SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT

Kern County, California



NOTICE TO PLANHOLDERS

Attached is

Addendum No. 1

to Specification No. SSJMUD 25-01

for constructing the

DRIVER ROAD PIPELINE PROJECT

SIGN AND RETURN THIS NOTICE WITH YOUR PROPOSAL



2/13/2025

ate: February 13, 2025	
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By signing the cover sheet, Contractor certifies that it has reviewed the contents of the subject addendum and that its proposal has been prepared taking into consideration the changes made by said addenda.

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT ADDENDUM NO. 1

TO THE SPECIFICATIONS NO. 25-01 for the DRIVER ROAD PIPELINE PROJECT

The Specifications No. 25-01 is hereby changed and/or clarified as follows.

1. Specification Changes

a. Cover Page

i. Revise bid opening date to Thursday, March 13, 2025.

b. Section A - Notice Inviting Bids

i. A-1 Invitation for Bids

On page A-1, in sentence 1 of paragraph 2 revise "Director of Industrial Relations" to "Department of Industrial Relations"

ii. A-2 Submitting Bids and Bid Opening

On page A-2, replace the first sentence of the first paragraph of A-2 in entirety with the following.

"Bids will be received at the offices of the District, 11281 Garzoli Avenue, Delano, CA 93215, until 2:00 p.m. on March 13, 2025, at which time and place the bids will be publicly opened and read aloud."

iii. A-6 Award of Contract

On page A-3, replace the entirety of paragraph 1 of A-6 with the following:

"Each bid shall be made on the proposal forms furnished by the District and shall be in accordance with the Contract Documents. The Proposal Bidding Schedule includes places to enter bid prices for each of the various items of work. Bidders will be required to submit prices for all the items on the Proposal Bidding Schedule, including the Optional Item (No. 12). Award of the Contract, if made by the District, will be to the responsible Bidder submitting the lowest responsive Bid Proposal on the basis of the prices in the Base

Contract plus the Optional Item (Item No. 1 through Item No. 12), in accordance with California Public Contract Code Section 20103.8(a). See Section B-17 for further particulars of the bidding and basis of award."

iv. A-10 Wage Rates/Compliance Monitoring

On page A-6, in sentence 1 of paragraph 1 revise "Director of Industrial Relations" to "Department of Industrial Relations".

c. Notice Inviting Bids (Published Version)

i. On page A-9, replace the first sentence of the first paragraph in entirety with the following.

"NOTICE IS HEREBY GIVEN that sealed bids will be received by the SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT (hereinafter "District") until 2:00 p.m. on March 13, 2025, for construction of the Driver Road Pipeline Project, located within Kern County and in the vicinity of the city of Delano. Bids will be received at the offices of the District, 11281 Garzoli Avenue, Delano, CA 93215, until the stated time and date, at which time and place the bids will be publicly opened and read aloud. If a contract is awarded, it will be awarded to the responsible Bidder submitting the lowest responsive Bid Proposal on the basis of prices in the Bid."

d. Instructions to Bidders

i. On page B-10, replace the second sentence of the first paragraph of section B-16 in entirety with the following.

"For purposes of preparing said Construction Schedule, Contractors should assume the Notice to Proceed will be issued on or before April 30, 2025 and Contractor shall begin work within ten (10) days of receipt of the Notice to Proceed."

e. **Proposal**

i. On page 1 of 4, replace the first statement in entirety with the following.

"Proposals received until 2:00 p.m. on March 13, 2025"

f. Measurement and Payment

- i. On page 3 of 6, replace a) and b) of Bid Item No. 3: Traffic Control in entirety with the following:
 - "a) Description: This item shall include providing all labor, materials, transportation, supplies, tools, equipment, and incidentals required to provide traffic control for safety and proper construction of the work within the Specifications and Plans. This item shall include all necessary coordination with the District, Landowners, utility companies, and Kern County and complying with their requirements, including permit requirements.
 - b) Measurement and Payment: The Final Pay Lump Sum Price paid for Traffic Control shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals, permits, and for all other work and operations which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore."

g. General Conditions

i. C-17 Workers and Wages

On page C-28, in paragraph 1 of Section C-17.e. Wage Rates, revise "Director of Industrial Relations" to "Department of Industrial Relations".

h. Special Conditions

i. D-3 Beginning and Completion of Work

On pages D-1 and D-2 replace section D-3 b. in entirety with the following.

"b. Completion of Work

The Contractor shall complete all work as follows.

Anticipated Notice of Award (NOA): April 10, 2025 Completion of the Construction of new Pipelines: January 26, 2026 Completion Date for all Contract Work: February 25, 2026

Failure to perform and complete the construction Work within the time period described in Paragraph D-3b shall subject the Contractor to the assessment of liquidated damages provisions of Paragraph D-7."

i. 02223 Excavation, Backfilling, and Compacting

- i. On page 02223-14, replace section 3.11 F.3.b. in entirety with the following:
 - "b. Pipe-bedding zone materials shall be placed and compacted in horizontal lifts to at least 90 percent relative compaction per CT-216. Material placed within 12 inches of the outer surface of the pipe shall be compacted by hand tamping equipment only."
- ii. On page 02223-15, replace section 3.11 I.1. in entirety with the following:
 - "1. Unless otherwise shown on the Drawings, compact the pipe zone to at least 90 percent relative compaction in accordance with CT-216."

j. 02316 Open Trench and Trenchless Steel Casing

- i. On page 02316-3, in section 1.04 H. replace "CALTRANS" with "Kern County"
- ii. On page 02316-3, in section 1.05 A. replace "State of California Department of Transprotation" with "Kern County"
- iii. On page 02316-3, in section 1.05 B. replace "CALTRANS" with "Kern County"
- iv. On page 02316-3, in section 1.05 C. replace "CALTRANS" with "Kern County"
- v. On page 02316-8, in section 3.01 A. replace "CALTRANS" with "Kern County"
- vi. On page 02316-9, in section 3.03 F.2. replace "CALTRANS" with "Kern County" in sentences 1 and 2.

k. 15051 Installation of Pressure Pipelines

- i. On page 15051-10, replace section 3.10 E.1. in entirety with the following:
 - "1. Where soil is disturbed, horizontally, the Contractor shall extend the excavation line a minimum of 5-feet beyond the thrust block bearing face. The appropriate lift thickness of the backfill will

depend on the compaction equipment used but generally shall not exceed a thickness of six inches of loosely placed material. Native material shall be placed and compacted in horizontal lifts to at least 90 percent relative compaction per CT-216. At the Contractor's option, the excavated area can be backfilled with CLSM in accordance with Section 02223 – Excavation, Backfilling, and Compacting."

2. Drawings

C-01, C-02, C-03, C-04, C-05, C-06, C-07, C-08, and CG-01 are revised as shown on the attached drawings.

3. Build America, Buy America Act

Bidders are reminded of the requirements of section D-6 of the Special Conditions.

4. Questions

a. Is this prevailing wage project?

Bids shall be made in accordance with the prevailing rate of per diem wages for this locality and project as determined by the Director of Industrial Relations pursuant to Labor Code Section 1770 et seq., and the Davis-Bacon Act, whichever is greater. See specifications.

b. Is there an Engineers Estimate?

\$3.6-\$4M, inclusive of the Optional Item

c. Would you consider extending the bid date 1 week, maybe 2 weeks to allow more time for the DBE Good Faith Advertising for the project? The current bid date is 02/26/2025. Typical requirement for advertising is approximately 30 calendar days.

See question 5.a. below regarding the 30-day advertising period; however, the bid date will be extended to March 13, 2025 at 2:00 PM.

5. Pre-Bid Conference Questions

a. Is there a 30-day advertising period for the Good Faith Efforts Requirement?

Section 200.321 of the Code of Federal Regulations does not include a requirement for a 30-day advertisement. The Good Faith Efforts Checklist in the specifications includes the affirmative steps required to satisfy the requirement.

b. Will construction water be provided by the District?

See D-8.c.

The District will provide water including sufficient water for earthwork, fire protection, dust abatement and testing requirements, at a rate of \$0/AF. Methods of obtaining water will be provided by the District and coordinated with the awarded Contractor. Contractor shall be responsible for trucking provided water.

If water is supplied from a source other than the District, the cost of the water and the cost and methods of obtaining and conveying water shall be the responsibility of the Contractor.

c. What are the testing requirements for the pipeline?

Per section 15042, Item 3.04 F of Project Specifications, the contractor shall pressurize the pipeline to 50 PSI using a hydrostatic test pump of sufficient size for a period of 4 hours. The District will provide the water to fill the line.

d. What type of backfill is required for the pipe zone? Slurry or sand?

Per section 4.7 of the BSK Associates Geotechnical Engineering Investigation Report (Appendix B – Soils Report of Specifications 25-01) most native soils are Class III with some boring locations of soil II and IV, which is suitable for backfill as long is clean material. Therefore, no import material cost shall be required during bidding. Except for Sand Slurry if Kern County Roads Deportment allows backfill for the road crossing at 9th Avenue.

e. Are there any easements or a need to remove grapevines?

No, the District will handle the removal of any vines that are in the way and obtain any easements needed from the landowner prior to construction.

f. Does the Contractor need to remove the District's irrigation pipeline that runs parallel to the new pipeline?

No, the irrigation line along Driver Road should be protected in place.

g. Will Kern County allow full road closures at pipeline crossings along Cecil Avenue and 9th Avenue?

No, full lane closures are unlikely. Kern County will likely require a traffic control plan for a one-lane closure.

h. Why is there a 95% compaction requirement in the pipe and bedding zone for unpaved areas when it is 90% for paved roadways (Detail Drawing Page CG-01)?

This is an error. The compaction requirement in the pipe and bedding zone for unpaved areas will be revised to 90%.

i. Who are the approved compaction testers?

Contractors may use any licensed testing firm.

j. Are there any driveways or roadway concerns?

There are no driveways along the alignment. For the jack and bore on Cecil Avenue, the contractor may need to temporarily remove some fencing. If that is the case, the District will help coordinate with the landowner.

k. Has an OSHA tunneling permit been obtained?

The OSHA tunneling permit is in progress.

1. Is there an encroachment permit with the County?

The Kern County encroachment permit is in progress. The Contractor will need to obtain a rider permit.

m. Are contractors allowed to conduct a pre-bid site inspection?

Yes, contractors are allowed to conduct a self-guided pre-bid site inspection. There is no need to coordinate with the District.

n. There appears to be a short lateral near the pipeline. Is it live?

It is not SSJMUD's pipeline so it is likely not live. The contractor is to remove the line if encountered.

6. Attachments

- a. Planholders List
- b. Pre-bid Conference Attendance List
- c. Specifications
 - i. Cover Page
 - ii. Section A Notice Inviting Bids
 - iii. Notice Inviting Bids (Published Version)
 - iv. Instructions to Bidders
 - v. Proposal
 - vi. Measurement and Payment
 - vii. Section C General Conditions
 - viii. Section D Special Conditions
 - ix. 02223 Excavation, Backfilling, And Compacting
 - x. 02316 Open Trench and Trenchless Steel Casing
 - xi. 15051 Installation of Pressure Pipelines

d. Drawings

- i. C-01, Drawing No. 5 of 21
- ii. C-02, Drawing No. 6 of 21
- iii. C-03, Drawing No. 7 of 21
- iv. C-04, Drawing No. 8 of 21
- v. C-05, Drawing No. 9 of 21
- vi. C-06, Drawing No. 10 of 21
- vii. C-07, Drawing No. 11 of 21
- viii. C-08, Drawing No. 12 of 21
- ix. CG-01, Drawing No.16 of 21

Southern San Joaquin Municipal Utility District SSJMUD 25-01 – Driver Road Pipeline Project Planholders List – Addendum 1

COUNT	ISSUED TO	CONTACT		
-	Kern County Builders Exchange			
-	Dodge Data and Analytics			
1	W. M. Lyles Co.	Scott Fults sfults@wmlylesco.com		
2	MAC General Engineering Inc.	Nathan Delk ndelk@macgeneralengineering.com		
3	Superior Ag Construction	Donna Alexander superioragconstructioninc@yahoo.com		
4	Westberry Construction, Inc.	Will Westberry westberryconstruction@yahoo.com		
5	Hartzell General Engineering Contractor, Inc.	Charles Hartzell charles@hartzellco.com		
6	Laurel Ag & Water	Curtis Lutje clutje@laurel-ag.com		
7	Todd Co.	Jared Steele flo@jt2inc.com		
8	Nicholas Construction, Inc.	Alex Silicz alex@nicholasconstructioninc.com		
9	West Valley Construction	Leandro Bontogon Ibontogon@wvcc.com		

Southern San Joaquin Municipal Utility District

*SSJ*MUD

SPECIFICATIONS NO. SSJMUD 25-01 Driver Road Pipeline Project

Pre-Bid Conference Attendance

Name	Company	Email Address	Phone
Charles Hartzell	Hartzell General Engineering Contractor, Proc.	Charles @ Hartzelleo.com	805-610-8113
CUATIS LUTSE	LAVARL AG + WATAN	CLUTSEQLAUREL-Ab.W	661-42-8115
Franklin Gaud:	Laurel As	tgandi Cata	805-20173
Brandon Kehoe	Laurel Ag	BKehoe@laurel-ag.com	1
JAROD STEELE	TOOD Co.	flo@ J+Zinc.com	!

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Southern San Joaquin Municipal Utility District

SSJMUD

SPECIFICATIONS NO. SSJMUD 25-01 Driver Road Pipeline Project

Pre-Bid Conference Attendance

Name	Company	Email Address	Phone
SAM Schaefer	GEI Consultants	sschueles@geicmally	805,729,464,
LUIS) FLORES	GEI CONSULTANTS	LFLORES Q gerconsultants.co	n 661-444955B
Alex Silicz	Nichdas Const, Inc.	Alox & Nichdes Construction Inc. com	
Andrew Field	Nicholas Const, Inc	nicholas (austructumine.com	461-616-8202
Noyen Rodriguez	GET consultants	nrodriguez a aciconsultants con	601 565 8700

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT



Kern County, California

CONTRACT DOCUMENTS

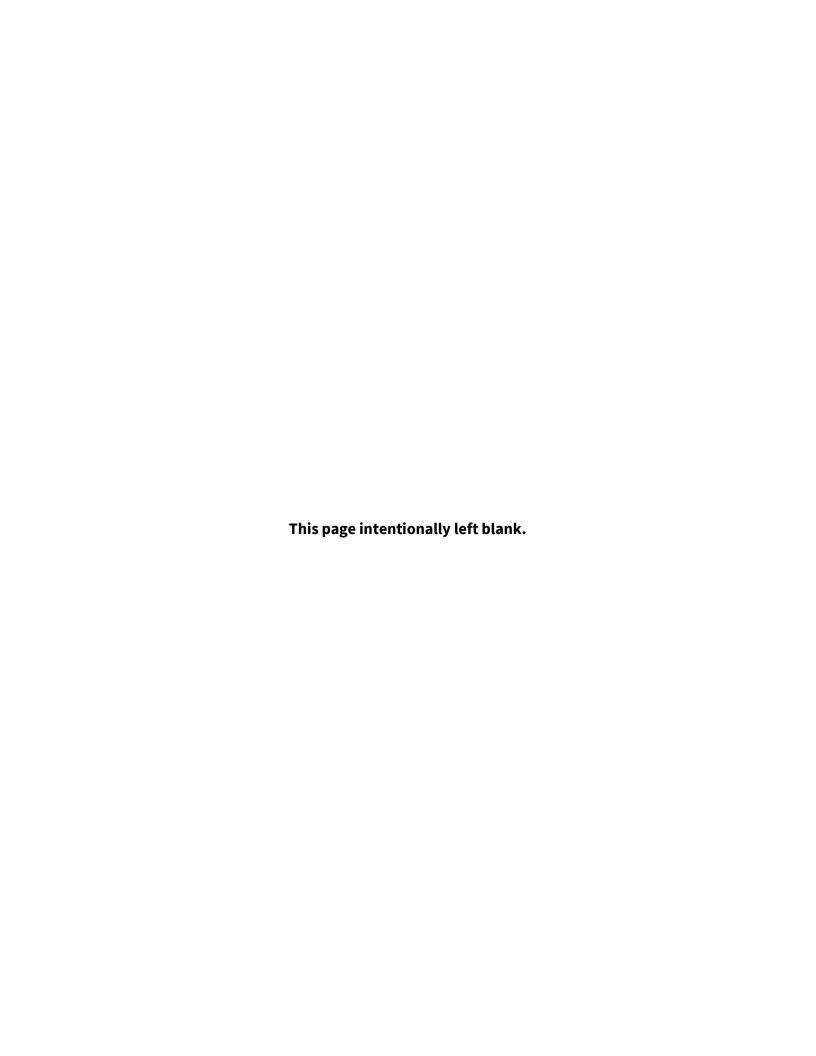
SPECIFICATIONS NO. SSJMUD 25-01 Driver Road Pipeline Project

ISSUED FOR BID January 2025

GEI Consultants, Inc. 5001 California Avenue, Suite 120 Bakersfield, CA 93309

A voluntary pre-bid conference will be held at 10:00 a.m. on Wednesday, February 5, 2025, at Southern San Joaquin Municipal Utility District, 11281 Garzoli Avenue, Delano, CA 93215.

Bids will be received until 2:00 p.m. on <u>Wednesday, February 26, 2025</u>, <u>Thursday, March 13, 2025</u> at Southern San Joaquin Municipal Utility District, 11281 Garzoli Avenue, Delano, CA 93215.



SECTION A NOTICE INVITING BIDS

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT

Kern County, California

FOR CONSTRUCTING THE

Driver Road Pipeline Project SPECIFICATIONS NO. SSJMUD 25-01

A-1 Invitation for Bids

NOTICE IS HEREBY GIVEN that sealed bids will be received by the <u>SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT</u>, hereinafter referred to as the District, for furnishing all labor, services, materials, tools, equipment, supplies, and facilities necessary therefore, transportation, utilities, and all other items as provided in the Contract Documents for the acceptable completion of the work described in Section A-4, together with all appurtenances thereto, in strict accordance with the Plans and Specifications on file at the office of the District.

Bids shall be made in accordance with the prevailing rate of per diem wages for this locality and project as determined by the <u>Director Department</u> of Industrial Relations pursuant to Labor Code Section 1770 et seq., and the Davis-Bacon Act, whichever is greater. A copy of the prevailing wage determination issued by the Department of Labor current as of the publishing of this solicitation is included in the appendix. Prevailing wage schedules for Kern County are available from the Department of Industrial Relations-Division of Labor Statistics & Research via the internet at www.dir.ca.gov. Davis-Bacon Act wages can be found at www.dol.gov.

The Contractor, its Subcontractors and Suppliers will be required to comply with all applicable State and Federal requirements, including, without limitation, those specifically identified in any Grant Agreement. This Project is being funded in part by a Federal grant from the Bureau of Reclamation (Reclamation) WaterSMART Drought Response Program: Drought Resiliency Projects.

A-2 Submitting Bids and Bid Opening

Bids will be received at the offices of the District, 11281 Garzoli Avenue, Delano, CA 93215, until 2:00 p.m. on-February 26 March 13, 2025, at which time and place the bids will be publicly opened and read aloud. Bids shall be timely submitted in sealed envelopes marked as directed in Section A-13. Facsimile and electronic bids will not be accepted. It is the sole responsibility of the bidder to ensure that their bid is received in proper time and at the proper location and in the proper format. Facsimile bids will not be accepted. Bids received after said deadline time will be returned unopened to the bidder.

A voluntary pre-bid conference will be held at 10:00 a.m. on February 5, 2025, at the offices of the District, 11281 Garzoli Avenue, Delano, CA 93215.

A-3 Location of the Work

The work to be constructed hereunder is located within Kern County, in the vicinity of Delano, California.

A-4 Description of Work

The description of the work is as follows:

Base Contract (Driver Road Pipeline Project):

- 1. Construct a new PVC waterline from the USBR Lateral 119.6 on Bassett Avenue to the existing groundwater recharge spreading basins west of Driver Road. Connect the pipeline to the existing Lateral 119.6-1.5S south of 9th Avenue
- **2.** Abandon in place the existing USBR Lateral 119.6-1.5S from Bassett Avenue to 9th Avenue.
- **3.** Connect several existing turnouts from Lateral 119.6-1.5S to the new PVC pipeline.

Optional Work (Driver Road Pipeline Project):

4. Construct a new PVC waterline from the new Driver Road Pipeline to SSJMUD Giumarra Spreading Basin Project south of 9th Avenue.

The work is described in the Technical Specifications and plans.

A-5 Classification of Contractors License / Contractor Registration

Pursuant to Public Contract Code section 6100(b), any contractor, subcontractor, and/or specialty contractor, as defined under Business and Professions Code section 7026, submitting a proposal shall possess, at the time the Contract is awarded, that classification of contractor's license required by law to enable the contractor to perform the Work contemplated under the Contract Documents, as more specifically set forth in the Specifications. Contractors shall provide the District with their Contractor's license number and expiration date as provided in the Proposal.

No contractor or subcontractor may bid or be listed on a bid proposal unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded the contract for the Project or engage in Work on the Project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

A-6 Award of Contract

Each bid shall be made on the proposal forms furnished by the District and shall be in accordance with the Contract Documents. The Proposal Bidding Schedule includes places to enter bid prices for each of the various items of work. Bidders will be required to submit prices for all the items on the bid-schedule_Proposal Bidding Schedule, including the Optional Item (No. 12). Award of the Contract, if made by the District, will be to the responsible Bidder submitting the lowest responsive Bid Proposal on the basis of the prices in the Base Bid-Base Contract plus the Optional Item (Item No. 1 through Item No. 12), in accordance with California Public Contract Code Section 20103.8(a). See Section B-17 for further particulars of the bidding and basis of award.

Proposals will be accepted until the date and time specified in the Notice of Inviting Bids. The Contract will be awarded as soon as practicable to the lowest responsible bidder that has submitted a responsive bid, price and other factors considered, <u>provided</u> its Bid is reasonable and is in the best interest of the District to accept.

The District reserves the right, after opening bids, to reject any or all bids, or to make award to the lowest responsive and responsible bidder and reject all other bids. Refer to Paragraph B-3 for information regarding "Responsible Bidder" and submission of a "Responsive Bid".

The successful Bidder will be notified in writing by District of the Award of Contract within 30 days after opening of Bids. Accompanying the Notice of Award will be a copy of the Agreement, which successful Bidder will be required to execute properly and return to District, together with properly executed Performance Bond, Payment Bond, Certificates of Insurance and Endorsement, and Non-Collusion Affidavits, all within 10 days after date of receipt of such Notice of Award. District will promptly determine whether such Contract, Bonds, and Certificates of Insurance and Endorsement are as required by the Specifications and, upon such determination, will forward a fully signed copy of the Contract to successful Bidder.

A-7 Site Conditions

Each bidder shall carefully examine the Plans, read the Specifications and the forms of the Contract Documents, and may visit the site of the proposed work to fully inform himself as to all existing conditions and limitations that may affect the execution of work under the Contract, and each such bidder shall include in the prices bid the cost of all incidentals and appurtenances. The failure or omission of any bidder to receive or examine any form, instrument, addendum, or other document, or his failure to visit the worksite and acquaint himself with conditions at the construction site, shall in no respect relieve any such bidder from any obligation imposed by his bid or by the Contract. The submittal of a bid shall be taken as prima facie evidence of compliance with all instructions contained herein.

A-8 Certified Checks and Bonds

Each bid shall be under sealed cover and must be accompanied by a Bidder's Bond in the form of either cash, a certified or cashier's check, or by a corporate surety bond on the form furnished by the District and made payable to the Southern San Joaquin Municipal Utility District as a guaranty that the bidder will, if an award is made to him in accordance with the terms of his bid, promptly secure worker's compensation insurance, liability insurance, and any other insurance required by the Contract Documents, execute a contract in the required form, and furnish satisfactory bonds for the faithful performance of the Contract and for the payment of claims of all persons supplying labor and materials for the construction of the work. Should the successful bidder fail to so perform, the District shall be entitled to retain the moneys represented by said check or bond as liquidated damages on account of the delay and inconvenience occasioned to the District, it being expressly agreed and understood that the amount of said check or bond

constitutes reasonable damages and that it is impracticable or extremely difficult to ascertain actual damages. Said cash, check or Bidder's Bond shall be in an amount not less than five percent (5%) of the amount of the bid. The District reserves the right to reject any bond, if in the opinion of the Engineer or the District's attorney, the Surety's acknowledgment is not legally sufficient. All sureties utilized by bidders shall be legally qualified to do business in the State of California, shall carry a current Best's Insurance Guide rating of "A" or better, Class X or better, and shall furnish such reports as to their financial condition, from time to time, as may be requested by the District, including the Financial Statement of Bonding Company furnished with the Bond. The premiums for all said bonds shall be paid by the bidder. If any surety becomes unacceptable to the District in the absolute judgment and discretion of the District, then the bidder/contractor shall promptly furnish at its own expense such additional bonds as may be required by the District to protect the District's interests and the interests of persons supplying labor or materials in the prosecution of the work contemplated by these Contract Documents.

In the event of any conflict between the terms of the Contract Documents and the terms of the bonds, the terms of the Contract Documents shall control and the bonds shall be deemed to be amended thereby. The District shall be entitled to exercise any and all rights granted by the Contract Documents in the event of default, without control by the surety, provided that the District promptly notifies the surety at the time or before the exercise of such rights. The exercise by the District of such rights shall not affect the liability of the surety under the bonds.

Bid security of unsuccessful bidder will be returned to the bidder within sixty (60) days of the time the execution of the contract by the District and the successful bidder award of Contract is made.

A-9 Contract Retention

At the request and expense of the Contractor and pursuant to Public Contract Code section 22300, securities equivalent to any amount withheld by the District to ensure the Contractor's performance under the Contract shall be deposited with the District as substitute security, or, at the Contractor's request, with a state or federally chartered bank in California as the escrow agent. Escrow instructions shall conform to the requirements of Public Contract Code section 22300.

A-10 Wage Rates / Compliance Monitoring

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the <u>Director Department</u> of Industrial Relations pursuant to Labor Code section 1770 <u>et seq.</u> and the Davis-Bacon Act, whichever is greater. A copy of the prevailing wage rate schedules is incorporated herein by this reference. The Contractor shall post a copy of said documents at each job site. The Contractor and any Subcontractor under him shall pay not less than the specified prevailing rate of per diem wages for general, holiday and overtime work to all workers employed in the execution of this Contract.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each contractor and subcontractor shall furnish the records specified in Labor Code section 1776 directly to the Labor Commissions, in the manner set forth in Labor Code section 1771.4.

Contractors shall be required to post job site notices, as prescribed by regulation.

A-11 Use of Apprentices

If the project requires the employment of workers in any apprenticeable craft or trade, once awarded, the Contractor or Subcontractors must apply to the Joint Apprenticeship Council unless already covered by local apprenticeship standards under Labor Code Section 1777.5, and the Contractor shall otherwise comply with Section 1777.5.

A-12 Contract Documents

The Contract Documents shall consist of the Notice Inviting Bids, the Instructions to Bidders, the accepted Proposal and Proposal Bidding Schedule, the Contractor's Licensing Statement, the Measurement and Payment, the Information Required of Bidders, the Agreement, the Bidder's Bond, the Faithful Performance Bond, the Payment Bond, the Non-Collusion Affidavits, the Good Faith Efforts Check List for Disadvantaged Business Enterprises, the Notice of Award, the Notice to Proceed, General Conditions, Special Conditions, Specifications, Plans, Appendices and any Change Order or Addenda, setting forth any modifications or interpretations of any of said documents, and Grant Agreements, all of which documents are on file or will be on file in the office of the District, 11281 Garzoli Avenue, Delano, CA 93215 and which are hereby referred to and made a part of this Notice Inviting Bids.

All questions about the meaning or intent of the Contract Documents or questions regarding the type of work required may be addressed to the following:

Grace Martin
GEI Consultants, Inc.
661-716-3010

gemartin@geiconsultants.com

All questions or inquiries regarding the project or the Contract Documents shall be directed solely to the person listed above. Bidders shall not contact any participants in the project regarding the project or the Contract Documents prior to the time that the bids are opened.

Portable Document Format (PDF) Contract Documents will be made available to Bidders either by email or link. No paper (hard) copies of Contract Documents will be provided to Bidders. Requests for electronic Contract Documents may be requested from Grace Martin, GEI Consultants, Inc. at gemartin@geiconsultants.com. Request must include company name, requesting person's name, requesting person's physical address, requesting person's email address, and requesting person's phone number. Addenda will only be distributed to requesting person.

Bidders are required to notify the contact above if they obtain the Contract Documents from a planroom or any means other than from the contact above, in order to be added to the planholders list.

The District may amend any provision or part of the Specifications at any time prior to three days before closing time, <u>provided</u> that the closing time set forth may be extended by District at any time prior to said closing time. Such amendments, if any, will be in the form of addenda which will be issued simultaneously to all persons who have obtained a copy of the Contract Documents from the contact above, and are on the planholder's list. Addenda will be emailed ONLY to all parties recorded by the Engineer as having received the Contract Documents. If you wish to receive addenda by some means other than email, please advise the Engineer immediately. Questions received after February 19, 2025, at 5:00 p.m. will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or responses will be without legal effect and are not to be relied upon by the Bidders unless they are integrated into the written Contract Documents.

A-13 Address and Marking of Proposal

The envelope enclosing the proposal shall be sealed and addressed to the Southern San Joaquin Municipal Utility District and mailed or delivered to 11281 Garzoli Avenue, Delano, CA 93215. The envelope shall be plainly marked in the upper left-hand corner with the name and address of the bidder and shall bear the words "Proposal for", followed by title of the Specifications for the work and the date and hour for opening of bids. The certified or cashier's check, money order, or Bidder's Bond, where applicable, shall be made payable to Southern San Joaquin Municipal Utility District. The bid security shall be enclosed in the same envelope with the proposal.

A-14 Substitute Securities

Pursuant to Public Contract Code Section 22300, equivalent securities may be substituted for monies withheld to ensure performance of the contract. The District reserves the right to solely determine the adequacy of the securities being proposed by the Contractor and the value of those securities. The District shall also be entitled to charge an administrative fee, as determined by District in its sole discretion, for substituting equivalent securities for retention amounts. The District's decisions with respect to the administration of the provisions of Section 22300 shall be final and shall include, but not be limited to, determinations of what securities are equivalent, the value of the securities, the negotiability of the securities, the costs of administration and the determination of whether or not the administration should be accomplished by an independent agency or by the District. The District shall be entitled, at any time, to request the deposit of additional securities of a value designated by District, in District's sole discretion, to satisfy this requirement. If the District does not receive satisfactory securities within twelve (12) consecutive days of the date of the written request, District shall be entitled to withhold amounts due to Contractor until securities of satisfactory value to District have been received.

Date: January 27, 2025 Southern San Joaquin Municipal Utility District

By: <u>s/s Roland Gross</u> General Manager

END OF SECTION

NOTICE INVITING BIDS (PUBLISHED VERSION)

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT

Kern County, California

FOR CONSTRUCTING THE

Driver Road Pipeline Project SPECIFICATIONS NO. SSJMUD 25-01

MUNICIPAL UTILITY DISTRICT (hereinafter "District") until 2:00 p.m. on February 26 March 13, 2025, for construction of the Driver Road Pipeline Project, located within Kern County and in the vicinity of the city of Delano. Bids will be received at the offices of the District, 11281 Garzoli Avenue, Delano, CA 93215, until the stated time and date, at which time and place the bids will be publicly opened and read aloud. If a contract is awarded, it will be awarded to the responsible Bidder submitting the lowest responsive Bid Proposal on the basis of prices in the Bid. The bidding requirements and the work are fully described in the Plans and Specifications, referred to as Specifications No. SSJMUD 25-01. Portable Document Format (PDF) of Contract Documents are being made available to Bidders either by email or a download link. No paper (hard) copies of Contract Documents will be provided to Bidders. Requests for electronic Contract Documents may be requested from Grace Martin, GEI Consultants, Inc. at gemartin@geiconsultants.com. Request must include company name, requesting person's name, requesting person's physical address, requesting person's email address, and requesting person's phone number. Addenda will only be distributed to requesting person.

A voluntary pre-bid conference will be held on February 5, 2025 at 10:00 a.m. commencing at the offices of the District, 11281 Garzoli Avenue Delano, CA 93215.

While the work is more fully described and detailed in the Plans and Specifications, it includes the following:

Base Contract (Driver Road Pipeline Project):

- Construct a new PVC waterline from the USBR Lateral 119.6 on Bassett Avenue to the existing groundwater recharge spreading basins west of Driver Road. Connect the pipeline to the existing Lateral 119.6-1.5S south of 9th Avenue
- 2. Abandon in place the existing USBR Lateral 119.6-1.5S from Bassett Avenue to 9th Avenue.

3. Connect several existing turnouts from Lateral 119.6-1.5S to the new PVC pipeline.

Optional Work (Driver Road Pipeline Project):

4. Construct a new PVC waterline from the new Driver Road Pipeline to SSJMUD Giumarra Spreading Basin Project south of 9th Avenue.

The work is described in the Technical Specifications and plans. The work must be completed during the period identified in the Specifications.

A contractor submitting a proposal shall possess, at the time the Contract is awarded, that classification of contractor's license required by law to enable the contractor to perform the work contemplated under the Contract Documents, as more specifically set forth in the Specifications. Contractors shall provide the District with their Contractor's license number and expiration date as provided in the proposal.

It is the District's intent that "plans," as used in Public Contract Code Section 3300, are defined as the construction contract documents, which include both the drawings and the specifications.

This published notice does NOT reproduce all of the bidding requirements; accordingly, the above-referenced Plans and Specifications are hereby referred to and made a part of this Notice Inviting Bids. An acceptable bid can only be prepared by reading and following all of the instructions that are found in the Specifications, which includes Sections A and B thereof.

Each Bidder is required to sign a Noncollusion Affidavit and submit it with his bid.

The successful Bidder is required to furnish a Payment Bond in an amount of 100% of the contract and a Faithful Performance Bond in an amount of 100% of the contract; the bonds to be secured by a surety company or surety companies satisfactory to the District.

Bids shall be based on the payment of not less than the prevailing rate of wages for this locality and project as determined by the Director of the California Department of Industrial Relations pursuant to Labor Code Section 1770 et seq. and as provided in the Davis-Bacon Act, whichever is greater. Prevailing wage schedules for Kern County are available from the Department of Industrial Relations-Division of Labor Statistics & Research via the internet at www.dir.ca.gov. Copies of Davis-Bacon Act wages can be found at www.dol.gov.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each contractor and subcontractor shall furnish the records specified in Labor Code section 1776 directly to the Labor Commissions, in the manner set forth in Labor Code section 1771.4. Contractors shall be required to post job site notices, as prescribed by regulation.

Pursuant to Public Contract Code Section 22300, equivalent securities may be substituted for monies withheld to ensure performance of the contract.

All questions about the meaning or intent of the Contract Documents or questions regarding the type of work required may be addressed to the following:

Grace Martin GEI Consultants, Inc. 661-716-3010

gemartin@geiconsultants.com

This Project is being funded in part by a Federal grant from the Bureau of Reclamation (Reclamation) WaterSMART Drought Response Program: Drought Resiliency Projects. The Contractor, its Subcontractors and Suppliers will be required to comply with all applicable State and Federal requirements, including, without limitation, those specifically identified in any Grant Agreement.

Date: January 27, 2025 Southern San Joaquin Municipal Utility District

By: <u>s/s Roland Gross</u> General Manager

END OF SECTION

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SECTION B

INSTRUCTIONS TO BIDDERS

B-1 Form of Proposal and Signature

The Proposal shall be submitted only on the form attached hereto or copies thereof and shall be enclosed in a sealed envelope and marked and addressed as hereinafter directed. The bidder shall state in figures the unit prices or the specific sums, as the case may be, for which he proposes to supply the labor, materials, supplies, or machinery, and perform the work required by the Contract and other Contract Documents, including the Specifications. If the unit price and the total amount named by a bidder for any item are not in agreement, the unit price alone will be considered as representing the bidder's intention and the totals will be corrected to conform thereto.

If the Proposal is made and submitted to the District by (1) an individual – the Proposal shall be signed by him and his full name and address shall be given; (2) a partnership - the Proposal shall be signed by a general partner of the partnership with the authority to act as an agent on behalf of the partnership and include the partnership name, the name of the general partner executing the Proposal, and provide the name and address of each member of the partnership; (3) a corporation - the Proposal shall be submitted in the name of the corporation, signed by its duly authorized officer or officers, attested by the corporate seal (optional, include the names and titles of all officers of the corporation, and include the address of the corporation and the state of incorporation; and (4) limited liability company - the Proposal shall be submitted in the name of the limited liability company, signed by an authorized agent of the limited liability company (if membermanaged, by a member of the limited liability company authorized to act as an agent thereof; if manager-managed, by a manager of the limited liability company authorized to act as an agent thereof), and include the name and address of the limited liability company, as well as the name of the managers of the limited liability company if manager managed. Proposals will be considered only from a Contractor(s) and/or Subcontractor(s) that is/are licensed as required under applicable provisions of the Contractors' State License Law (California Business and Professional Code, Section 7000 et seq.) and rules and regulations adopted pursuant thereto. Each bidder shall insert his license number in the place provided in the Proposal. All Contractors and/or Subcontractors submitting or included on a Proposal shall be registered with the Department of Industrial Relations

pursuant to Labor Code section 1725.5 and include said registration number in the place provided in the Proposal. No oral, telephonic, or telegraphic proposal or modification of a proposal will be considered.

B-2 Preparation of the Proposal

Blank spaces in the Proposal shall be properly filled. The phraseology of the Proposal must not be changed, and no additions shall be made to the items mentioned therein. Unauthorized conditions, limitations, or provisos attached to a Proposal will render it informal and may cause its rejection. If erasures, interlineations or other changes appear on the form, each erasure, interlineation or change must be initialed by the person signing the Proposal. Alternative proposals will not be considered unless specifically provided for in the Bidding Schedule.

Proposals may be withdrawn without prejudice by written or telegraphic requests received from bidder prior to the time for opening of bids, and Proposals so withdrawn will be returned to bidders unopened when reached in the process of opening bids. No Proposal may be withdrawn after the hour fixed for opening bids without rendering the accompanying certified or cashier's check or Bidder's Bond subject to retention as liquidated damages in like manner as in the case of failure to execute the Contract after award, as in the Contract Documents herein provided.

No Proposal received after the time fixed or at any place other than the place stated in the Notice Inviting Bids will be considered. All bids will be opened and read publicly. Refer to Paragraph B-17 of the "Bid Submission and Opening Procedures" for information regarding the procedures for opening of bids. Bidders, their representatives and other interested parties are invited to be present at the opening. Where bonds are required, the bidder shall name in his Proposal the surety or sureties which have agreed to furnish said bonds.

B-3 Responsible Bidder and Responsive Bid

A "Responsive Bid" is one that materially conforms in all respects to the requirements set forth in Section A—Notice Inviting Bids and Section B—Instructions to Bidders. The District reserves the right to waive any irregularities in the Bids received.

A "Responsible Bidder" is one that has the qualifications, general competency, and resources to perform the Work covered by the Proposal. Among other matters, a Responsible Bidder is one that can demonstrate successful completion of projects

involving work of scope and complexity comparable to that being installed under the Contract Documents. Bids shall identify such projects and provide the information indicated in the "Information Required of Bidder" form. District expressly reserves the right to reject any Bid if it determines that Bidder's business or technical organization, financial resources, plant and equipment to be used in performing work, or lack of successful experience in performing work of similar scope and complexity, is such that it is not in District's best interest to accept the Bid.

B-4 Brokerage of Work Not Favorably Considered

In general, the brokerage of work will not be favorably considered, and, the subletting of the entire Contract or of substantial complete units of it will be permitted only upon an adequate showing of the necessity involving some new condition not reasonably foreseen at the time of the Proposal. Additionally, subletting shall be in compliance with the Subletting and Subcontracting Fair Practices Act, Public Contract Code section 4100, et seq.

B-5 Equalizing Factors

Wherever applicable, equalizing elements or factors not specifically mentioned or provided for herein, such as interest during construction, cost of transportation, inspection (including salaries and travel subsistence expenses), installation and operation, or any other factor or element in addition to that of price which would affect the total cost or value to the District, will be taken into consideration in comparing bids for award of the Contract.

B-6 Servicing and Maintenance

Each bidder must, if requested, furnish evidence that there is an efficient service organization which regularly carries a stock of repair parts for the proposed equipment to be furnished and installed in the work and that the organization is conveniently located for prompt service.

B-7 Local Conditions

Before submitting a Proposal, the Bidder shall carefully examine the Plans, read the Specifications and all other Contract Documents, visit the site of the work, and fully inform himself as to all conditions and limitations, including the character of equipment and

facilities needed preliminary to and during the prosecution of the work, the uncertainty of weather, site accessibility, groundwater level, and soil conditions along the line or work, and as to all other matters which can in any way affect the work to be done. Failure to do so will not release bidders from the responsibility for estimating properly the difficulty or cost of successfully performing the work. The District makes no representation or warranty regarding the accuracy or interpretation of information derived from maps, plans, specifications, profiles, drawings, borings, or other investigations and will not be responsible for any understanding or representations concerning conditions made by any of its officers or agents, including the Engineer or his assistants, prior to the execution of the Contract. The quantities of work or material stated in the unit price items of the Bidding Schedule are given only as a basis for the comparison of bids, and the District does not represent or warrant that the actual amount of work or material will correspond therewith, but reserves the right to increase or decrease the quantity of any unit price items of the work as may be deemed necessary or expedient by the Engineer.

This Project is being funded in part by a Federal grant from the Bureau of Reclamation (Reclamation) WaterSMART Drought Response Program: Drought Resiliency Projects.

B-8 Execution of Contract

The District reserves the right to accept or reject bids for a period of thirty (30) calendar days after date of opening, and no bid can be withdrawn during said period. A bidder to whom award is made shall execute a written Contract with the District in the form attached hereto and obtain insurance and faithful performance and labor and material bonds of the types and character and in the amounts required in Paragraph B-9, B-10, and B-11, within ten (10) calendar days from the date of the mailing of a notice from the District to the bidder of the acceptance of his Proposal, or such additional time as may be allowed by the Engineer. If a bidder to whom award is made fails or refuses to so perform, his Bidder's Bond shall become the property of the District, as provided for in Paragraph A-8, and the award will be annulled, and in the discretion of the District, an award may be made to the bidder whose Proposal is next most acceptable to the District; and such bidder shall fulfill every requirement hereof as if he were the party to whom the first award was made.

B-9 Bonds

In conformance with Paragraph A-8 of the Notice Inviting Bids, a bidder to whom the Contract is awarded shall, within the time specified in Paragraph B-8, furnish a surety bond conditioned upon the full and faithful performance of all obligations required to be performed under the Contract and full performance and verity of all warranties and guarantees therein contained. Said bond, referred to herein as the Faithful Performance Bond, shall be in an amount equivalent to one-hundred percent (100%) of the total amount payable under the Contract Documents. The form of the Faithful Performance Bond set forth in these Contract Documents is a mandatory form.

In conformance with Paragraph A-8 of the Notice Inviting Bids, a bidder to whom the Contract is awarded shall, within the time specified in Paragraph B-8, furnish a Payment Bond, approved by the District, in accordance with the provisions of Civil Code sections 8150 et seq., and sections 9550 et seq. Said Payment Bond shall be in the sum of not less than one-hundred percent (100%) of the total amount payable under the Contract Documents. The form of the Payment Bond set forth in these Contract Documents is a mandatory form.

Said bonds shall be of a form satisfactory to the District and shall be obtained from responsible corporate sureties acceptable to the District. All sureties utilized by bidders shall be legally qualified to do business in the State of California, shall carry a current Best's Insurance Guide rating of "A" or better, Class X or better. Said sureties shall furnish reports as to their financial condition from time to time as requested by the District. The premiums for said bonds shall be paid by the bidder.

If any surety becomes unacceptable to the District or fails to furnish reports as to its financial condition as requested by the District, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the District and of persons supplying labor or materials in the prosecution of the work contemplated by this Contract.

In the event of any conflict between the terms of the Contract and the terms of said bonds, the terms of the Contract shall govern and said bonds shall be deemed to be amended thereby. Without limiting the foregoing, the District shall be entitled to exercise all rights granted to it by the Contract in the event of default, without control thereof by the surety, provided that the District gives the surety notice of such default at the time or before the exercise of any such right by the District and, regardless of the terms of said

bonds, the exercise of any such right by the District shall in no manner affect the liability of the surety under said bonds.

B-10 Workers' Compensation Insurance

Prior to execution of the Contract as specified under Paragraph C-17 and in conformance with Section 3700 et seq. of the California Labor Code, a bidder to whom the Contract has been awarded shall sign and file with the District the following certification: "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract." In addition, before the Contract is executed on behalf of the District, a bidder to whom the Contract has been awarded shall furnish satisfactory evidence that he has secured, in the manner required by law, the payment of the workers' compensation provided for in the California Labor Code and all amendments thereto.

B-11 Public Liability and Property Damage Insurance

The Contractor shall at his own expense maintain in effect at all times during the performance of the work, comprehensive liability insurance in the amounts given below, in a form and with insurance companies acceptable to the District. Such insurance shall contain endorsements as follows: (a) including the State of California, the California Department of Water Resources, the United States, the U.S. Bureau of Reclamation, Southern San Joaquin Municipal Utility District, the Engineer, and their respective directors, officers and agents as additional named insureds; (b) providing contractual liability coverage for the Contractor's indemnification obligations under the Contract documents; (c) providing coverage for explosion, collapse and underground hazards; (d) personal injury coverage, including injury to the Contractor's own employees; (e) providing that the insurance may not be canceled or reduced until thirty days (30) days after the District and the Engineer shall receive written notice of such cancellation or reduction; (f) providing "cross liability" or "severability of interest" coverage for all insureds, providing that the coverage afforded the additional named insureds shall not be prejudiced by any failure of the Contractor to comply with notice requirements of the policy; and (g) providing that any other insurance maintained by the District or the Engineer is excess and not contributing insurance with the insurance required herein.

Contractor shall, at its sole cost and expense, procure and maintain the following insurance coverage:

<u>Commercial General Liability Insurance:</u> This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000. Coverage must be purchased on a post 2004 ISO occurrence or equivalent and include coverage for, but not limited to, the following:

- a. Bodily Injury and Property Damage
- b. Personal Injury and Advertising Injury
- c. Fire legal liability
- d. Products and completed operations

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- a. Waiver of subrogation in favor of District and in a form acceptable to District.
- b. Additional insured endorsement in favor of District and in a form acceptable to District.
- c. Contractors and subcontractors shall name the District, its officers, agents and employees as additional insureds on liability insurance.
- d. Separation of insureds.

<u>Business Automobile Insurance</u>: This insurance shall contain a combined single limit of at least \$1,000,000, and include coverage for, but not limited to the following:

- a. Bodily injury and property damage.
- b. Any and all vehicles owned, used or hired.

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- a. Waiver of subrogation in favor of District and in a form acceptable to District.
- b. Additional insured endorsement in favor of District and in a form acceptable to District.
- c. Contractors and subcontractors shall name the District, its officers, agents and employees as additional insureds on liability insurance.

d. Separation of insureds.

<u>Workers' Compensation and Employers' Liability Insurance:</u> This insurance shall include coverage for, but not limited to:

- a. Contractor's statutory liability under the workers' compensation laws of the state(s) in which the services are to be performed. If optional under state laws, the insurance must cover all employees anyway.
- b. Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

a. Waiver of subrogation in favor of and acceptable to District.

Excess Liability (if necessary): The limits of insurance required in these Contract Documents may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the District and other required additional insureds specified above (if agreed to in a written contract or agreement) before the District or other additional insureds' own primary or self-insurance shall be called upon to protect it as a named insured.

The Contractor shall, within the period stated in Paragraph B-8 and as a condition precedent to execution of the Contract by the District, deliver to the District a certificate of insurance issued by the insurer reflecting the existence of the required insurance, together with signed copies of the above-specified endorsements. If required by the District, the Contractor shall also furnish a complete copy of the policy and all endorsements. The Contractor shall also disclose the amount of the deductible under its policy(ies) and if the District determines that the deductible is excessive, may require the Contractor to post a bond guaranteeing payment of any losses and defense costs within the deductible layer.

B-12 Subcontracts

Bidder shall furnish information regarding its Subcontractors in substantially the form set forth in the bid forms. If no Subcontractors are to be used, Bidder shall so state. Bidder's attention is directed to Sections 4100 through 4113 of the California Public Contract Code

for requirements and provisions relative to Subcontractors. No substitution of subcontractors by the Bidder shall be consented to or permitted except in accordance with the provisions of Public Contract Code Sections 4107 and 4107.5.

The bidder shall perform with his own organization, work equivalent to at least sixty (60) percent of the total Contract price, and no more than work equivalent to forty (40) percent of the total Contract price may be performed by subcontractors. The cost of Contractor-furnished materials installed by labor carried on the bidder's own payroll may be included in the above required sixty (60) percent.

In conformance with the provisions of Section 4104 of the Public Contract Code of the State of California, each bidder shall set forth in his or her Proposal on the form provided therefor:

- a. The name and location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specifically fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half (½) of one percent (1%) of the Contractor's total bid; and
- b. The portion of the work which will be done by each such subcontractor and a description of the nature of such work.

B-13 Non-Collusion Affidavits

In accordance with the provisions of Section 7106 of the Public Contract Code, each bidder shall execute and submit with their bid a Non-Collusion Affidavit in the form attached hereto. Additionally, the principal contractor shall secure from each proposed subcontractor a Non-Collusion Affidavit in the form also attached hereto.

B-14 Bidder's Bond

Each proposal must be accompanied by a certified or cashier's check drawn on a responsible bank or a Bidder's Bond made by a responsible corporate surety, payable to the Southern San Joaquin Municipal Utility District, as a guarantee that if the bid is accepted, the bidder will, within the time specified in the Instructions to Bidders, enter into a written contract in the form hereinafter set forth and obtain insurance and faithful performance and labor and material payment bonds of the types and character, and in

the amounts as required in said Instructions to Bidders. Said check or Bidder's Bond shall be for a sum not less than five percent (5%) of the aggregate sum of the proposal. Checks will be returned (a) to unsuccessful bidders as soon as practicable after the opening of bids and (b) to the successful bidder as soon as he has executed the contract and obtained the required insurance and bonds, provided he so performs in the manner and within the time stated in the Instruction to Bidders. Should the successful bidder fail to so perform, the District shall be entitled to retain the moneys represented by said check or bond as liquidated damages on account of the delay and inconvenience occasioned to the District, it being expressly agreed and understood that the amount of said check or bond constitutes reasonable damages and that it is impracticable or extremely difficult to ascertain actual damages. There is enclosed following the Proposal for these Specifications a form of Bidder's Bond, and all Bidders submitting bonds as bid guarantees are required to make use of this form and to submit the complete form with submitted proposals.

B-15 Good Faith Efforts Checklist for Disadvantaged Business Enterprises

Each Bidder must complete and include as part of their proposal the Good Faith Efforts Checklist for Disadvantaged Business Enterprises (DBE) to ensure that certified DBEs have the opportunity to compete for procurements funded by USBR financial assistance funds. Bidders must make good faith efforts prior to submission of bids/proposals.

B-16 Construction Schedule

Preliminary Construction Schedule - The Contractor shall submit with his Bid a preliminary construction schedule for the District's review, which includes important milestones. For purposes of preparing said Construction Schedule, Contractors should assume the Notice to Proceed will be issued on or before March 31, 2025 April 30, 2025 and Contractor shall begin work within ten (10) days of receipt of the Notice to Proceed. The Preliminary Construction Schedule shall be in sufficient detail to show the chronological relationship of all activities of the project, including, but not limited to, estimated starting and completion dates of various activities including shop drawing submittal and approval, mobilization of equipment and resources, procurement of materials, construction of components of project, and completion of closeout of project. The schedule shall be prepared in Critical Path Method (CPM) format.

The CPM schedule shall include at a minimum the following: (1) identification of the basic tasks or activities that must be performed to complete the project; (2) estimation of the

duration of the specific activities; and (3) a determination of the logical flow of the work, which includes a determination of which activities must be completed before the subsequent ones can commence.

The Preliminary Construction Schedule shall reflect completion of all work under the Contract within the specified times and in accordance with the Contract Documents, including the Specifications. The Preliminary Construction Schedule will be used by the District in determining award of the Contract.

Post-Bid Pre-Award Schedule - As a condition of award during the period after the opening of bids and prior to actual award of the Contract by the District, the apparent low bidder shall submit a Construction Schedule as set forth in this section. The Construction Schedule shall indicate the time of starting and completion of each major structure or phase of the Work and such intermediate phases as will serve for well-defined chronological order on the Construction Schedule. The schedule shall also indicate the anticipated date of receipt of major items of equipment, and all items of equipment receipt and installation of which is critical to the scheduled progress of the project. The Construction Schedule shall be prepared in Critical Path Method format.

Within five (5) calendar days after bid date, the apparent low bidder shall designate in writing an authorized representative who will be responsible for the preparation of the post-bid pre-award Construction Schedule as set forth in this Section.

The apparent low bidder's representative shall have the authority to fulfill the requirements of preparing the schedule in a professional and acceptable manner demonstrating competence in use of the Construction Schedule, including scheduling experience on project of similar value and complexity.

B-17 Bid Submission and Opening Procedures

The Proposal Bidding Schedule includes a Base Bid and the lowest bid will be determined based on the submission of a responsive bid from a responsible bidder (refer to Section B-3). Accordingly, the following procedures will be followed:

- a. Bid Envelopes: Bids must be submitted in a labeled envelope plainly marked in the upper left-hand corner with the name and address of the bidder and shall bear the words "Proposal for", followed by the title of the Contract Documents for this work and the date and hour for opening bids.
- b. Contents of Bid: Bidders shall complete and submit all documents noted as

"REQUIRED" listed below for bids to be considered responsive. Bid proposal shall be organized and submitted as follows:

REQUIRED

- 1. Bidder's Proposal
- 2. Proposal Bidding Schedule
- 3. Information Required of Bidder Form
- 4. Good Faith Efforts Check List for Disadvantaged Business Enterprises
- 5. Preliminary Construction Schedule (ref. Paragraph B-16)
- 6. Bidder's Non-Collusion Affidavit (ref. Paragraph B-13)

Note: the <u>Subcontractors'</u> Non-Collusion Affidavit may be submitted by the awarded Contractor after the Notice of Award.

- 7. All Issued Addenda (signed front-covers only)
- 8. Bid Security (in the form of a certified or cashier's check or Bidder's Bond) (ref. Paragraph B-14)
- 9. Proof that contractor and subcontractors are registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Listing the DIR number on the Information Required of Bidder Form is considered sufficient proof.
- 10. Proof that the Contractor(s) and/or Subcontractor(s) is/are licensed as required under applicable provisions of the Contractors' State License law (see California Business and Professional Code section 7000 et seq.), and as required under all rules and regulations adopted, applicable, and/or relevant with respect thereto. Listing the License number on the Information Required of Bidder Form is considered sufficient proof.

Delivery of Bid: It is the bidder's responsibility to make sure that their bid is submitted within the specified time. Late bids will not be accepted regardless of postmark and will be returned unopened to the bidder.

- a. Hand Delivery Bid shall be sealed and submitted prior to the time and place established for receiving bids.
- b. Mail or Courier Delivery Bid shall be sealed and inserted into another envelope or packaging exhibiting all information as required for delivery of the envelope or

package to the place established for receiving bids. Bidders submitting Bid Packages via mail or courier delivery are strongly encouraged to notify the District in advance that a bid is being delivered in this manner.

Opening of Bids: The Bid Opening will be held at the place and time stated in Paragraph A-2. The envelope containing the "Bid" as described in Section B-17b will be publicly opened at the prescribed time and the amount of the Base Bid will be read aloud. This will continue until all bids are announced. A bid tabulation will be prepared during the Bid Opening which lists the Base Bid amounts and the corresponding name of the bidders. At the request of the bidders, the District will transmit a bid tabulation of all bids, to include bidder name and the corresponding Base Bid amount.

Announcement of Bid Ranking and Bidders: The announcement of bid ranking and bidders will be completed after the public bid opening and evaluation of bids.

END OF SECTION

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PROPOSAL

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT

Kern County, California

FOR CONSTRUCTING THE

Driver Road Pipeline Project SPECIFICATIONS NO. SSJMUD 25-01

Proposals received until 2:00 p.m. on February 26 March 13, 2025

To the Board of Directors Southern San Joaquin Municipal Utility District 11281 Garzoli Avenue Delano, CA 93215

The undersigned hereby declares that the only persons or parties interested in this Proposal as principals are those named herein; that no director or officer of the District 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 the undersigned has read the Notice Inviting Bids and the Instructions to Bidders hereto attached, and agrees to all the provisions thereof; that the undersigned has examined the site of the Work, the form of the Agreement approved by the District, and the Plans and Specifications and other Contract Documents therein referred to, the District's Grant Agreements between the District and the California Department of Water Resources and the U.S. Bureau of Reclamation, and proposes and agrees that if this bid as submitted in the attached Proposal Bidding Schedule be accepted, he will contract in the form so approved to perform all the work mentioned and as provided in said approved form of the Agreement and the Plans and Specifications and other Contract Documents and to complete the same within the time stipulated therein; and that he will accept in full payment therefor the prices named in said Proposal Bidding Schedule. Said prices are to include and cover the furnishing of all materials except as otherwise provided in the Specifications or other Contract Documents, the performing of all labor requisite or proper, and the providing of all necessary machinery, tools, apparatus, and other means of construction, and the performance and completion of all the Work in the manner set forth, described, and shown in the Contract Documents including the Plans and

	Title
Bidder's post office address	Ву
	Bidder
Dated, 20	-
	Ity of perjury, in accordance with Business and se statements contained herein are true and correct.
•	or sureties named in the spaces provided below have ggregate amounts set forth in Paragraph B-9 of the ct is awarded on the basis of this Proposal.
	hereto as a guarantee that the undersigned will so he undersigned that if he does not so perform, the as represented by said check or bond.
insurance within ten (10) days from the date such additional time as may be allowed by Bidder's Bond made payable to the Southern of \$	the Agreement and furnish the required bonds and e of notice of acceptance of this Proposal, or withing the Engineer. A certified or cashier's check or an San Joaquin Municipal Utility District in the amount, said amount to be not less than five percent (5%)
carefully all words and figures inserted in sa	aid Proposal Bidding Schedule and understands that rrors or omissions on the part of the undersigned in

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(CORPORATE SEAL)

Names and addresses of all members of the firm or names and titles of all officers	Corporation organized under the laws of the State of
	Contractor' License No.
	Expiration Date
	Surety or Sureties

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MEASUREMENT AND PAYMENT

Payment for the various items of the Proposal Bid Schedule, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the Work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety, and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Proposal Bid Schedule, but which is necessary for the complete construction of the Work and all costs therefore shall be included in the prices named in the Proposal Bid Schedules for the various appurtenant items of work.

Note: Pay Items in the Bid Schedule are described in the specifications and are identified on the Contract Drawings at location.

In the case of unit price items, SSJMUD reserves the right to increase or decrease the quantities up to twenty-five percent (25%) using the bid unit price to accommodate conditions encountered on the Project. These adjustments are considered to be within the original Contract Scope and as such will not be considered as a basis for a change in the bid unit price. If the actual quantities of a Pay Item exceed twenty-five percent (25%), SSJMUD and the Contractor will negotiate an equitable increase or decrease in the bid price in accordance with the Contract Documents.

BASE CONTRACT (Items 1 through 11)

Bid Item No. 1: Mobilization and Demobilization:

a) **Description:** Mobilization shall include all activities and costs for transportation of personnel, equipment, and operating supplies to and from the site; establishment of portable sanitary and refuse facilities; location, provision and installation of field offices & equipment/materials, storage yards for excavation equipment, buildings, and other necessary facilities for the Contractor's operations at the site; premiums paid for performance and payment bonds, including coinsurance and reinsurance agreements as applicable; temporary project signage.

Contractor will be responsible to provide his own security for equipment, materials, fuel, tools, etc. that he may have on site.

The Contractor shall provide all necessary equipment & materials; all tools, accessories, power, fuel, materials, supplies, lighting, water, and other support equipment; and experienced personnel necessary to execute the work in an orderly an efficient manner.

Demobilization shall include all activities and costs for; removal of tools, materials, equipment, supplies, and facilities used by the Contractor during construction of the project and restoration of all damaged site features (roads, fences, gates, structures, etc.), final cleanup, and completion of all project submittal requirements, including final site survey and record documents.

Amount shall not exceed 10% of total base bid amount for the Contract.

Mobilization and Demobilization also includes all items necessary to complete the project that are not covered under any other Bid Item.

b) Measurement and Payment: The Final LUMP SUM Price paid for Mobilization and Demobilization shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, and incidentals and for doing all other work and operations which must be performed or costs incurred to complete the mobilization and demobilization efforts and items to complete the project that are not covered under any other line item – including, but not limited to, premiums paid for performance and payment bonds, including coinsurance and reinsurance agreements as applicable.

Bid Item No. 2: Environmental Compliance and Permitting:

- a) **Description:** The Contractor shall comply with all local, state and federal requirements for Storm Water Pollution Prevention, site dust control, and other items identified in the General and Special Conditions. Contractor shall install, construct, maintain all necessary measures to comply with and keep the necessary records in accordance with the requirements of the applicable agencies.
- b) **Measurement and Payment:** The Final Pay Lump Sum Price paid for Environmental Compliance measures shall include full compensation for furnishing all permits, fees, labor, materials, tools, equipment, and incidentals and for doing all work involved in PM-10, SWPPP, etc. compliance.

Bid Item No. 3: Traffic Control:

- a) **Description:** This item shall include providing all labor, materials, transportation, supplies, tools, equipment, and incidentals required to provide traffic control for safety and proper construction of the work within the Specifications and Plans. This item shall include all necessary coordination with the District, Landowners, utility companies, and Kern County and complying with their requirements, including permit requirements.
- b) Measurement and Payment: The Final Pay Lump Sum Price paid for Traffic Control shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals, permits, and for all other work and operations which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore.

Bid Item No. 4: Demolition

- a) Description: This item includes all work associated with removal of existing concrete or asphalt pavements, irrigation pipes and appurtenant structures as shown on the Drawings and Specifications. The Work includes demolition (including pipes that are abandoned in place and plugged with concrete), disposal, hauling, clearing, grubbing, and stripping as required to install and/or remove and dispose of all items as necessary to complete the Work.
- b) Measurement and Payment: The Final Pay Lump Sum Price paid for Demolition shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, and incidentals and for doing all other work and operations which must be performed, or costs incurred to complete this task, and no additional allowance shall be made, therefore.

Bid Item No. 5 Pavement Restoration

- a) **Description:** Contractor shall perform all work associated with restoration of existing asphalt concrete surfaces including grinding existing pavements, all equipment, materials, fuel, power, etc. needed, as specified in the Technical Specifications, as shown on the Drawings, and as directed by the Engineer.
- b) Measurement and Payment: The Final Pay Quantity paid for Pavement Restoration shall be measured for payment by the square yard (SY). No compensation will be made for pavement restoration beyond the lines and grades shown on the drawings unless authorized in writing by the Engineer prior to start of the work.

Bid Item No. 6: 36" PVC C900

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install the 36-inch PVC watermain as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe.
- b) Measurement and Payment: The Final Pay Quantity Unit Price paid per Linear Foot for furnishing and installing 36 inch PVC Pipe, 36' to 24" eccentric reducer, 36" x 36" x 24" tee, valves, fittings and accessories shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, tax, and incidentals to excavate, backfill, metallic locator tape, thrust blocks and for doing all other work and operations which must be performed, or costs incurred for completing this task and no additional allowance shall be made.

Bid Item No. 7: 57" x 57" x 36" Tee Furnished with 36" BFV(s) (Cut-in tee)

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install 57" x 57" x 36" connection to the existing watermain on Bassett Avenue as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe.
- b) **Measurement and Payment:** The Final Pay Lump Sum Price paid for 57" x 57" x 36" Tee Furnished with 36" BFV(s) (Cut-in tee) shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals and for all other work and operations including dewatering of the existing watermain, demolition, restoration of existing pipeline lining and coatings which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore.

Bid Item No. 8: Connection to Existing Turnouts

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install new pipe, fittings to the existing turnouts as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe
- b) **Measurement and Payment:** The Final Pay Quantity Unit Price paid for Connection to Existing Turnouts shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals and for all other work and operations including maintaining irrigation flow to the turnouts which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore.

Bid Item No. 9: Furnish and Install 4" Combination Air Relief Valve

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install the 4" combination air relief valves, fittings as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe.
- b) **Measurement and Payment:** The Final Pay Quantity Unit Price paid for Furnish and Install 4"Combination Air Relief Valve shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals and for all other work which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore.

Bid Item No. 10: 52" Steel Casing at 9th Avenue

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install 52" carrier pipe beneath 9th Avenue as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe.
- b) **Measurement and Payment:** The Final Pay Lump Sum Price paid for 52"Steel Casing at 9th Avenue shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals and for all other work and operations which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore.

Bid Item No. 11: 52" Steel Casing at Cecil Avenue

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install 52" carrier pipe beneath Cecil Avenue as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe.
- b) Measurement and Payment: The Final Pay Lump Sum Price paid for 52" Steel Casing at Cecil Avenue shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, incidentals and for all other work and operations which must be performed, or costs incurred prior to beginning during and after the completion of the work on this contract item and no additional allowance shall be made, therefore.

Optional Item (Item 12)

Optional Bid Item No. 12: 24" PVC C900

- a) **Description:** The Contractor shall provide all materials, labor, and incidentals to install the 24-inch PVC watermain as shown in the Plans and described in the Specifications, complete. No separate payment will be made for the eccentric reducers, fittings, valves or other incidentals to install the pipe.
- b) Measurement and Payment: The Final Pay Quantity Unit Price paid per Linear Foot for furnishing and installing 24 inch PVC Pipe, 24" to 15" eccentric reducer, valves, fittings and accessories shall include full compensation for all labor, materials, transportation, supplies, tools, equipment, tax, and incidentals to excavate, backfill, metallic locator tape, thrust blocks and for doing all other work and operations which must be performed, or costs incurred for completing this task and no additional allowance shall be made.

END OF SECTION

SECTION C

GENERAL CONDITIONS

C-1 Definitions

The following terms, as used in any of the Contract Documents, are respectively defined as follows:

- a. **"Application for Payment"** the form accepted by Engineer which is to be used by Contractor in requesting payments and which is to include such supporting documentation as is required by the Contract Documents.
- b. "Board of Directors" or "Board" the Board of Directors of the District.
- c. **"Certificate of Completion and Final Acceptance"** the certification and acceptance by Engineer of Work when it has been completed in all respects in accordance with the Contract Documents and any Modifications thereof previously approved. Such acceptance is constituted by a Certificate of Completion and Final Acceptance by Engineer to Contractor.
- d. **"Change Order"** a written order to Contractor from Engineer authorizing a substitution, addition, deletion or revision in the Work, or an adjustment in the Contract Price or Contract Time issued after the effective date of the Contract.
- e. **"Change Work"** a substitution, addition, deletion or revision in the Work within the general scope of the Contract necessary to the completion of the Work.
- f. **"Construction Schedule"** an outline of construction activities showing the sequence and timeline for completing the components of the Work.
- g. **"Contract"** the written agreement between District and Contractor covering the Work; other Contract Documents are attached to the Contract and made a part thereof as provided therein.
- h. **"Contract Documents"** the Notice Inviting Bids, the Instructions to Bidders, the accepted Proposal and Proposal Bidding Schedule, the Contractor's Licensing Statement, the Measurement and Payment, the Information Required of Bidders, the Agreement, the Bidder's Bond, the Faithful Performance Bond, the Payment

Bond, the Non-Collusion Affidavits, the Good Faith Efforts Check List for Disadvantaged Business Enterprises, the Notice to Proceed, General Conditions, Special Conditions, Specifications, Plans, Appendices and any Change Order or Addenda setting forth any modifications or interpretations of any of said documents, and any Grant Agreement.

- i. "Contractor" the bidder who submitted the accepted Proposal and who executed a Contract to complete the Work in accordance with the Contract Documents, and the legal representatives of said party.
- j. **"Contract Price"** the monies payable by District to Contractor under the provisions of the Contract Documents.
- k. **"Contract Time"** the length of time stated in the Contract Documents for the completion of the Work.
- I. "County" County of Kern, California.
- m. "Day" a calendar day of 24 hours measured from midnight to the next midnight.
- n. **"Defective"** an adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment, unless responsibility for the protection thereof has been assumed by District.
- o. **"Detail Drawings"** details of standard structures, devices, or installations referred to on the Project Drawings or in the other Contract Documents.
- p. "District" the Southern San Joaquin Municipal Utility District.
- q. "DWR" the California Department of Water Resources.
- r. **"Effective Date of the Contract"** the date indicated in the Contract in which a fully executed Contract is delivered to the District.
- s. **"Engineer"** GEI Consultants, Inc.

- t. **"Equipment"** products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, and other like items).
- u. "Extra Work" Work outside the general scope of the Contract.
- v. **"Field Order"** a written order issued to Contractor by Engineer which orders minor Change Work but which does not involve a change in the Contract Price or the Contract Time, or such an order issued when, as determined, the time required for development and execution of a Change Order would result in delay or stoppage of the Work or would allow a hazardous condition to exist.
- w. **"Final Inspection"** determines if the Work has reached Final Completion.
- x. **"Final Completion"** indicates that the Work has been fully completed in accordance with the Contract Documents and is ready for acceptance and final payment by the District.
- y. **"Final Punch List"** contains items that remain uncompleted after Substantial Completion but that must be completed prior to Final Completion.
- z. **"Grant Agreement"** any agreement entered into between the District and any federal or state agency that pertains to this Contract and the Work.
- aa. **"Materials"** products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form Work.
- bb. "Modification" a Written Amendment to the Contract signed by both parties, a Change Order or a Field Order. Any Modification involving a permit must be supported by the written agreement of the agency issuing the permit. A Modification may be issued only after the effective date of the Contract.
- cc. "Notice of Award" the written notice by District to the apparent successful Bidder of District's intent to sign and deliver the Contract upon Contractor's delivery of all Contract Documents.

- dd. **"Notice of Completion"** the written notice filed by District with the County Recorder certifying that the Work has been completed.
- ee. **"Notice to Proceed"** the written notice by District to Contractor fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform its obligation under the Contract Documents.
- ff. "Owner" the Southern San Joaquin Municipal Utility District.
- gg. "Plans" or "Drawings" means and includes Project Drawings and Detail Drawings.
- hh. **"Preconstruction Conference"** a conference held before Contractor starts Work at the Site, attended by Contractor, Engineer and others as appropriate, to discuss the schedules provided, to discuss procedures for handling Shop Drawings and other submittals and for processing Applications for Payment, and to establish a Working understanding among the parties as to the Work.
- ii. **"Products"** includes purchased items for incorporation into the Work regardless of whether specifically purchased for the Project or taken from Contractor's stock of previously purchased products.
- jj. **"Project"** see Work.
- kk. **"Project Drawings"** the drawings developed by District or Engineer, or both, specifically for the Project which show the character and scope of the Work and are part of the Contract Documents.
- II. **"Record Drawings"** set of drawings the Contractor shall maintain on which the Contractor shall mark all project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented on the original Plans, including buried or concealed construction and utility features which are revealed during the course of construction.
- mm. "Release and Certificate of Final Payment" the release by Contractor, in consideration of final payment, of District from all claims and obligations of every nature.

- nn. **"Schedule of Values"** a statement furnished by Contractor to Engineer reflecting the portions of the Contract Price allotted for the various parts of the Work and used as the basis for reviewing Contractor's Application for Payment.
- oo. **"Semi-Final Inspection"** determines if the Work has reached Substantial Completion.
- pp. **"Shop Drawings" or "Submittals"** all drawings, diagrams, illustrations, schedules and other material which are specifically prepared by or for Contractor to illustrate some portion of the Work, samples, and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams, and other information prepared by a Supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.
- qq. **"Site"** the location or locations where the Work is to be accomplished.
- rr. **"Special Conditions"** specific clauses setting forth requirements peculiar to the Work and supplementary to the General Conditions.
- ss. "Specifications" the manual prepared by District or for District by the Engineer.
- tt. "State" the State of California.
- uu. **"State Standard Specifications"** Standard Specifications issued by the State of California, Department of Transportation, latest edition.
- vv. **"Subcontractor"** an individual, firm or corporation having a direct subcontract with Contractor or with any other Subcontractor for the performance of a portion of the Work at the Site, or for the fabrication and installation of a portion of the Work in accordance with drawings contained in the Contract or furnished by Contractor under the Contract.
- ww. **"Substantial Completion"** means the Work has progressed to the point that the Work is ready for beneficial use and occupancy by the District for the intended purpose.
- xx. **"Supplier"** a manufacturer, fabricator, supplier, distributor, materialman or vendor.

- yy. **"Technical Conditions"** specific clauses setting forth conditions or requirements for materials, equipment, construction systems, standards, workmanship, measurement and payment.
- zz. **"U.S. Bureau of Reclamation, USBR, Reclamation"** the United States Bureau of Reclamation Department of the Interior.
- aaa. **"Work"** the entire construction or the total of the separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.
- bbb. **"Written Amendment"** a written amendment of the Contract Documents, signed by District and Contractor on or after the Effective Date of the Contract.
- ccc. Whenever in the Specifications or upon the Plans the words **DIRECTED**, **REQUIRED**, **PERMITTED**, **ORDERED**, **DESIGNATED**, **PRESCRIBED**, or words of like importance are used, it shall be understood that the direction, requirement, permission, order, designation or prescription of the Engineer is intended, and similarly the words **APPROVED**, **ACCEPTABLE**, **SATISFACTORY**, or words of like importance, shall mean approved by or acceptable to, or satisfactory to the Engineer, unless otherwise expressly stated.
- ddd. **"AASHTO"** the American Association of State Highway and Transportation Officials.
- eee. "ACI" the American Concrete Institute.
- fff. "AISC" the American Institute of Steel Construction.
- ggg. "AISI" the American Iron and Steel Institute.
- hhh. "ASME" the American Society of Mechanical Engineers.
- iii. "ASTM" the American Society for Testing and Materials.
- jjj. "AWS" the American Welding Society.
- kkk. "AWWA" the American Water Works Association.

- III. "FWA" Friant Water Authority
- mmm. "IEEE" (formerly AIEE) the Institute of Electrical and Electronics Engineers.
- nnn. "IPCEA" the Insulated Power Cable Engineers Association.
- ooo. "NEMA" the National Electrical Manufacturers Association.
- ppp. "SSPC" the Steel Structures Painting Council.
- qqq. "USAS" (formerly ASA) the United States of America Standard(s) Institute.
- rrr. The figures given in the Specifications or upon the Plans after the word **ELEVATION**, or an abbreviation of it, shall mean distances in feet above U.S. Coast and Geodetic Survey sea level datum, as established by the Engineer.
- sss. All gender specific pronouns shall be interpreted to include all genders.

C-2 Correlation and Intent of Documents

The Contract Documents are complementary, and what is called for in any one shall be as binding as if called for in all. The intention of the Contract Documents is to require a complete and finished piece of Work including all labor, materials, equipment, facilities, and transportation necessary for the proper execution of the Work, with the exception of such items as are definitely stated in the Specifications or on the Plans to be furnished by the District. Should there be a conflict between the Specifications and the Plans, the Specifications shall be controlling, unless provided at the time of discovery in writing by the District that the plans govern in that case. Should there be a conflict between the General Conditions and the Special Conditions, the Special Conditions shall be controlling.

C-3 Assignment

Neither party to the Contract shall assign the Contract nor sublet it as a whole without the prior written consent of the other, nor shall the Contractor assign any money due or to become due to it hereunder without prior written consent of the Engineer.

C-4 Notice and Service Thereof

Any notice required or given under the contract shall be in writing, be dated, and signed by the party giving such notice or his duly authorized representative, and be served as follows:

- a. If to the District or the Engineer, by personal delivery or by deposit in the United States mail;
- b. If to the Contractor, by personal delivery to the Contractor or to his authorized representative at the site of the project or by deposit in the United States mail;
- c. If to the surety or any other person, by personal delivery to said surety or other person or by deposit in the United States mail;
- d. All mailed notices shall be in sealed envelopes, shall be sent by certified mail with postage prepaid, and shall be addressed to the addresses in the Contract Documents or such substitute addresses which a party designates in writing and serves as set forth herein; and,
- e. Any notice served in accordance with this Section C-4, shall be deemed received by the addressee seventy-two (72) hours after deposited, postage prepaid, in the United States mail.

Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter, or other communication upon the Contractor personally.

C-5 Cooperation with Others

At all times the Contractor shall extend full cooperation to all others performing Work authorized by the District within or adjacent to Contract Work areas including all landholders performing necessary private work. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or by District employees. The Contractor shall have no claim for damages on account of interference. Exact methods of coordination of Work involving the Contractor and others will be as determined by the Engineer, whose decision will be final.

C-6 Personal Attention

The Contractor shall give his personal attention constantly to the faithful prosecution of the Work, and shall be present, either in person or by duly authorized and competent representative, on the site of the Work continually during its progress to receive directions or instructions from the Engineer. Whenever the Contractor is not present on any part of the Work, and where it may be desired to give instructions or directions, they may be given by the Engineer and they shall be received and obeyed by the superintendent or foreman who may have charge of the particular part of the Work in reference to which said instructions or directions are given.

C-7 Compliance with Laws, Permits, Licenses, Approvals, Legal Obligations, Taxes

a. The Contractor is an independent contractor and shall, at his sole cost and expense, comply with all laws, rules, ordinances and regulations of all governing bodies having jurisdiction over the Work, obtain all necessary permits and licenses therefor, pay all manufacturers' taxes, sales taxes, use taxes, processing taxes, and all Federal and State taxes, insurance and contributions for Social Security and Unemployment which are measured by wages, salaries or any remuneration paid to the Contractor's employees, whether levied under existing or subsequently enacted laws, rules, or regulations. The Contractor shall also pay all property tax assessments on materials or equipment used until acceptance by the District. Without limitation, materials furnished and performance by the Contractor hereunder shall comply with Safety Orders of the Division of Industrial Safety, State of California.

The Contractor, upon request, shall furnish evidence satisfactory to the Engineer and/or to the District that any or all of the foregoing obligations have been or are being fulfilled. The Contractor warrants to the District that he is licensed by all applicable governmental bodies to perform this Contract and will remain so licensed throughout the progress of the Work, and that he has, and will have, throughout the progress of the Work, the necessary experience, skill, and financial resources to enable him to perform this Contract.

- b. Contractor shall be responsible for obtaining any and all permits, licenses, and approvals required for performing its obligations under this Project.
- c. Without limiting the foregoing, Contractor shall keep informed of and take all measures necessary to ensure compliance with California Labor Code

requirements, including but not limited to Section 1720 et seq. of the California Labor Code regarding public works, limitations on use of volunteer labor (California Labor Code Section 1720.4), labor compliance programs (California Labor Code Section 1771.5), and payment of prevailing wages for work done under this project.

C-8 Indemnification

- To the fullest extent permitted by law, the Contractor shall assume the defense of a. and indemnify and save harmless the State of California, the California Department of Water Resources, the United States, the U.S. Bureau of Reclamation, Southern San Joaquin Municipal Utility District, the Engineer, and their respective directors, officers and agents from any and all loss, damage, liability, claims or causes of action of every nature whatsoever for damage to or destruction of property, including the District's property, or for injury to or death of persons, including Contractor's employees, in any manner, including that alleged to have been caused by the negligence of the indemnitees or any of them, arising out of or incident to the performance of this Contract; provided, however, that the Contractor shall have no such obligation with respect to such of the foregoing as are actually caused by the sole negligence or willful misconduct of the indemnitees or any of them; and provided further, that the Contractor shall not be liable for damages resulting solely from error or omission in design which were not due to or contributed to by negligence or fault of the Contractor, his subcontractors, agents or employees.
- b. The Contractor shall at all times preserve and protect the Work installed and performed hereunder, and assume full responsibility for the condition thereof until final acceptance by the District. The Contractor shall be liable for any loss or damage to any Work in place and to any materials on the Site which may be caused by the Contractor, his employees, agents or guests. Any such damage shall be immediately repaired by the Contractor, and, upon failure to do so, the District may remedy the same and deduct the cost thereof from any amount due or to become due the Contractor.
- c. The Contractor shall assume the defense of and indemnify and save harmless the State of California, the California Department of Water Resources, the United States, the U.S. Bureau of Reclamation, Southern San Joaquin Municipal Utility

District, the Engineer, and their respective directors, officers and agents against any and all liens, claims, demands and costs, including attorneys' fees, for labor and material furnished to the Contractor or any of his Subcontractors in connection with the performance of this Contract. In the event that the Contractor or any of his Subcontractors shall fail to pay for any material or labor used in the performance of this Contract, or any lien is filed against the said property, or any claim is asserted or action filed on any Bond, by any person claiming to have furnished labor or materials to the Contractor or any of his subcontractors in connection with the performance of this Contract, the District shall be entitled, at its option, to pay for said material or labor, or discharge any such lien, or to pay or settle any such claim or action and to deduct the amount so paid, together with any and all costs and attorney's fees incurred by or on behalf of the District in connection with any such payment, discharge, or settlement, from amounts due or to become due the Contractor hereunder. The District may also deduct from any amounts due or to become due to the Contractor, any other amounts owing by the Contractor to the District, including the cost of any materials, labor, services, equipment or facilities supplied by the District as to which the Contractor has the obligation to supply the same hereunder. In the event that the balance which otherwise would be due the Contractor shall be insufficient to so reimburse the District, the Contractor shall pay the District any deficiency upon demand.

d. The Contractor shall pay all royalties and license fees. Contractor shall, at his own cost, expense and risk, defend any and all suits or claims for infringement of any patent rights and shall save the District and its directors, officers, employees and agents harmless from loss on account thereof; except that the District shall be responsible for all such loss when a particular manufacturer is specified by it unless the Contractor has information that the process or article specified is or may be an infringement of a patent, in which case Contractor shall be responsible for such loss unless he promptly gives such information, in writing, to the Engineer.

C-9 Assignments of Antitrust Actions

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. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of

Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

In entering into a public works contract or 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. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

C-10 Claims and Payment of Attorneys' Fees

Claims by the Contractor shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed with the District on or before the date of final payment. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by the Contract for the filing of claims.

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

For claims greater than or equal to fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the District will respond in writing to all written claims within sixty (60) days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the claim, any additional documentation

supporting the claim or relating to defenses to the claim or claims the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the District and Contractor. The District's written response to the claim, as further documented, will be submitted to the Contractor within thirty (30) 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 or request documentation, whichever is greater.

If the Contractor disputes the District's written response, or the District fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within fifteen (15) days of receipt of the District's response or within fifteen (15) days of the District'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 a demand, the District will schedule a meet and confer conference within thirty (30) days for settlement of the dispute.

If following the meet and confer conference the claim or any portion remains in dispute, the Contractor may file a claim pursuant to Government Code Section 900 et seq. and a lawsuit on the claim may be filed in the appropriate state court.

The court shall submit the matter to non-binding mediation. The parties are to select a mediator within fifteen (15) days of submittal to mediation, and the mediation must be commenced within thirty (30) days of the submittal to mediation.

If the matter remains in dispute, the case shall be submitted to judicial (non-binding) arbitration pursuant to Code of Civil Procedure Section 1141.10 et seq. If either party objects to the arbitrator's award, the matter can then go to trial de novo in the trial court. Any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees as provided by applicable law, pay the attorney's fees of the other party arising out of the trial de novo.

In the event that any litigation of any nature between the District and the Contractor becomes necessary to enforce or interpret all or any portion of this Contract, it is mutually agreed that the prevailing party therein shall receive from the other, in addition to such sums as may be reduced to judgment, an amount sufficient to reimburse such prevailing

party for reasonable attorneys' fees and litigation costs paid or owing as a result of such litigation.

Compliance with Public Contract Section 9204

Contractor shall comply with Public Contract Code Section 9204, the provisions of which are replicated, specifically, below:

- (a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.
- (b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.
- (c) For purposes of this section:
 - (1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:
 - (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.
 - (B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.
 - (C) Payment of an amount that is disputed by the public entity.
 - (2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.
 - (3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the

California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

- (B) "Public entity" shall not include the following:
 - (i) The Department of Water Resources as to any project under the jurisdiction of that department.
 - (ii) The Department of Transportation as to any project under the jurisdiction of that department.
 - (iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.
 - (iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
 - (v) The Military Department as to any project under the jurisdiction of that department.
 - (vi) The Department of General Services as to all other projects.
 - (vii) The High-Speed Rail Authority.
- (4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.
- (5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.
- (d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion

of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

- (B) The claimant shall furnish reasonable documentation to support the claim.
- (C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.
- (D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.
- (2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.
 - (B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing.

If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

- (C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
- (D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
- (E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.
- (3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.
- (4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.
- (5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on their own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work

which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

- (e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.
- (f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.
- (g) This section applies to contracts entered into on or after January 1, 2017.
- (h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.
- (i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute that is enacted before January 1, 2027, deletes or extends that date.

Compliance with Public Contract Section 20104

Following compliance with Public Contract Code Section 9204 as provided herein, Contractor shall comply with Public Contract Code Section 20104 et seq., if applicable. The applicable provisions of Public Contract Code Section 20104 et seq. are replicated, specifically, below:

(a) (1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and a local agency.

- (2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.
- (b) (1) "Public work" means "public works contract" as defined in Section 1101 but does not include any work or improvement contracted for by the state or the Regents of the University of California.
 - (2) "Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.
- (c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.
- (d) This article applies only to contracts entered into on or after January 1, 1991.

20104.2

For any claim subject to this article, the following requirements apply:

- (a) 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 the filing of claims.
- (b) (1) For claims of less than fifty thousand dollars (\$50,000), the local 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 claim or relating to defenses to the claim the local agency may have against the claimant.
 - (2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

- (3) The local 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.
- (c) (1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local 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 to the claim the local agency may have against the claimant.
 - (2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.
 - (3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 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 or requested documentation, whichever is greater.
- (d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local 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 a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.
- (e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 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 that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.

20104.4

The following procedures are established for all civil actions filed to resolve claims subject to this article:

- (a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.
- (b) (1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act (Title 4 (commencing with Section 2016.010) of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.
 - (2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.
 - (3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award

requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

20104.6

- (a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.
- (b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

C-11 Authority of the Engineer

a. The Engineer shall give all orders, lines, grades, and directions contemplated under the Contract. The Engineer may determine the adequacy of the Contractor's methods, tools, plant, equipment, and appurtenances and he shall determine in all cases the quantity, quality, acceptability, and fitness of the several kinds of Work and materials which are to be paid for. The Engineer shall have the authority to determine all questions in relation to said Work and the construction thereof and decide in all cases questions which may arise relative to the fulfillment of this Contract on the part of the Contractor. The Engineer shall also have the authority to reject all Work and materials which do not conform to the Contract and to stop the Work when necessary to prevent its improper execution. Should any discrepancy appear or any misunderstanding arise as to the import of anything contained in the Specifications or Drawings, the matter shall be referred to the Engineer, who shall decide the same in accordance with the true intent and meaning. Any differences or conflicts which may arise between the Contractor and other contractors of the District in regard to their Work will be adjusted and determined by the Engineer. All instructions, rulings, and decisions of the Engineer shall be made promptly and in writing, if so requested, and they shall be final and binding.

- b. If at any time the Contractor's Work force, tools, plant or equipment appear to the Engineer to be insufficient, inefficient or inappropriate to secure the required quality of Work or the proper rate of progress, the Engineer may order the Contractor to increase their efficiency, improve their character, to augment their number or to substitute other personnel, new tools, plant, or equipment, as the case may be, and the Contractor shall comply with such order.
- c. The undertaking of inspections by the Engineer or the giving of instructions as herein authorized shall not be construed as supervision of the actual construction or make the Engineer or the District responsible for providing a safe place for the performance of Work by the Contractor, Subcontractor, or Suppliers; or for access, visits, use, Work, travel or occupancy by any person.

C-12 Qualifications of Bidders

The Contractor's attention is directed to Paragraph B-3 which requires that, in addition to certifying to financial ability to perform Contract Work, each bidder shall submit a statement verifying his experience in performing Work comparable to that required under the Contract. Bids will be considered only from general contractors who can demonstrate a record of experience satisfactory to the District. Under "Information Required of Bidder," each bidder shall submit with his proposal a listing of at least three projects constructed under the supervision of his organization during the past ten (10) years involving work of size and complexity comparable to that to be installed under these Contract Documents. In conformance with Paragraph B-12, it is further required that the Contractor shall perform with his own organization, work equivalent to at least sixty percent (60%) of the total Contract price. The cost of Contractor-furnished materials installed by labor carried on the Contractor's own payroll may be included in the above required sixty percent (60%).

C-13 Contractor's License

Contractor, including all Subcontractors and Specialty Contractors, shall possess a valid California Contractor's license, of the required class for the Work to be performed and completed as required by the Project, the Contract Documents, and the Specification, at the time the Bid/Proposal is submitted and during the entire course of performance under the Contract. The following statement, in pertinent part, shall be included in at least 10-point type on all written contracts with respect to which the person is a prime contractor in accordance with Section 7030 of the California Business and Professions Code:

"Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, CA 95826."

C-14 Subcontracts

- a. The attention of the Contractor is directed to the provisions of Public Contract Code, Section 4100 et seq. as amended, and said provisions are by this reference incorporated herein and made a part hereof.
- b. Each subcontract shall contain a suitable provision for the suspension or termination of that subcontract should the Work be suspended or terminated or should the Subcontractor neglect or fail to conform to every provision of the Contract Documents insofar as such provisions are relevant. The Contractor shall be as fully responsible to the District for the acts or omissions of his Subcontractors and of the persons either directly or indirectly employed by them as he is for the acts or omissions of persons directly employed by him. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the District. If a legal action against the District is initiated by a subcontractor, the Contractor shall reimburse the District for the amount of legal expenses incurred by the District in defending itself in said action.
- c. A copy of each subcontract, if in writing, or if not in writing then a written statement signed by Contractor, giving the name of the subcontractor, and the terms and conditions of such subcontract, shall be filed with Owner before the subcontractor commences performance of the Work. Each subcontract shall contain a reference to the agreement between Owner and Contractor, and the terms of that agreement and all parts thereof shall be made a part of such subcontract insofar as applicable to the Work covered thereby. Each subcontract shall provide for its annulment by Contractor at the order of Owner, if, in Owner's opinion, the subcontractor fails to comply with the requirements of the principal

agreement insofar as the same may be applicable to his work. Nothing herein contained shall create any contractual relation between any subcontractor and Owner or relieve Contractor of any liability or obligation hereunder.

- d. Contractor is hereby alerted to provisions of Section 7107 of the Public Contract Code, requiring Contractor to pay to each of its subcontractors from whom retention has been withheld, each subcontractor's share of the retention received, within seven (7) days from receipt of all or any portion of such retention proceeds from Owner.
- e. Pursuant to Public Contract Code Section 6109, subcontractors who are ineligible to perform work on a public works project as determined by the Department of Industrial Relations pursuant to Section 1777.1 or Section 1777.7 of the California Labor Code shall not perform any portion of the work contemplated herein. Any subcontract between the Contractor and an ineligible subcontractor shall be void as a matter of law, and the ineligible subcontractor shall not receive any payment for performing such work.

C-15 Plans and Specifications

Plans furnished herewith are for bidding purposes. The Engineer will furnish the Contractor electronic copies of conformed Plans and Specifications. The Contractor shall have no claim for excusable delay on account of the failure of the Engineer to deliver necessary Plans or Specifications unless the Engineer shall have failed to deliver the same within two (2) weeks after receipt of written demand for the Plans and Specifications by the Contractor.

The Contractor shall keep one (1) paper copy of all current Plans and Specifications relating to the Work, in good order, available to the Engineer and his representatives, and convenient to the Site, on site at all times.

If the Contractor, in the course of the Work, finds any discrepancy between the Plans and the physical condition of the locality, or any errors or omissions in the drawings, or in the layout as given by points and instructions, it shall be his duty to inform the Engineer in writing, and the Engineer will promptly verify the same. Any Work done after such discovery, until authorized, will be done at the Contractor's risk. All Plans, Specifications, and copies thereof furnished by the Engineer shall not be reused on other Work and, with

the exception of the signed Contract sets, are to be returned to him, on request, at the completion of the Work.

The Contractor shall not take advantage of any errors, discrepancies or omissions which may exist in the Plans and Specifications but shall immediately call them to the attention of the Engineer whose interpretation or correction thereof shall be conclusive.

It is intended that the information pertaining to conditions that may affect the cost of the Work will be shown on the Drawings or indicated in the Specifications; however, the District does not warrant the completeness or accuracy of such information. The Contractor shall ascertain the existence of conditions that would affect the cost of the Work which would have been disclosed by a reasonable examination.

Existing improvements visible at the Site for which no specific disposition is made on the Plans but which could reasonably be assumed to interfere with the satisfactory completion of the improvements contemplated by the Plans shall be removed and disposed of by the Contractor.

When deemed necessary by the Engineer, additional Detailed Drawings will be furnished to the Contractor during the progress of the Work.

The location of the Work, its general nature and extent, and the form and general dimensions of all appurtenant works are shown on the Plans to be attached to and made a part of these Specifications. Drawings applicable to the Work described in the Contract Documents are listed on the front page of the Plans.

C-16 Department of Industrial Relations Registration

Pursuant to Labor Code Section 1725.5, all Contractors, including Subcontractors and Specialty Contractors, are to be registered with the Department of Industrial Relations in order to be qualified to bid on, be listed in a bid proposal, or engage in the performance of any public work contract. The foregoing are required to register with the Department of Industrial Relations prior to bidding, being included on a bid, or engaging in Work set forth herein. Said Registration shall be maintained by the Contractor at all times prior to and throughout the course of completion of the Project, and the cost and renewal thereof is to be the sole responsibility of the Contractor, Subcontractor, and/or Specialty Contractor.

C-17 Workers and Wages

- a. Character of Workers Only qualified, careful and efficient Workers shall be employed. When required in writing by the Engineer, the Contractor or any subcontractor shall remove from the Work any person who is, in the opinion of the Engineer, incompetent, unfaithful, disorderly, or otherwise unsatisfactory, and shall not again employ such person on the Work except with the consent of the Engineer. Such removal shall not be the basis for any claim for compensation or damages against the District, or any of its officers or agents.
- b. **Convicts** No convict labor shall be directly employed by the Contractor or any subcontractor in the performance of any Work done under this Contract.
- Hours of Work Eight (8) hours of labor shall constitute a legal day's work upon c. all the Work hereunder and the time of service of any worker employed by the Contractor or by any Subcontractor under him shall be limited and restricted to eight (8) hours during any one (1) calendar day, except that work performed by employees in excess of eight (8) hours per day and forty (40) hours in any one (1) calendar week will be permitted upon compensation for all hours worked in excess of said limitations at not less than one and one-half times the basic rate of pay or as otherwise may be required by applicable law. The Contractor and all Subcontractors under him shall keep record of hours worked as required by Section 1812 of the California Labor Code. As required by Section 1813 of the California Labor Code, the Contractor shall forfeit as a penalty to the District twenty-five dollars (\$25) for each worker employed in the execution of the Contract by him or by any Subcontractor under him for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one (1) calendar week in violation of the provisions of this subsection.
- d. **Compliance with State Requirements for Employment of Apprentices** The Contractor's attention is directed to Section 1777.5 of the California Labor Code; provisions of said section pertaining to employment of registered apprentices are hereby incorporated by reference into these Specifications. As applicable, the Contractor or any Subcontractor employed by him in the performance of Contract

Work shall take such actions as necessary to comply with provisions of said Section 1777.5.

e. **Wage Rates** – Bids shall be made in accordance with the prevailing rate of per diem wages for this locality and project as determined by the <u>Director Department</u> of Industrial Relations pursuant to Labor Code Section 1770 et seq. and the Davis-Bacon Act, whichever is greater.

The Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Pursuant to Article 2 (commencing at Section 1770), of the California Labor Code, the Director of the State of California, Department of Industrial Relations has ascertained the generally prevailing rate of per diem wages and the generally prevailing rates for legal holiday and overtime work in the locality in which the work is to be performed, for each craft or type of worker needed to execute the Contract. The Contractor and all Subcontractors under him shall pay not less than said specified rates to all workers employed in the execution of the Contract, which is incorporated herein by this reference. The Contractor shall post a copy of said documents at each job site. As required by Section 1775 of the California Labor Code, the Contractor shall, as a penalty to the District, forfeit an amount determined by the Labor Commissioner, not more than fifty dollars (\$50), for each calendar day, or portion thereof, for each worker paid less than the specified prevailing rates for work done under the Contract by him or by any subcontractor under him. The Contractor and all subcontractors under him shall keep records of wages paid as required by Section 1776 of the California Labor Code. The Contract and each Subcontractor shall furnish the record specified in section 1776 of the California Labor Code to the Labor Commission in the manner required by section 1171.4 of the California Labor Code. The Contractor and each Subcontractor shall pay travel and subsistence payments to each worker needed to execute the Work required by the Contract, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with Section 1773.8 of the California Labor Code.

Prevailing wage schedules for Kern County are also available from the Department of Industrial Relations-Division of Labor Statistics & Research via the internet at www.dir.ca.gov. Davis-Bacon Act wages can be found at www.dol.gov.

- f. Worker's Compensation Insurance In accordance with the provisions of Section 3700 of the California Labor Code, every Contractor shall secure the payment of compensation to his employees. Prior to commencing Work, Contractor shall sign and file with the District a certification as follows: "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's 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."
- g. **Labor Discrimination** The Contractor's attention is directed to Section 1735 of the California Labor Code. The Contractor agrees to comply with provisions of said section that read as follows:

"No discrimination shall be made in the employment of persons upon public works because of the race, religious creed, color, national origin, ancestry, physical handicap, mental condition, marital status or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."

The Contractor's attention is further directed to Section 1777.6 of the California Labor Code, and the Contractor agrees to ensure compliance with the provisions of said section which provide as follows:

"It shall be unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works, on the ground of the race, religious creed, color, national origin, ancestry, sex or age, except as provided in Section 3077, of such employee."

C-18 Quality Control

All items specified under the Specifications shall be of the sizes, shapes and materials as specified herein. All materials shall be new, free from defects impairing strength, durability and appearance, shall be of the best commercial quality for the purposes specified and made with structural properties to withstand all stresses and strains to which they normally will be subjected. Items furnished, unless otherwise specified, shall be standard, approved products of recognized manufacturers and fabricated in accordance with the best shop methods. All incidental items and accessories not

specified herein, but which are required to fully carry out the specified intent of the Work, shall be furnished without additional cost. Welding shall be in accordance with the latest revision of the Standard Code for Arc and Gas Welding in Building Construction as issued by the AWS. All welding shall be performed by certified welders qualified under the standard qualification procedures of the AWS. At all times, the manufacturer shall provide and maintain adequate inspection and quality control procedures for all items or Work, whether manufactured or fabricated in manufacturer's plant or elsewhere. In order to ensure that all items of Work meet material quality and performance requirements of the Specifications, if so directed by the Engineer, for those items of Work manufactured or fabricated elsewhere than his plant, the Contractor shall furnish written certification that adequate supervision, inspection and quality control procedures have been provided.

Refer to section D-13 for Quality Control – Testing responsibility.

C-19 Construction Program (Schedule)

Post-Award Schedule - Within five (5) days of award of Contract by the District, the Engineer will return the post-bid pre-award Construction Schedule to the Contractor. The Contractor shall modify the schedule to include any modifications, or changes and to reflect final phasing and scheduling of Work.

The Contractor shall complete these modifications within five (5) calendar days from date the schedule is returned to him and shall resubmit it for review. Upon receiving written notice from the Engineer that the schedule, as revised, has been accepted, it will then become the Construction Schedule by which the Contractor shall construct the Work and shall be subject to progress reporting, revision, and updating procedures implemented during the course of construction.

The initial Construction Schedule shall contain no Contract changes or delays which may have occurred during the interim submittal period. Changes shall be entered at the first update revision as specified under revisions to Construction Schedule produced below.

At any time during the progress of the project, if Contractor's progress has fallen behind the accepted Construction Schedule, Contractor shall take such corrective steps as may be required, including but not limited to, increasing the number of personnel, shifts, overtime operations, days of work, and amount of construction equipment until such time as the Work is back on schedule, at no additional cost to the District. He shall also submit at the next weekly construction progress meeting such supplementary schedule

or schedules as may be deemed necessary to demonstrate the manner in which the approved rate of progress will be regained.

Revisions to Construction Schedule - The Contractor shall submit a revised Construction Schedule within five (5) days of the occurrence of any of the following:

- a. When delay in completion of any activity or group of activities indicates an overrun of the Contract time by thirty (30) working days.
- b. Delays in submittals, deliveries, or work stoppage are encountered which make re-planning or rescheduling of the Work necessary.
- c. The schedule does not represent the actual prosecution and progress of the project as being performed in the field.

The revised Construction Schedule shall be submitted to the Engineer for review with a letter describing the reasons for submitting a revised Construction Schedule with any supporting documentation. The cost of revisions to the Construction Schedule resulting from Contract changes will be included in the cost for the change in the Work.

The cost of revision to the Construction Schedule not resulting from authorized changes in the Work shall be the responsibility of the Contractor.

C-20 Superintendence

- a. The Contractor shall submit a statement of the qualifications of its proposed superintendent to the Engineer for review. The statement shall include the superintendent's name, the name of each project that is the basis of the qualifications, each project site location, a brief description of each project, and the name and mailing address of the owner for each project.
- b. The Contractor shall assign a duly authorized and competent person continually on the site during the Work. The superintendent shall have not less than 7 years' experience as a contractor's general superintendent on heavy engineering work with not less than 4 years as a superintendent on projects with complexity and configuration similar to the Work described in the contract documents.
- c. If the superintendent is not deemed qualified or if the superintendent's performance on the Work is determined to be unsatisfactory by the Engineer, the superintendent shall be immediately removed from the project.

- d. The Contractor shall furnish to the Engineer a written statement of the qualifications of the proposed substitute superintendent if a substitute superintendent is required.
- e. A substitute superintendent shall meet the same requirements and shall be subject to approval by the Engineer.

C-21 Suspension of Work - Damages for Delay

- a. The Engineer may at any time, by notice in writing to the Contractor, suspend any part of the Work for such period of time as may be necessary to prevent improper execution of the Work on the Project, and the Contractor shall have no claim for an extension of time to complete the Work, or for damages or additional compensation on account of any such suspension.
- b. The District may at any time suspend any part or all of the Work upon ten (10) days' written notice to the Contractor, who shall thereupon discontinue all Work suspended except for all operations to prevent loss or damage to Work already executed as may be directed by the Engineer. The Contractor shall be paid on the same basis as Extra Work for costs of Work performed in accordance with such orders of the Engineer during such suspension, provided that this shall not include any costs pertaining to Work not suspended by said notice. Work shall be resumed by Contractor after such suspension on ten (10) days' written notice from the District. In the event of suspension of the entire Work by the District, the Contractor shall be paid the sum of one-hundred fifty dollars (\$150.00) for each calendar day during which the entire Work shall have been suspended. Said sum is hereby mutually agreed upon as fixed and liquidated damages in full settlement of all costs and expenses, losses and damages resulting to the Contractor from such suspension.
- c. In the event of any suspension of the Work in whole or in part, the Contractor shall be entitled to any extension of time to complete the Work in a length equal to the length of the suspension of the Work. Provided, however, that the Contractor shall not be entitled to an extension of time to complete the Work in the event that the Work is suspended by the Engineer to prevent or correct improper execution of the Work.

C-22 Time of Work -Termination for Delay - Time Extensions

- The Contractor shall at all times employ such force, plant, materials, and tools as a. will be sufficient, in the opinion of the Engineer, to prosecute the Work at not less than the rates fixed under the terms of the Contract and to complete the Work or any separable portions thereof within the time limits fixed therein. If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will insure its completion within the time specified in the Contract, or any extension thereof, or fails to complete said Work within such time, the District may, by written notice to the Contractor, terminate his right to proceed with the Work or such part of the Work as to which there has been delay. In such event the District may take over the Work and prosecute the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the Work such materials, appliances, equipment, and plant as may be on the site of the Work and necessary for its prosecution. Whether or not the Contractor's right to proceed with the Work is terminated, he and his sureties shall be liable for all damages, including attorney's fees, sustained or incurred by the District in enforcing the provisions hereof against the Contractor due to any refusal or failure to prosecute the Work.
- b. The Contractor's right to proceed shall not be so terminated nor the Contractor charged with resulting damage if:
 - 1. The delay in the completion of the Work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to Acts of God (herein to include only the following occurrences or conditions and effect: earthquakes affecting the Site in excess of a magnitude of 3.5 on the Richter Scale and tidal waves), acts of the public enemy, a war in which the United States of America is a participant, acts of the District in either its governmental or contractual capacity, acts of another contractor in the performance of a contract with the District, fires, floods (excluding site flooding due to ground water), epidemics, quarantine restrictions, strikes, lockouts, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or

- negligence of either the Contractor or such subcontractors and suppliers; and
- 2. The Contractor, within ten (10) days from the beginning of any such delay (unless the Engineer grants a further period of time before the date of final payment under the Contract), shall notify the Engineer in writing of the causes of delay and request an extension of time. The Engineer shall ascertain the facts and the extent of the delay and extend the time for completing the Work when, in his judgment, the findings of fact justify such an extension, and his findings of fact shall be final and conclusive on the parties.
- c. The rights and remedies of the District provided in this clause are in addition to any other rights and remedies provided by law or under this Contract.
- d. A request for an extension of time, or the granting of an extension of time, shall not constitute a basis for any claim against the District for additional compensation. The Contractor shall be deemed to have waived any claim for additional compensation, and does hereby waive any such claim.
- e. No additional time extensions will be granted for inclement weather conditions, only as provided under this paragraph. Contract time extensions will be granted as provided in this Paragraph C-22; however, the Contractor is advised that weather-related time extensions will be granted only if conditions are such that it is impossible to perform any productive Work. The Contractor shall make every effort to protect the Work from adverse weather and shall minimize delays and time extensions by taking mitigative measures such as pumping of surface water, utilizing equipment best suited for adverse weather, etc.

C-23 Termination for Reasons Other Than Delay

a. If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed for the Contractor on account of his insolvency and not be discharged within ten (10) days after his appointment, or if the Contractor should fail to make prompt payment to Subcontractors or for material or labor, or should persistently disregard laws, ordinances, or the instructions of the Engineer, or otherwise be

guilty of a substantial violation of any provisions of the Contract, then the District, upon the certification of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, and after giving the Contractor ten (10) days written notice, terminate the employment of the Contractor and take possession of the Site and of all equipment, materials, tools, and other facilities thereon and finish the Work by whatever method the District may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished. If upon completion of the Work the total cost to the District, including attorney's fees, in connection therewith shall be less than the amount which would have been paid if the Work had been completed by the Contractor in accordance with the terms of the Contract, then said difference shall be paid to the Contractor in the same manner as the final payment under the Contract. If the expense, including attorney's fees, incurred by the District on account of termination of employment of the Contractor and subsequent completion of the Work by the District by whatever method the District may deem expedient shall exceed said amount which the Contractor would otherwise have been paid, the Contractor and his sureties shall be liable to the District for the full amount of such excess expense.

b. In addition to its rights under Paragraph C-23, Subsection (a) hereof, if at any time before completion of the Work under the Contract it shall be determined by the District that reasons beyond the control of the parties hereto render it impossible or against the interests of the District to complete the Work, or if the Work shall be stopped by an injunction of a court of competent jurisdiction or by order of any competent authority, the District may, upon ten days written notice to the Contractor, discontinue the Work, and terminate the Contract. Upon service of such notice of termination the Contractor shall discontinue the Work in such manner, sequence, and at such times as the Engineer may direct, continuing and doing after said notice only such Work until such time or times as the Engineer The Contractor shall have no claim for damages for such may direct. discontinuance or termination, nor any claim for anticipated profits on the Work thus dispensed with, nor any other claim except (1) for the Work actually performed up to the time of complete discontinuance, including any Extra Work ordered by the Engineer to be done, and (2) for any liquidated damages due hereunder in accordance with the provisions relating to suspension of Work.

C-24 Changes and Extra Work

- a. Without invalidating the Contract, District may, at any time or from time to time, order Change Work or request Extra Work to be performed by the Contractor. Change Work may involve increasing or decreasing the quantity of an item or portion of the Work; deleting any item, or items, of the Work; or adding items to the Work.
- b. Engineer will provide Contractor with a written description of the scope of Work involved. Unless otherwise required, Contractor shall, within 10 days after receipt of such written material, submit in writing to Engineer a proposal for accomplishing such Work.

The proposal shall reflect any change in cost to Contractor for performing the proposed Change Work or Extra Work under the Contract, in comparison to what the cost would have been otherwise. The proposal shall state the basis for compensation for such Work. Sufficient detail shall be given in the proposal to permit thorough analysis.

The proposal shall state also the basis for any change of Contract Time, or for a change in the time required for completion of any items of Work for which a specific completion time or date is set forth in the Contract, due to the Change Work or Extra Work. Sufficient detail shall be given in the proposal to permit thorough analysis.

The proposal shall state if the performance of such Change Work or Extra Work would result in any change in the time required for completion of any items of the Work as shown on Contractor's current construction schedule. A revised construction schedule shall be submitted with the proposal if any such changes are involved.

Engineer will analyze the proposal data, clarify as needed and, if necessary, attempt to reach agreement on the terms of the proposal through negotiations with Contractor.

Engineer will then determine one of the following:

1. A Change Order will be issued ordering Change Work or Extra Work, based upon the Contractor's proposal covering such Work, or on the proposal as modified by mutual agreement.

2. The proposed Change Work or Extra Work will not be performed under the Contract.

Change Work and Extra Work must be authorized through a Change Order or Field Order. Upon receipt of a Change Order, Contractor shall proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If, as determined by District, any Change Order causes a change in Contract Price or a change in Contract Time, an equitable adjustment will be made.

c. Engineer may authorize minor Change Work not involving a change in Contract Price or Contract Time, which is consistent with the intentions of the Contract Documents. This will be accomplished by Field Order and shall be binding on District and on Contractor who shall perform the change promptly. If Contractor believes that Work under a Field Order justifies an increase in Contract Price or an extension of Contract Time, Contractor may make a claim as provided for in Paragraphs C-25 and C-27.

Engineer may also issue a Field Order for Change Work where, as determined, the time required for development and execution of a Change Order would result in delay or stoppage of the Work or would allow a hazardous condition to exist. In these cases, a Change Order will be developed as soon as possible to replace the Field Order.

Additional Work performed without authorization of a Change Order will not entitle Contractor to an increase in Contract Price or an extension of Contract Time.

It shall be solely the responsibility of Contractor to provide any notice to sureties of any change affecting the general scope of the Work or change in Contract Price or Contract Time.

d. Any Change Work or Extra Work will be authorized by written orders to Contractor by Engineer, except that in the event of an emergency which Engineer determines endangers life or property and only in such an event, Engineer may issue oral orders to Contractor for any Work required by reason of such emergency. Any such oral orders will be confirmed in writing as soon as practicable. Such orders, whether written or oral, may be accompanied by drawings and data as are necessary to show the extent of such ordered Work.

Contractor shall commence such Work so that all current Contract Time requirements will be met, except that in the event of an emergency which Engineer determines endangers life or property, Contractor shall commence such Work as required by Engineer.

e. If the time required for completion of any items for which a specific completion date is set forth in the Contract is changed because of the performance of Change Work or Extra Work, an adjustment in the time for completion for the affected items will be made. The construction schedule shall be revised to reflect such adjustment and resubmitted for approval.

C-25 Changes of Contract Price

a. The Contract Price constitutes the total compensation payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at its expense without change in the Contract Price.

The Contract Price may be changed only by a Change Order. Any claim by Contractor for an increase in the Contract Price shall be based on written notice delivered to Engineer within 15 days after the occurrence of the event giving rise to the claim. Failing such notice, the claim shall be deemed to have been waived by Contractor. Notice of the amount of the claim with supporting data, shall be delivered within 45 days after such occurrence unless Engineer agrees in writing to allow an additional period of time. Any change in the Contract Price will be determined by Engineer.

b. The basis for change of Contract Price through a Change Order shall be either Contract unit or lump sum prices, if applicable, or new unit or lump sum prices, unless otherwise specified.

If the basis of compensation proposed by Contractor for Change Work, or any part thereof, is not acceptable, and if a basis of compensation for such Work, or any part thereof, cannot be agreed upon, the basis of compensation will be determined by Engineer and set forth in the Change Order.

In the event that an agreement cannot be reached for the basis of compensation, such basis of compensation will either be as developed by Engineer (considering the character, location and extent of the Change Work and Contract unit or lump sum prices) or cost-plus as provided in Paragraph C-25.c.

If at any time after Contractor commences such Change Work, another basis of compensation for such Work, or any part thereof, is agreed upon, compensation will be made in accordance with such agreement. In any event Contractor shall keep accurate records of its actual costs for such Change Work.

If the Change Order in a situation where a basis of compensation must be determined by the Engineer, involves deletion of an entire item, or items of Work, payment will be made to Contractor for Work performed prior to the date Contractor was notified by Engineer in writing of such deletion. If acceptable material for use in the deleted Work was ordered by Contractor prior to notification, and if the order for such material cannot be cancelled, as determined by Engineer, Contractor will be paid for such material. Upon such payment said material will become the property of District and District will arrange for its disposition at District expense. All payments to Contractor for material order's that cannot be cancelled will be on a cost-plus basis as provided in Paragraph C-25.c. below. If the order for said material can be cancelled, Contractor will be paid for only actual costs of ordering and canceling.

- c. Any Work performed under the Contract on a cost-plus basis shall be in accordance with the following:
 - 1. Direct Labor Cost Payment shall be made for all manual classifications up to and including foremen, but shall not include superintendents, assistant superintendents, general foremen, surveyors, office personnel, time-keepers and maintenance mechanics. The direct labor cost for foremen shall be proportioned to all of their assigned work and only that portion applicable to cost-plus Change Work or Extra Work shall be paid for such Work. The time charged to Change Work or Extra Work shall be subject to daily approval and no charges shall be accepted unless evidence of such approval is submitted by Contractor with its billing. Labor rates used to calculate the direct labor costs shall be those rates in effect during the accomplishment of Change Work or Extra Work. In addition to the direct

payroll costs, the direct labor costs shall include payroll taxes and insurance, vacation allowance, subsistence, travel time, overtime premium and any other payroll additives required to be paid by Contractor by law or collective bargaining agreements. Copies of certified pertinent payrolls shall be submitted to Engineer. Overtime shall not be worked without prior written approval by the Engineer. No time or charges will be allowed except when the employees are actually engaged in the proper, efficient, and diligent performance or completion of the Change Work or Extra Work as authorized.

2. **Equipment Costs** - Payment for the rental and operation of the equipment furnished and used by Contractor shall be made for all construction and automotive equipment, except equipment or tools with a current new cost at point of origin of \$500 or less each.

Equipment time charged to Change Work or Extra Work will be subject to daily approval and no charges will be accepted unless evidence of such approval is submitted with Contractor's billing.

The equipment rental rates used shall be those rates listed in "Labor Surcharge and Equipment Rental Rates" as published by Caltrans, in effect as of the date of the Contract. These rates shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Such rates shall not include costs for operating labor, which will be paid as provided in Paragraph C-25.c., Item 1. Direct Labor Cost, or for transportation of equipment to and from the location of Change Work or Extra Work. For equipment proposed to be used for which rental rates are not set forth in said publication, the rental rates shall be negotiated with Engineer and agreed upon in writing before such equipment is used on any Change Work or Extra Work.

When the operated use of equipment is infrequent and, as determined, the equipment need not remain at the Site continuously, payment shall be limited to actual hours of use. Equipment not operating but retained at the location of Change Work or Extra Work at Engineer's direction shall be

paid for at a rate equal to the rental rate times the right of way delay factor in the above-referenced Caltrans publication.

Transportation costs for bringing equipment that will be used exclusively for cost-plus Work to the Site and for returning equipment to the point of origin, will be reimbursed to Contractor based on invoices, provided that prior written approval for such transport has been given by Engineer to Contractor.

- 3. Material Costs Payment for the cost of materials furnished and used by Contractor in performing any Change Work or Extra Work shall be made, provided such furnishing and use of materials was as specifically authorized in a Modification and the actual use was verified by Engineer. Charges shall be the net cost to Contractor for such materials delivered at the Site and vendor's invoice shall accompany the billing along with verification by Engineer of use of such materials.
- 4. **Subcontract and Outside Service Costs** Payment for Work and services subcontracted by Contractor in the performance of Change Work or Extra Work will be allowed only when both the Subcontractor and the terms of payment to such Subcontractor have been approved in writing before the Subcontractor starts to Work on Change Work or Extra Work. Such charges will be allowed at net cost to Contractor on the same basis as provided in Items (1) through (3) above.

Markups on Work performed by Subcontractors shall not exceed five percent (5%).

5. **Tools, Supplies, Overhead, Supervision and Profit** - Payment for use of tools and equipment with a current new cost of \$500 or less each and for supplies, overhead, supervision and profit will be made in an amount determined as follows:

a) For Work performed by Contractor an amount equal to the following percentages of Items (1), (2) and (3) above:

Direct Labor Costs 20 Equipment Costs 15 Material Costs 15

b) For Work performed by Subcontractor or through outside services an amount equal to the following percentages of Items (1), (2) and (3) above:

Direct Labor Costs 25
Equipment Costs 15
Material Costs 15

No payment shall be made for cost-plus Work except as provided in Items (1) through (5) above. No payment shall be made for extended home office overhead costs. Any other costs for such Work shall be considered to be included in these payments.

C-26 Claims for Extra Cost

If the Contractor claims that any instructions by Plans or otherwise that are issued after the Notice to Proceed involve extra cost under the Contract, he shall give the Engineer written notice thereof within ten (10) calendar days after the receipt of such instructions. No such claim shall be valid unless so made.

C-27 Changes of Contract Time

- a. All time limits stated in the Contract Documents are of the essence of the Contract.

 The Contract Time may be changed only by a Change Order.
- b. If any Change Work or Extra Work requires a change of Contract Time, or in the time required for the completion of any items of Work for which a specific completion time or date is set forth in the Contract, an adjustment shall be made by Change Order to allow sufficient time for the required Work to be efficiently performed by Contractor, as determined by the Engineer.

If Contractor's performance is prevented or delayed by any cause, existing or future, which is beyond the reasonable control and without the fault or negligence of Contractor and which condition was not foreseeable by Contractor at the time the Contract was entered into, such as an act, omission or neglect of the District, or its representatives, Acts of God (herein to include only the following occurrences or conditions and effect: earthquakes affecting the Site in excess of a magnitude of 3.5 on the Richter Scale and tidal waves), acts of the public enemy, a war in which the United States of America is a participant, acts of the District in either its governmental or contractual capacity, acts of another contractor in the performance of a contract with the District, fires, floods (excluding site flooding due to ground water), epidemics, quarantine restrictions, strikes, lockouts, freight embargoes, or unusually severe weather, Contractor shall, within ten (10) days after the commencement of any such delay, give to Engineer written notice thereof and of the anticipated results thereof. Within seven (7) days after the termination of any such delay, Contractor shall file a written notice with Engineer specifying the actual duration of the delay and claim for increase of Contract Time. Failing to meet either of the above notice requirement the claim shall be deemed to have been waived by Contractor. If District determines that the delay was beyond the control and without the fault or negligence of Contractor and not foreseeable by Contractor at the time the Contract was entered into, the Contract Time will be extended in an amount equal to time lost due to such delay and the Contract will be modified by Change Order accordingly.

The Contract Time will not be extended if any such delay is attributed by Contractor to any Subcontractor(s) or Supplier(s) and District determines that the cause of the delay was not beyond the reasonable control or due to the fault or negligence of said Subcontractor(s) or Suppliers(s); or 1) the services, equipment or supplies involved were available in adequate time from other sources; 2) Engineer directed Contractor, in writing, to obtain such services, equipment or supplies from said other sources; and 3) Contractor failed to comply with such directions.

d. When Contractor requests an increase of Contract Time for delay due to inability to obtain materials or equipment, its last written notice, as provided in Paragraph C-27.c., shall include the following:

c.

- 1. Date Engineer was notified of delay.
- 2. Date the delay began.
- 3. Exact description of material or equipment causing delay.
- 4. Documentation showing when and from whom ordered.
- 5. Documentation of promised delivery schedule.
- 6. Documentation of actual delivery schedule.
- 7. Description of how late delivery caused delay (include current construction schedule).
- 8. Documentation of measures taken to try and get prompt delivery.
- 9. Documentation of attempts to get timely delivery from other sources.
- 10. Description of steps taken to minimize effects of late delivery on progress of Work.
- 11. Description of steps taken to stay within Contract Time after actual delivery.
- 12. Statement of actual days lost as a result of late delivery.

C-28 Inspection of Work

a. The State of California, the California Department of Water Resources, the US Bureau of Reclamation, Southern San Joaquin Municipal Utility District, the District, the Engineer and their respective directors, officers, and their representatives shall at all times have access to the Work wherever it is in preparation or progress, and the Contractor shall provide safe and convenient facilities for such access and for inspection. If the Specifications, the Engineer's instructions, laws, ordinances, or any public authority require any material, equipment or Work to be specially tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection, and if the inspection is by an authority other than the Engineer, of the time fixed for inspection. Inspections by the Engineer will be made promptly and, where practicable, at the source of supply.

- b. Work performed without inspection or proper testing may be required to be removed and replaced under proper inspection and testing and the entire cost of removal and replacing, including the cost of District-furnished materials used in the Work, shall be borne by the Contractor, regardless of whether or not the Work exposed is found to be defective. Examination of questioned Work may be ordered by the Engineer and, if so ordered, the Work must be uncovered by Contractor. If such Work is found to be in accordance with the Contract Documents, the District will pay the cost of reexamination and replacement. If such Work is found to be not in accordance with the Contract Documents, Contractor shall pay such cost, unless he shows that the defect in the Work was caused by another contractor, and in that event the District will assume responsibility for such costs.
- c. The inspection of the Work shall not relieve the Contractor of his obligation to fulfill the Contract as herein prescribed or in any way alter the standard of performance provided by Contractor. Defective Work shall be made good and unusable materials may be rejected, notwithstanding that such Work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the Work or any part thereof shall be found defective, Contractor shall, within ten (10) calendar days, make good such defect in a manner satisfactory to the Engineer. If the Contractor shall fail or neglect to make ordered repairs of defective Work or to remove the condemned materials from the Work within ten (10) calendar days after direction by the Engineer in writing, the District may make the ordered repairs, or remove the condemned materials, and deduct the cost thereof from any moneys due the Contractor.
- d. Refer to Section D-13 for quality control testing responsibility.

C-29 Field Verification of Existing Dimensions and Ground Profiles

Layout dimensions shown on the Plans are subject to change to meet field conditions and/or based upon the final in-place location of Contractor-furnished and installed facilities, as determined by Engineer. It shall be the responsibility of the Contractor to verify all pertinent dimensions, to ensure satisfactory fitting of all existing facilities with new Contract materials and equipment, and to insure that the proper earth cover is provided over all new and existing buried pipe. Depth of existing buried utilities shall be verified prior to construction.

C-30 Conditions Affecting Work

The Contractor shall be responsible for ascertaining the nature and location of the Work, and the general and local conditions which can affect the Work or the cost thereof. Any failure by the Contractor to do so will not relieve him from responsibility for successfully performing the Work without additional expense to the District. Except as expressly provided to the contrary in the Contract, the Contractor assumes all risk with respect to unforeseen difficulties which may be encountered in performance of the Work, including and without limiting the generality of the foregoing: obstacles, obstructions or adverse groundwater conditions in or along the line of Work and variance of the quality or quantity of surface and subsurface materials from that which was assumed.

C-31 Underground Facilities

- a. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based on information and data furnished to District or Engineer by the owners of such underground facilities, including District, or by others. Unless it is otherwise expressly provided in the Special Conditions:
 - 1. District and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
 - 2. The cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a) Reviewing and checking all such information and data;
 - b) Locating all Underground Facilities shown or indicated in the Contract Documents;
 - c) Coordination of the Work with the districts of such underground facilities, including District, during construction; and
 - d) The safety and protection of all such underground facilities and repairing any damage thereto resulting from the Work.
 - 3. The Contractor shall expose and demarcate, prior to staking, earthwork, and excavation, all existing utilities and existing facilities which could be damaged by or conflict with the Work. Two working days' notice shall be given to the Engineer prior to commencing the Work. The Contractor shall

contact Underground Service Alert (USA) at 1-800-227-2600 at least two working days prior to any excavation work to identify any buried utilities within the proposed excavation area. Full compensation for all costs involved in locating, verifying, protecting, exposing, and otherwise providing for utilities shall be included in the amounts bid for the various items of work, and no separate payment shall be made therefore.

- 4. Protection - The Contractor shall not interrupt the service function or disturb the supporting base of any utility by disrupting any facility identified in the Plans and Specifications without authority from the District or order from the Engineer. Where protection of such facilities is required to ensure support of utilities, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at the Contractor's expense. The Contractor shall develop and execute a workplan, subject to Engineer's approval to protect underground facilities. The Contractor shall be prepared at all times with labor, equipment, and materials to make repair on damaged mains or utility facilities. The Contractor shall immediately notify the Engineer and the utility district if he disturbs, disconnects or damages any utility. The Contractor shall bear the costs of repair or replacement of any utility facility described with reasonable accuracy in the Plans and Specifications which is damaged by the Contractor. No extra compensation will be made for the repair of any services or mains damaged by the Contractor, nor for any damage incurred if the neglect or failure of providing protective barriers, lights and other devises or means required to protect such existing utilities or facilities described with reasonable accuracy in the Plans and Specifications.
- 5. **Relocation** When the Plans or Specifications provide for the Contractor to alter, relocate or reconstruct a utility, or landowner facility (pipeline, fence, etc.) all costs for such work shall be absorbed in the Contractor's bid or paid for at the unit price indicated. Temporary or permanent relocation or alteration of utilities desired by the Contractor for the Contractor's own convenience shall be the Contractor's responsibility, and the Contractor shall make all arrangements and bear all costs. The Contractor may, for the Contractor's own convenience or to expedite the Work, agree with the District of any utility to disconnect and reconnect interfering service connections. The District shall not be involved in any such agreement, but the Contractor shall give the District written notice of such an agreement upon its execution.

b. **Not Shown or Indicated**

- 1. If an underground facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith, identify the district of such underground facility and give written notice to District and Engineer. Engineer will promptly review the underground facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the underground facility. During such time, Contractor shall be responsible for the safety and protection of such underground facility.
- 2. If Engineer concludes that a change in the Contract Documents is required, a Work Change directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any underground facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If District and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, District or Contractor may make a Claim therefore as provided in the contract specification.
- 3. Contractor shall develop and execute a work-plan, subject to Engineer's approval to protect underground facilities.
- 4. The Contractor shall expose, prior to staking and trenching, all existing utilities and existing facilities which may control proposed facility grades, and alignment. Two (2) working days' notice shall be given to the Engineer prior to commencing the Work. Full compensation for all costs involved in locating, verifying, protecting, exposing, and otherwise providing for utilities shall be included in the amounts bid for the various items of Work, and no separate payment shall be made therefore.
- 5. As specified in Government Code, Section 4215, the Contractor shall be compensated as Extra Work for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, and

removing or relocating such utility facilities not indicated in the Plans and Specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work. As specified in Government Code, Section 4215, 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 District or the district of the utility to provide for removal or relocation of such utility facilities.

c. **Protection** - The Contractor shall not interrupt the service function or disturb the supporting base of any utility by disrupting any facility identified in the Plans and Specifications without authority from the District or order from the Engineer. Where protection of such facilities is required to ensure support of utilities, the Contractor shall, unless otherwise provided, furnish and place the necessary protection at the Contractor's expense.

The Contractor shall be prepared at all times with labor, equipment and materials to make repair on damaged mains or utility facilities. The Contractor shall immediately notify the Engineer and the Utility district if he disturbs, disconnects or damages any Utility. The Contractor shall bear the costs of repair or replacement of any utility facility described with reasonable accuracy in the Plans and Specifications that is damaged by the Contractor. No extra compensation will be made for the repair of any services or mains damaged by the Contractor, nor for any damage incurred if the neglect or failure of providing protective barriers, lights and other devices or means required to protect such existing utilities or facilities described with reasonable accuracy in the Plans and Specifications.

d. Relocation - When the Plans or Specifications provide for the Contractor to alter, relocate or reconstruct a Utility, or landowner facility (pipeline, fence, etc.) all costs for such work shall be absorbed in the Contractor's Bid or paid for at the unit price indicated. Temporary or permanent relocation or alteration of utilities desired by the Contractor for his own convenience shall be his responsibility, and he shall make all arrangements and bear all costs. The Contractor may, for his own convenience or to expedite the Work, agree with the District of any utility to disconnect and reconnect interfering service connections. The District shall not be involved in any such agreement.

C-32 Protection of Work Site, Existing Structures, Roadways, Utilities, Vegetation, and Private Property

a. The Contractor shall effectively secure and protect adjacent property and structures, livestock, crops and other vegetation.

- b. The Contractor shall open fences on or crossing the right of way and install temporary gates of sound construction thereon so as to prevent the escape of livestock (if applicable). Adjacent fence posts shall be adequately braced to prevent the sagging or slackening of the wire. Before such fences are opened, the Contractor shall notify the District or tenant of the property and, where practicable, the opening of the fences shall be in accordance with the wishes of said District or tenant. The Contractor shall be responsible that no loss or inconvenience shall accrue to the District or tenant by virtue of his fences having been opened or the gate not having been either shut or attended at all times. Where special types of fences are encountered, the Contractor shall install temporary gates made of similar materials and of suitable quality to serve the purposes of the original fences. In all cases where the Contractor removes fences to obtain Work room, he shall provide and install temporary fencing as required, and on completion of construction shall restore the original fence to the satisfaction of the Engineer. All cost of providing, maintaining and restoring gates and fencing shall be borne by the Contractor.
- c. The Contractor shall use extreme care during construction to prevent damage from dust to crops and adjacent property. The Contractor, at his own expense, shall provide adequate dust control for the right of way and take other preventive measures as directed by the Engineer.
- d. The Contractor shall be responsible for all damage to any property resulting from trespass by the Contractor or his employees in the course of their employment, whether such trespass was committed with or without the consent or knowledge of the Contractor.
- e. The Contractor shall see that the Site is kept drained and free of all ground water.
- f. The Contractor shall be responsible for any damage caused by drainage or water runoff from construction areas and from construction plant areas.
- g. In the event of an emergency or unusual conditions endangering life, the Work, or adjacent property, the Contractor may, without special instructions or authorization, act at his discretion to prevent or eliminate such danger. Should the Engineer deem an emergency condition to exist, the Contractor shall immediately do those things and take those steps ordered by the Engineer. The decision of the

Engineer in this respect shall be final. Any claims for compensation made by the Contractor on account of emergency Work shall be determined by agreement.

- h. The Contractor shall be responsible for locating, removal, relocation and protection of all public and private utility facilities, including irrigation facilities, located on the site of the Project and the Contractor shall not be entitled to any extension of time or claim for damages or extra compensation in connection therewith. Provided however, if and to the extent that existing main or trunkline public utility facilities as defined by Government Code Section 4215 ("Public Utility Facilities") are not identified in the Contract Documents, as between the Contractor and the District, the District will be responsible for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, and removing or relocating Public Utility Facilities not indicated in the plans and specifications with reasonable accuracy, and for equipment on the project necessarily idled during such Work regarding said Public Utility Facilities, as the case may be, but the Contractor shall perform any such Work in conformance with applicable provisions of Paragraphs C-24 and C-25 if so directed by the Engineer. The Contractor will 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 the District of the Public Utility Facilities to provide for removal or relocation of any Public Utility Facilities. If the Contractor, while performing the Contract Work, discovers utility facilities not identified by the District in the Contract Documents, he shall immediately notify the Engineer in writing.
- i. Subject to the provisions of Paragraph C-32.h., where the Work to be performed under the Contract crosses or otherwise interferes with existing streams, water courses, canals, farm ditches, pipelines, drainage channels, or water supplies, the Contractor shall provide for such water courses or pipelines and shall perform such construction during the progress of Work so that no damage will result to either public or private interests, and the Contractor shall be liable for all damage that may result from failure to so provide during the progress of the Work.

C-33 Temporary Use of District Facilities

Subject to the approval of the District, the Contractor will be permitted to make temporary use of any available, District-owned facilities in the vicinity of the Site or

storage areas and all such areas shall be returned to a neat and presentable condition as approved by the Engineer, upon termination of such usage.

C-34 Responsibility for Repair of Facilities

All existing District facilities or other public or private facilities, including but not limited to pipelines, structures, telephone or power cables, roadways and driveways and embankments disturbed by the Contract construction shall be repaired and replaced to match existing. In addition, the Contractor shall be responsible for any settlement damage to such facilities or adjoining areas, for a period of one (1) year after District acceptance of such repaired facilities.

C-35 Products, Material and Equipment

a. General – The word "Products" as used in the Contract Documents, is defined to include purchased items for incorporation into the Work regardless of whether specifically purchased for the Project or taken from Contractor's stock of previously purchased products. The word "Materials" is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form Work. The word "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, and other like items). Definitions in this Paragraph are not intended to negate the meaning of other terms used in the Contract Documents, including "specialties", "systems", "structure", "finishes", "accessories" "furnishings", "special construction", and similar terms, which are self-explanatory and have recognized meanings in the construction industry.

Neither "Products" nor "Materials" nor "Equipment" includes machinery and equipment used for preparation, fabrication, conveying, and erection of the Work.

- b. **Product Delivery and Storage** The Contractor shall deliver and store the Work in accordance with manufacturer's written recommendations and by methods and means that will prevent damage, deterioration, and loss including theft.
- c. **Transportation and Handling** Products shall be transported by methods to avoid damage and shall be delivered in undamaged condition in manufacturer's unopened containers and packaging. The Contractor shall provide Equipment and

personnel to handle Products by methods to prevent soiling and damage. The Contractor shall provide additional protection during handling to prevent marring and otherwise damaging Products, packaging, and surrounding surfaces.

d. Storage and Protection – Products shall be stored in accordance with manufacturer's written instructions and with seals and labels intact and legible. Sensitive Products shall be stored in weather-tight climate controlled enclosures and temperature and humidity ranges shall be maintained within tolerances required by manufacturer's recommendations.

For exterior storage of Products, items shall be placed on sloped supports above ground. Products subject to deterioration shall be covered with impervious sheet covering and ventilation shall be provided to avoid condensation.

Storage shall be arranged to provide access for inspection. The Contractor shall periodically inspect to assure Products are undamaged and are maintained under required conditions.

Storage shall be arranged in a manner to provide access for maintenance of stored items and for inspection.

e. Maintenance of Products in Storage — Stored Products shall be periodically inspected on a scheduled basis. The Contractor shall maintain a log of inspections and shall make the log available on request. The Contractor shall comply with manufacturer's Product storage requirements and recommendations. The Contractor shall maintain manufacturer-required environmental conditions continuously. The Contractor shall ensure that surfaces of Products exposed to the elements are not adversely affected and that weathering of finishes does not occur.

For mechanical and electrical equipment, the Contractor shall provide a copy of the manufacturer's service instructions with each item and the exterior of the package shall contain notice that instructions are included.

C-36 Trade Names or Approved Equals

a. Where shown in the Contract Documents, or whenever materials or other items are **specified** using the trade name or the name of a particular Supplier, the

specification is intended to establish the type, function, appearance, craftsmanship and quality required. Unless the specification or description contains "Or-Equal" after the manufacturer/supplier name, no substitution is permitted, and the material must be supplied by the manufacturer or supplier as listed.

- 1. "Or Equal" Items: A proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a) It is at least equal in materials of construction, quality, durability, appearance, strength, craftsmanship and design characteristics;
 - b) It will reliably perform at least equally and achieve the results imposed by the design concept;
 - c) It has a proven record of performance and availability of responsive service; and
 - d) If approved and incorporated into the Work:
 - 1) There will be no increase in cost to the District or increase in Contract Time; and
 - 2) It will conform substantially to the detailed requirements of the item named in the Contract Documents.

Substitute Items

- a) If in the opinion of the Engineer an item of material or equipment does not qualify as an "or equal" item, it will be considered a proposed substitute item. Below is a description of the steps that the Contractor must follow when submitting requests for substitution.
- b) Contractor shall submit sufficient information to the Engineer to allow the Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute. Requests for substitutions of material or proposed equipment will not be accepted by the Engineer unless it is submitted by the Contractor. Subcontractors or Suppliers shall not submit such requests.

- c) The Contractor shall submit a request to the Engineer requesting review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The written request:
 - 1) Shall demonstrate that the proposed substitute item will:
 - a. Perform adequately;
 - b. Be similar in substance to that specified; and
 - c. Be suited to the same use as that specified.

2) will state:

- a. Whether the use of such proposed substitute item require any changes in Contract price or Contract Time; and
- Whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents.
- 3) And shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item.
- 4) Contractor shall submit a Substitution Request Form as provided by the Engineer when requesting any substitutions. The form must be filled out entirely. This form can be found at the end of this Section.

C-37 Special Controls

a. Traffic Control – Contractor shall conduct his Work to interfere as little as possible with public travel, whether vehicular or pedestrian. Whenever it is necessary to cross, obstruct, or close roads, driveways and walks, whether public or private, Contractor shall provide and maintain suitable and safe bridges, detours, or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them. Such maintenance of traffic will not be required when Contractor has obtained written permission from the owner and tenant of private property involved, to obstruct traffic at the designated point.

Where required by the authority having jurisdiction thereover that traffic be maintained over any construction Work in or around a public street, road, or highway, and the traffic cannot be maintained on the alignment of the original roadbed or pavement, Contractor shall, at his own expense, construct and maintain a detour around the construction Work. Each detour shall include all necessary barricades, guardrails, approaches, lights, signals, signs, and other devices and precautions necessary for protection of the Work and safety of the public.

- a. **Surface and Stormwater Control** The Contractor shall divert or otherwise control surface water and waters flowing from existing projects or structures from coming onto its Work areas. The method of diversions or control shall be adequate to ensure the safety of stored materials and of personnel using these areas. Following completion of Work under the Contract, ditches, dikes, or other ground alterations made by the Contractor shall be removed and the ground surfaces shall be returned to their former condition, or as near as practicable, in the Engineer's opinion. Surface and storm water that enters the Contractor's Work area shall be controlled, treated, and disposed in a lawful manner.
- b. Dust Control The Contractor shall provide effective measures to prevent operations from producing dust in amounts damaging to personnel, property, District plant operations, plants, or animals, and to prevent causing a nuisance to persons living or occupying buildings in the vicinity.

Areas used by the Contractor for construction roads or other purposes in connection with the Work shall be given an approved dust inhibiting surface treatment to avoid production of dust. This surface condition shall be continuously maintained during the entire construction period. The Contractor's construction facilities shall be operated in a manner ensuring minimum dust production.

Trucks transporting soil, or cement, or debris shall be covered or moistened with water to suppress the dispersion of dust.

c. **Light Abatement** – The Contractor shall exercise special care to direct floodlights to shine downward at an angle less than horizontal. These floodlights shall also be shielded to avoid a nuisance to the surrounding areas. No lighting shall include a

residence in its direct beam. The Contractor shall correct lighting nuisance whenever it occurs.

d. **Air Pollution Control** – The Contractor shall not discharge smoke, dust, or other air contaminants into the atmosphere in a quantity that exceeds the legal limit.

The Contractor shall maintain equipment in proper mechanical adjustment to minimize the volume of exhaust emissions.

e. **Noise Control** – The Contractor shall conduct operations to abate noise wherever possible and to minimize noise where complete abatement is not possible.

To limit noise, construction vehicle equipment shall be kept in proper working order for the duration of the construction activities.

f. **Restoration of Improvements** – Upon completion of the Work, the Contractor shall reconstruct existing roads to a condition equivalent to that which existed before the start of Work.

C-38 Security

The Contractor shall prevent unauthorized personnel or vehicular entry into the project site.

The Contractor shall be responsible for providing security within the Site as the Contractor deems necessary for the protection of its own equipment, materials, or Work from vandalism or theft. District shall not be responsible for theft or damage to the Contractor's equipment, materials, or Work.

All staff working for or representing the Contractor, including Subcontractors, shall possess a valid California identification with a photograph of the staff member.

The Contractor shall provide the names of its lead persons, supervisors and all employees working on the project.

C-39 Relief from Duty of Protecting Work

The Contractor's responsibility for protection of, and liability for, damage to the Work shall be as stated in the Contract Documents. However, the District may issue written permission to relieve the Contractor of the duty of maintaining and protecting portions

of the Contract Work which have been completed in all respects in accordance with applicable requirements of the Specifications. Relief from the duty of maintaining and protecting any portion of the Contract Work shall not release the Contractor from his obligations under Paragraph C-32 of the General Conditions.

C-40 Guarantee and Maintenance Warranties

a. In addition to any other warranties, representations and guarantees stated elsewhere in the Contract and any warranties implied by law, the Contractor guarantees the Work for a period of one (1) year after the date of acceptance of the work by the District. Acceptance of the Work by the District will be in the form of the fully-executed and recorded Notice of Completion, which will be filed with the Kern County Recorder's office.

The Contractor shall repair or remove and replace any and all such Work, together with any other Work which may be displaced in so doing, that is found to be defective in workmanship and/or materials within said one (1) year period, without expense whatsoever to the District, ordinary wear and tear and unusual abuse or neglect excepted. In the event of a failure to comply with the abovementioned conditions within seven (7) days after being notified in writing, the District is hereby authorized to proceed to have the defects remedied and made good at the expense of the Contractor who hereby agrees to pay the cost and charges therefor immediately on demand. Such action by the District will not relieve the Contractor of the guarantees required by this Paragraph or elsewhere in the Contract Documents.

The performance bond and the payment bond shall continue in full force and effect for the duration of the guarantee period.

If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District or to prevent interruption of operations of the District, the District will attempt to give the notice required by this Paragraph. If the Contractor cannot be contacted or does not comply with the District's request for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this Paragraph, proceed to make such correction or provide such attention; the costs of such correction or attention shall be charged against the Contractor. Such action by the District will not relieve the Contractor of the guarantees required by this Paragraph or elsewhere in the Contract Documents.

No guarantee, whether provided in this Paragraph or elsewhere in the Contract, shall in any way limit the guarantee of any items for which a longer guarantee is specified, or any items for which a manufacturer or Supplier gives a guarantee for a longer period. The Contractor agrees to act as co-guarantor with such manufacturer or Supplier, and the Contractor shall furnish the District with all appropriate guarantee or warranty certificates upon completion of the Project. No guarantee period, whether provided in this provision or elsewhere, shall in any way limit the liability of the Contractor or his sureties or insurers under the indemnity.

b. In addition to any other warranties, representations and guarantees stated elsewhere in the Contract and any warranties implied by law, the Contractor agrees that, for a maintenance warranty period of three (3) years after the acceptance of the Work, the Contractor shall be responsible for the repair of all defects, leaks, or failures occurring in the pipe, pipe joints, and fittings (if applicable) from any cause whatsoever, except as hereinafter provided. The Contractor will be reimbursed the actual and necessary cost, plus twenty percent (20%) for profit and general expense of any Work or materials pertaining to repairs or replacements that are determined as not the responsibility of the Contractor.

The Contractor, upon notice from the District, shall promptly commence and diligently prosecute the repair of any defects, leaks, or failures that develop during the maintenance warranty period. The Work of repairing any defects, leaks, or failures includes the necessary excavation, pipe repair, backfill, and replacement of any appurtenances destroyed or disturbed by reason of such Work. Repairs as may be required shall be made by the Contractor in such a manner as to cause the least practicable interference with the use of the pipelines in service. The Contractor shall make necessary arrangements to have competent personnel and suitable equipment available so that repairs may be commenced within 48 hours after receipt of notice from the District.

The obligations of the Contractor under this Paragraph shall be enforceable against his surety or sureties for the Faithful Performance Bond under the Contract, and for one (1) year after final acceptance of all Work under the Contract. Prior to final payment under the contract, the Contractor shall furnish a maintenance warranty bond in the penal sum of five percent (5%) of the total original Contract price, to assure performance of the Contractor's obligations under this Paragraph after the expiration of the obligation under the Performance Bond, for the remainder of the maintenance warranty period.

The maintenance warranty bond or the extended Faithful Performance Bond shall contain a clause specifically incorporating the requirements of this paragraph by reference or otherwise.

- c. The cost of furnishing the maintenance warranty bond shall be included in the prices bid in the schedule for other items of Work.
- d. The District's remedies, whether provided in this part or elsewhere in the Contract, shall be in addition to any other available legal and equitable remedies.

C-41 Guarantee

In addition to warranties, representations and guarantees stated elsewhere in the Contract and in addition to any warranties implied by law, the Contractor unconditionally guarantees all Contractor furnished materials and workmanship furnished hereunder, and agrees to replace at Contractor's sole cost and expense, and to the satisfaction of the Engineer and the District, any and all materials which may be defective or improperly installed, whether such defects of material and installation are of patent or latent nature.

C-42 Right to Operate Unsatisfactory Equipment

If, following installation of any equipment or facilities furnished by the Contractor, defects requiring correction by the Contractor are found, the District shall have the right to operate such unsatisfactory equipment and make reasonable use thereof until the equipment can be shut down for correction of defects without injury to the District.

C-43 Notice of Latent or Hazardous Conditions

In accordance with Section 7104 of the Public Contract Code, where the Specifications require digging trenches or excavating deeper than four (4) feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any:

- a. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
- b. Subsurface or latent physical conditions at the Site differing from those indicated in the Plans and Specifications;

c. Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Specifications.

Upon receipt of written notice by the Contractor of such conditions, the District shall promptly investigate the conditions. If the District finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work, the District will issue a change order under the procedures described in the Contract.

In the event a dispute arises between the District and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause decrease or increase in the cost of or time required for performance of any part of the Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, and Contractor shall retain any and all rights provided either under the Contract or by law which pertain to the resolution of disputes and protests between the District and the Contractor.

C-44 Safety

- a. Contractor shall be solely and completely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The duty of the Engineer to conduct construction review of the Contractor's performance and the undertaking of inspections by the Engineer or the giving of instructions as authorized herein is not intended to include review of the adequacy of the Contractor's safety measures in, on, or near the construction site and shall not be construed as supervision of the actual construction nor make the Engineer or the District responsible for providing a safe place for the performance of Work by the Contractor, Subcontractors, or Suppliers; or for access, visits, use, work, travel or occupancy by any person. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 1. All persons on the Site or who may be affected by the Work;
 - 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

- 3. Other property at the Site or adjacent thereto, including crops, trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- b. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and/or underground facilities (including districts and utility districts) when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- c. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor.
- d. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is fully completed and accepted. Such duties and responsibilities shall be extended, however, to include any time period in which warranty Work or other Work by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, remains in progress.
- e. The Contractor shall have at the Site, copies or suitable extracts of Construction Safety Orders, issued by Cal-OSHA. The Contractor shall comply with the provisions of these and all other applicable laws, ordinances and regulations.
 - The Contractor shall submit to the District a copy of his permit for the project issued by Cal-OSHA, within ten (10) calendar days after the mailing of the Notice of Award and before the commencement of any operations.
- f. If there is any non-compliance with the Cal-OSHA Construction Safety Orders, the Contractor shall stop forthwith all affected Work until there is compliance in the

opinion of the State Division of Industrial Safety. The District, Engineer, officers, employees, consultants, and agents of the aforementioned, shall not be liable for costs incurred by the Contractor due to work stoppage. The Contractor will not be eligible for an extension of time to complete the Work within the time set forth in this Contract due to the Work stoppage.

C-45 Accidents

The Contractor shall provide, at the site, such equipment and medical facilities as are necessary to supply first aid service to anyone who may be injured in connection with the Work. The Contractor must promptly report to the Engineer in a writing giving full details and statements of witnesses of all accidents whatsoever arising out of, or in connection with the performance of the Work, whether on or adjacent to the Site, which cause death, personal injury, or property damage. In addition, if death or serious injury or serious damage are caused, the accident shall be reported immediately by telephone or messenger to the Engineer. If any claim is made by anyone against the Contractor or any Subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

C-46 Fire Protection

The Contractor shall use all precautions to prevent fires and shall provide adequate facilities and equipment for extinguishing fires at no cost to the District. Waste disposal by burning will not be allowed at any time.

C-47 Landscape Preservation

a. **General** – The Contractor shall exercise care to preserve the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work. Except where clearing is required for permanent works, for approved construction roads and for excavation operations, all trees, native shrubbery, and vegetation shall be preserved and shall be protected from damage which may be caused by the Contractor's construction operations and equipment. No special reseeding or replanting will be required under the Specifications; however, on completion of the Work, and in addition to the requirements of Section C and E relative to site clean-up operations, all Work areas shall be smoothed and graded in a manner to conform to the natural appearance of the landscape. Where unnecessary destruction, scarring, damage, or defacing may occur as a result of

- the Contractor's operations, the same shall be repaired, replanted, reseeded, or otherwise corrected at the Contractor's expense.
- b. **Construction Roads** The location, alignment, and grade of construction roads shall be subject to approval of the Engineer. When no longer required by the Contractor, construction roads shall be made impassable to vehicular traffic and the surfaces shall be scarified and left in a condition which will facilitate natural revegetation.
- c. **Contractor's Campsite** The Contractor's camp, shop, office, and yard area shall be located and arranged in a manner to preserve trees and vegetations to the maximum practicable extent. On abandonment, all camp, storage, and construction buildings, including concrete footings and slabs, and all construction materials and debris shall be removed from the site. The camp area shall be left in a neat and natural appearing condition.
- d. **Borrow Areas and Quarry Sites** The Contractor shall obtain locations of borrow areas for fill from District along with limits of borrow areas. Borrow pits and quarry sites shall be so excavated that water will not collect and stand therein. Before being abandoned, the sides of borrow pits and quarry sites shall be brought to stable slopes with slope intersections rounded and shaped to provide a natural appearance. All rubbish, Contractor's equipment and structures shall be removed from the Site. Waste piles shall be leveled and trimmed to regular lines and shaped to provide a neat appearance.
- e. **Blasting Precautions** No blasting is allowed.
- f. **Costs** No separate payment will be made for Work or materials specified under this Paragraph. All costs therefore shall be borne by the Contractor.

C-48 Clean-up

During the progress of the Work, the Contractor shall maintain the site and related structures and equipment in a clean, orderly condition and free from unsightly accumulation of rubbish. Upon completion of the Work and before the final Application for Payment is submitted, the Contractor shall at his own cost and expense remove from the vicinity of the Work all plants, buildings, rubbish, unused Work materials, concrete forms, and temporary bridging and other like material, belonging to him or used under his direction during construction. In the event of Contractor's failure to do so, the same may be removed by the District after ten (10) calendar days notice to the Contractor at the

expense of the Contractor. Where the construction has crossed yards or driveways, the yards and driveways shall be restored by the Contractor to the complete satisfaction of the Engineer at the Contractor's expense.

C-49 Submittals

- a. **Schedule of Submittals** Within ten (10) calendar days after the effective date of the Notice to Proceed, the Contractor shall submit a completed submittal schedule and list of products for all items requiring the Engineer's review and approval as follows:
 - 1. Submittals, including description of the item and name of manufacturer, trade name, and model number.
 - 2. Specification section reference.
 - 3. Intended submission/resubmission dates.
 - 4. Order release date.
 - 5. Lead time to delivery/anticipated delivery date(s).
 - 6. Highlight any items that require expedited review to meet the project schedule.

These schedules shall be presented in a form acceptable to the Engineer in both electronic and hardcopy and shall be updated. Identify all submittals that are required by the Contract Documents and determine the date on which each submittal will be submitted in conformance with the schedule submitted.

b. Technical Submittals – General

1. Each submittal shall contain material pertaining to no more than one equipment or material item, and shall have the specification section and applicable paragraph number clearly identified. Each submittal shall be sequentially numbered starting with the first one delivered. Re-submittals shall include the number of the original submittal plus the suffix ".1" for the first re-submittal, ".2" for the second re-submittal, etc. (e.g. submittal 3.0, 3.1, 3.2, etc.) Submittals not conforming to these requirements will be rejected.

- 2. Designation of Work "by others," if shown on Shop Drawings, shall mean that the Work will be the responsibility of the Contractor rather than the Subcontractor or Supplier who has prepared the Shop Drawings.
- 3. Submittals shall be submitted at least 30 calendar days before the specified installation date. Submittals will be acted upon by the Engineer as promptly as possible, and returned to the contractor not later than the time allowed for in Paragraph C-49.c.1 below. The Contractor shall provide in his Construction Schedule the time for this review. If the Contractor is required by the Engineer to resubmit data, then the time required for the Contractor to prepare and resubmit such data, and the required time for Engineer review, shall not be a cause for delay in Contract completion or a cause for an extension of Contract time delay shall be assigned solely to the Contractor.
- 4. Additional costs of the Engineer's review beyond the second submission shall be borne by the Contractor. This applies to all submittals including Shop Drawings.
- 5. After a submittal has been reviewed and accepted, no changes or substitutions in that submittal will be allowed.
- 6. Shop Drawings and submittals will be reviewed for general conformance with the Plans and Specifications. The intent of the review is to determine if the Contractor is submitting materials and equipment which are in general conformance with the Contract Documents. Detailed review of dimensions, sizes, space requirements, coordination with other equipment, and other construction details is not performed. Engineer's review of submittals shall not relieve Contractor from responsibility for errors, omissions, or deviations, nor responsibility for compliance with the Contract Documents. The Contractor shall indicate on the submittal transmittal form any deviation, the reasons, and how the submittal deviates from the Contract requirements.

c. Submittal Procedures

1. The Contractor shall submit to the Engineer for review one (1) electronic copy in pdf format of each submittal (Shop Drawings, electrical diagrams, and catalog cuts for fabricated items and manufactured items furnished under the Contract, etc.). Only an electronic copy of each submittal with review comments will be returned to the Contractor. Shop Drawings shall

be submitted in sufficient time to allow the Engineer not less than fifteen (15) calendar days for examining the Shop Drawings.

2. Unless otherwise specified, submittals shall be delivered to:

Grace Martin, gemartin@geiconsultants.com

- 3. The Contractor shall prepare and maintain an accurate submittal log for the duration of the project. The log shall contain a listing of submittals and shall include the following information for each listed item:
 - a) Specification section reference
 - b) Projected submission date
 - c) Actual submission date
 - d) Projected need date for approval of the submittal
 - e) Actual return date from the Engineer
 - f) Notation of the Engineer's response
 - g) Notation if resubmittal or record copy is required
- 4. A separate letter of transmittal, in a form acceptable to the Engineer, shall be used to transmit submittals for each specific item or class of material or equipment. A sample letter of transmittal has been provided at the end of this Section.
- 5. Submittal of multiple items using a single letter of transmittal will be permitted only when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates review of the group or package as a whole. If multiple submittal items are transmitted under one transmittal letter, then the Contractor shall tab each individual submittal item in the package and provide a table of contents at the beginning of the submittal package.
- 6. The letter of transmittal for each submittal shall show the transmittal number, date of transmittal, project title, construction contract number, specifications section or drawing number to which the submittal pertains, brief description of the material or equipment submitted, and the company name or the originator of the submittal. Material descriptions

shall include the following: type, size, trade name, manufacturer's/supplier's name, and other appropriate summarizing information. Submittal letters for Shop Drawing descriptions shall include the complete list of drawings/sheet numbers that are included in the submittal package. Each letter of transmittal shall be clearly marked to indicate the cases when the material is being submitted as a variation.

- 7. The transmittal number shall be indicated on every page of each copy of each submittal, and shall correspond to the number given in the letter of transmittal. Only the first sheet of a bound set of originally published or printed brochures or catalogs shall be numbered.
 - a) Submittals shall be consecutively numbered beginning with the number 1.
 - b) Multiple-page submittals (more than 25 pages) shall be collated into sets, and each set shall be put in a folder or bound before transmittal to the Engineer.
 - c) When material or equipment is resubmitted for any reason, a new letter of transmittal shall have the original submittal number followed by a decimal and a number corresponding to the number of resubmittal. An example is 50.2, where 50 is the submittal number and 2 is the number of times submittal 50 has been resubmitted. The letter of transmittal shall indicate that it is a resubmittal.
- 8. Shop Drawings shall be accurate and complete, and shall contain all required information, including satisfactory identification of items in relation to the Plans and Specifications.
- 9. Shop Drawings shall be submitted only by the Contractor, who shall indicate by a signed stamp on the Shop Drawings, or other approved means, that Contractor has checked and approved the Shop Drawings, and that the Work shown is in accordance with Contract requirements and has been checked for dimensions and relationship with Work of all other trades involved. Incomplete Shop Drawings and Shop Drawings that have not been checked by the Contractor will be returned to the Contractor for resubmission in the proper form.
- 10. After review by the Engineer, the appropriate number of submittals will be returned to the Contractor appropriately marked. If major changes or

corrections are necessary, the Shop Drawing shall be rejected and returned to the Contractor with the need for such changes or corrections indicated. The Contractor shall correct and resubmit rejected Shop Drawings in the same manner and quantity as specified for the original submittal. If changes are made by the Contractor (in addition to those requested by the Engineer) on the resubmitted Shop Drawings, such changes shall be clearly explained in a transmittal letter accompanying the resubmitted Shop Drawings.

- 11. The review of Shop Drawings and catalog cuts by the Engineer shall not relieve the Contractor from responsibility for correctness of dimensions, fabrication details, coordination with other Work, space requirements, or for deviations from the Plans or Specifications, unless the Contractor has called attention to such deviations in writing by a letter accompanying the Shop Drawings and the Engineer approves the change or deviation in writing at the time of submission; nor shall review by the Engineer relieve the Contractor from the responsibility for errors in the Shop Drawings.
- 12. The Contractor agrees that Shop Drawing submittals processed by the Engineer do not become Contract Documents and are not Change Orders; that the purpose of the Shop Drawing review is to establish a reporting procedure and to permit the Engineer to monitor the Contractor's progress and understanding of the design.
- 13. Submittals of substitutions, changes, and deviations shall be in accordance with this section and may be permitted subject to the following requirements:
 - a) The proposed substitution, change, or deviation is conspicuously marked on the Shop Drawings or data.
 - b) The corresponding line item on the letter of transmittal is conspicuously marked as a variation.
 - c) Proof shall be provided of the comparative quality and suitability of alternative equipment or materials for proposed substitutions. Description, information, performance data, and other information as may be required by the Engineer shall be submitted showing the equality of the materials or equipment offered to those specified.
 - d) A written explanation of the necessity for the proposed change or deviation shall be indicated in the Letter of Transmittal.

- e) The Engineer will be the sole judge as to the comparative quality and suitability of alternative equipment or materials, and his decision will be final.
- f) A sample substitution request form has been provided at the end of this Section.

d. Shop Drawing Requirements

General

Shop Drawings shall include catalog cuts, information schematic diagrams, and other submittals for both shop and field-fabricated items. The Contractor shall submit, as applicable, the following for all prefabricated or manufactured structural items, material, and equipment.

- 2. For structures, submit all shop, setting, equipment, miscellaneous iron and reinforcement drawings and schedules necessary for construction. The foregoing shall include detailed "pour drawings" which shall show the sequence of concrete placement, and the type, quantity and location of all embedment items (sleeves, anchor bolts, etc.).
- 3. For exposed and buried pipelines, submit a detailed layout of the pipeline with details of bends and fabricated specials, and furnish any other details necessary.
- 4. For electrical submittals, submit detailed information to show power supply requirements, MCC and control panel elevations, wiring diagrams, control and protection schematics, shop test data, operation and maintenance procedures, outline drawings, and manufacturer's recommendation of the interface/interlock among the equipment.
- 5. For mechanical equipment submit all data pertinent to the installation and maintenance of the equipment including Shop Drawings, anchorage requirements, manufacturer's recommended installation procedure, detailed installation drawings, performance data, test data and curves, operation and maintenance manuals, and other details necessary.
- 6. For architectural fabrication submit all data pertinent to the installation of the fabrications, including Shop Drawings, manufacturer's recommended installation procedure, detailed installation drawings, and other details necessary for operation and maintenance.

- Installation or placing drawings for equipment, drives, and bases, include dimensions, size and location of connections to other Work, and weight of equipment.
- 8. Supporting calculations for equipment and associated supports, or hangers required or specified to be designed by equipment manufacturers. Include seismic restraint information and details.
- 9. Complete manufacturer's specifications, including materials description and paint system.
- 10. Seismic design calculations and restraint details for equipment and piping supports.
- 11. Samples of finish colors for selection.

e. Review by Engineer

- 1. One copy of each submittal will be returned to the Contractor marked with one of the following notations:
 - a) No Exceptions Taken
 - b) Make Corrections Noted
 - c) Revise and Resubmit
 - d) Rejected Resubmit
 - e) For Informational Purposes Only

Returned copies of submittals marked with either notation (a) or (b) authorize the Contractor to proceed with the fabrication, installation or construction, or any combination thereof, covered by such returned drawings, provided that such fabrication, installation or construction shall be subject to the comments, if any, shown on such returned copies. Although fabrication may proceed on a notation (b), Contractor shall incorporate the comments, resubmit, and obtain notation (a) before release for shipment can be granted.

Returned copies of submittals marked with notation (c) shall be corrected as necessary and revised drawings shall be submitted in the same manner as before. Returned copies of drawings marked with notation (c) shall be

resubmitted not later than ten (10) calendar days after date of transmittal by Engineer of such copies of such drawings.

Returned copies of submittals marked with notation (d) are found not acceptable. Submittals shall be corrected as necessary and be resubmitted in its entirety in the same manner as before. Returned copies of drawings marked with notation (d) shall be resubmitted not later than 7 calendar days after date of transmittal by Engineer of such copies of such drawings.

2. Engineer will review with reasonable promptness Contractor's submittals, but Engineer's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The Engineer's review shall not extend to means, methods, techniques, sequences or procedures of construction, except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, or to safety precautions or programs incident thereto. Contractor shall make corrections required by Engineer.

Neither the Engineer's review or failure to review Contractor's submittals, nor the Engineer's authorization for Work to proceed, shall relieve Contractor of any of its obligations to meet all the requirements of the Contract, or relieve Contractor of the responsibility for the correctness of any items submitted, including full compliance with the Contract Documents, and the performance of the Work in a safe and satisfactory manner. Contractor shall, at its expense, make any changes in the design which are necessary to make the Work conform to the provisions and intent of the Contract.

f. Requests for Information

- 1. Requests for information about the Contract Documents shall be directed by Contractor to Engineer using a Request for information (RFI) form. Such requests will not be accepted by the Engineer from a Subcontractor or Supplier.
- A separate RFI form shall be used for each specific item for which information is required. Requests for information for more than one item using a single RFI form will be permitted only when the items are so functionally related that expediency indicates review of the group of items as a whole.

- 3. The Engineer will reply to the Contractor's request for information within seven (7) regular working days following receipt by the Engineer.
- g. **Operation and Maintenance Manuals** Refer to Section C-53.i. of the Specifications for information.

C-50 Payments to Contractor and Completion

a. Schedule of Values – Within fourteen (14) calendar days after receiving the Notice to Proceed, the Contractor shall submit a detailed Schedule of Values to the Engineer for approval. The Schedule of Values shall be used as a basis for determining progress payments on a lump sum contract or any designated lump sum bid item. The Schedule of Values shall be a schedule of cost loaded construction activities equal, in total, to the lump sum bid and shall be in such form and sufficient detail to correctly represent a reasonable apportionment of the lump sum.

Each lump sum bid item on the Bid Schedule must be broken down separately. The breakdown of each lump sum bid item must cover the cost of construction required by the Contract Drawings and Contract Documents for that item. The sum of the values for the construction activities, within a bid item, must equal the total bid amount for that item. The breakdown shall include subcontract amounts which shall not deviate from the amounts submitted in the Proposal Bidding Schedule. The Contractor shall provide certification from the Subcontractors certifying the subcontract amounts.

b. **Applications for Payment**

- An Application for Payment for each calendar month of Contract Work (but not more often than once a month), shall be submitted by the Contractor to Engineer for review covering the Work completed as of the date of the Application for Payment and accompanied by all supporting documentation as is required by the Contract Documents.
- 2. Contractor may apply for payment for materials and equipment to be used in the Work but not yet incorporated therein, which have been delivered to, and are suitably stored, at the Site. The application shall be accompanied by data satisfactory to District to establish District's title to such materials and

equipment or otherwise protect District's interest and shall be subject to approval by Engineer. Payment for such materials and equipment will not include any amount for Contractor's overhead or profit or relieve Contractor of its obligation to protect and install such materials and equipment in accordance with the Contract Documents, or to restore damaged or defective Work involving such materials and equipment.

- 3. Beginning with the second Application for Payment, each Application for Payment shall be submitted with all release forms confirming that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 4. As provided in Section 7201 of the Public Contract Code, a five percent (5%) retention of payment will be withheld on all progress payments.
- 5. The provisions pertaining to the withholding of specified percentages of the Contract price, may, at the Contractor's request and expense, be satisfied by depositing with the District or State or Federally chartered bank as escrow agent, securities equivalent to the amount to be withheld. Securities eligible for investment include those listed in California Government Code Section 16430 and bank and savings and loan certificates of deposit.

c. **Review** of **Applications**

- Engineer will, within five (5) days after receipt of each Application for Payment, either prepare a recommendation of payment and present to the District or return the Application of Payment to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. If the Application for Payment has been returned to the Contractor, the Contractor may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will represent by Engineer to District, that:
 - a) The Work has progressed to the point indicated; and
 - b) The quality of the Work is generally in accordance with the Contract Documents.

- 3. Engineer may refuse to recommend the whole or any part of any payment for any of the following reasons:
 - Any claims are filed against Contractor by District, Engineer, or third parties, or if reasonable evidence indicates the probability that such claims will be filed;
 - b) Contractor is in default of any Contract condition;
 - c) The Work is defective, or completed Work has been damaged, which will require that the Work be corrected or replace;
 - d) District has been required to correct defective Work or complete Work; or
 - e) The Contractor has failed to provide the required waivers and releases.

d. Payment Becomes Due

Partial payments will be made as the Work progresses and following the District's monthly Board meeting, or as soon thereafter as practical.

The Contractor is hereby notified that because of the need for payments to be reviewed by the District's Board of Directors and because the Board only regularly meets once a month, delays of as much as sixty (60) days may occur in Contractor's receipt of payment for progress pay estimates and the final pay estimate. The Contractor is urged to process his request for payment in a timely manner to minimize payment delays. The Contractor agrees that such a delay shall not entitle Contractor to any remedy provided for in the Contract Documents or law.

e. **Reduction in Payment**

- 1. The District may refuse to make payment of the full amount recommended by Engineer because:
 - a) Claims have been made against District on account of Contractor's performance;
 - Stop notices or liens have been filed in connection with the Work;
 - c) There are other items entitling the District to a set-off against the

amount recommended;

- d) Failure of the Contractor to make payment properly to Subcontractors or for material or labor;
- e) A reasonable doubt that the Contract can be completed for the balance then unpaid;
- f) Damage to another Contractor, Subcontractor, Supplier, or Individual;
- g) Failure of the Contractor to keep his Work progressing in accordance with the time schedule; or
- h) Where Work on unit price items is substantially complete but lack clean-up and/or correction ordered by the Engineer.
- 2. If District refuses to make payment of the full amount recommended by Engineer, District will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. District shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by District and Contractor, when Contractor corrects to District's satisfaction the reasons for such action.

f. Substantial Completion and Final Review

- 1. When the Work has been completed and ready for its intended use, Contractor shall notify District and Engineer in writing that the Work is Substantially Complete and request that Engineer issue a certificate of Substantial Completion, which will be in the form of a letter.
- 2. When the Work has been Substantially Completed and the Contractor so notifies the Engineer in writing, the Engineer and Contractor will jointly make a Semi-Final Inspection and may prepare a Punch List. As a result of this inspection, the Engineer may determine that (I) the Work is not sufficiently complete to warrant a Semi-Final Inspection or the preparation of a Final Punch List, (2) the Work is sufficiently complete for the Engineer to prepare a Final Punch List but certain incomplete or Defective Work prohibits use of the Work for its intended purpose and therefore, the Work is not Substantially Complete, or (3) that the Work is Substantially Complete and usable for its intended

purpose and the Engineer can prepare a Final Punch List. In preceding cases 1 and 2, the Contractor shall continue the Work and call for a second Semi-Final Inspection when the Work is ready. In case (3), the Engineer will prepare a Final Punch List and a notice of Substantial Completion which shall establish the date of Substantial Completion and shall state the time agreed to by the District and the Contractor (not to exceed 30 days) in which the Contractor shall complete all Work ready for Final Inspection. The date of Substantial Completion shall be revised if necessary, such that it is no more than 30 days prior to the actual date of Final Completion. The Engineer shall attach a copy of the Final Punch List to the notice of Substantial Completion. If the Contractor does not achieve Substantial Completion on the second attempt, it shall reimburse the District the cost of the Engineer's services for additional inspections.

- 3. When the Contractor has completed or corrected all the items on the Engineer's Final Punch List, the Contractor shall give the Engineer written notice that the Work is ready for Final Inspection and acceptance and the Engineer shall make a Final Inspection. If the Engineer finds the Work is not fully complete, it shall notify the Contractor of items still requiring completion or correction. The Contractor shall immediately correct these deficiencies and call for a reinspection. When the Engineer finds to the best of the Engineer's knowledge, information and belief, and on the basis of the Engineer's observations and inspections, the Work is acceptable and fully complete in accordance with the Contract Documents, the Engineer will recommend that the District issue and file a Notice of Completion, designating Final Completion, and accept the Work in accordance with the terms and conditions of the Contract Documents. The Notice of Completion will be file once the Final Completion has been achieved.
- 4. The District shall file the Notice of Completion with the Kern County Recorder's office within 10 days of acceptance of the Work and Final Completion. This will be the date when the Contractor is relieved from responsibility to protect the Work.
- 5. Contractor is herein put on notice and acknowledges that the date of the filing of the Notice of Completion is the date by which any liquidated damages will be computed for the Work as a whole and that the District is under no duty to place the Contractor on notice that liquidated damages are about to run, or have begun to run.

g. Partial Utilization

- Prior to Substantial Completion of all the Work, District may use or occupy any Substantially Completed part of the Work which District and Engineer agree constitutes a separately functioning and usable part of the Work that can be used by District for its intended purpose without significant interference with Contractor's performance of the remainder of the Work.
- 2. When provided for in the Contract Documents or agreed to in writing by the District and the Contractor, the District may notify the Contractor and begin using a portion of the Work even though the overall Work is not Substantially Complete. The Contractor, the District and the Engineer shall agree on and document responsibilities for security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that portion of the Work being used by the District. The District, the Contractor and the Engineer shall inspect such portion of the Work and shall prepare a list of Work to be completed or corrected before final acceptance. The District's use of any portion of the Work shall not constitute final acceptance of that portion of the Work prior to Final Completion and acceptance of the Work as a whole. Provided, however, the warranty for such Work will commence upon Substantial Completion for that portion of the Work that is Substantially Complete. The District shall allow the Contractor reasonable access to complete or correct Work in areas being used by the District. Partial beneficial occupancy shall not relieve the Contractor of liquidated damages unless the Contract Documents expressly provide for and identify the portion of Work that may be considered Substantially Complete before the remaining portions of the Work.

h. Final Payment

1. Application for Payment

a) After Contractor has, in the opinion of Engineer, satisfactorily addressed all items in the Final Punch List and has delivered, in accordance with the Contract Documents, all operation and maintenance manuals, warranties, Record Drawings, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents etc. and other documents, Contractor may make application for final

- payment following the procedure for progress payments.
- b) The final Application for Payment shall be accompanied (except as previously delivered) by:
 - 1) All documentation called for in the Contract Documents;
 - 2) Consent of the surety, if any, to final payment;
 - 3) A list of all claims against District that Contractor believes are unsettled; and
 - 4) Complete and legally effective releases or waivers (satisfactory to District) of all lien rights arising out of or liens filed in connection with the Work.

2. Engineer's Review of Application and Acceptance

- a) If, on the basis of Engineer's observation of the Work during construction and Final Inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within five (5) days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to District for payment. At the same time Engineer will also give written notice to District and Contractor that the Work is acceptable. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- b) Neither the acceptance of the Work by the District nor the payment of all or part of the sum due the Contractor hereunder shall constitute a waiver by the District of any claim which the District may have against the Contractor or surety under this Contract or otherwise.

3. Payment Becomes Due

Final payment shall not be due until thirty-five (35) days after either the Notice of Completion has been recorded in compliance with the Code of Civil Procedure of the State of California or after such time as the Contractor has submitted all documents required in Paragraph C-50.h. and has addressed all items in the Final Punch List, whichever is later. The Contractor is hereby notified that because of the need for payments to be reviewed by the District's Board of Directors and because the Board only regularly meets once a month, delays of as much as sixty (60) days may occur in his receipt of payment for progress pay estimates and the final pay estimate. The Contractor is urged to process his request for payment in a timely manner to minimize payment delays. The Contractor agrees that such a delay shall not entitle Contractor to any remedy provided for in the Contract Documents or law.

C-51 Project Meetings

a. Pre-Construction Conference – Upon receipt of the Notice to Proceed, or at an earlier time if mutually agreeable, the District will arrange a preconstruction conference to be attended by the Contractor, Contractor's superintendent, the District, the Engineer or his representative, and representatives of utilities, major Subcontractors, and others involved in the execution of the Work.

The purpose of this conference shall be to establish a working understanding between the parties and to discuss the Construction Schedule (Critical Path Method format required), Shop Drawing submittals and processing, applications for payment and their processing, and such other subjects as may be pertinent for the execution of the Work.

b. **Progress Meetings**

The District may arrange and conduct progress meetings. These meetings shall be attended by the Engineer or his representative, Contractor, Contractor's superintendent and representatives of all Subcontractors, utilities, and others, that are active in the execution of the Work. The purpose of these meetings shall be to expedite the Work of any Subcontractor (if acceptable to the District) or other organization that is not

- up to schedule, resolve conflicts, and in general, coordinate and expedite the execution of the Work.
- 2. The agenda of progress meetings shall include review of progress and schedule, of payment request, of the latest Construction Schedule update, and of the record documents. To the maximum extent practicable, Contractor shall contact the District and Engineer at least twenty-four (24) hours in advance of the meetings regarding items the Contractor wishes to have added to the agenda.
- 3. Persons designated by the Contractor to attend and participate in project meetings shall have the authority to commit the Contractor to the resolution of problems as agreed upon in the project meetings.
- 4. A meeting will be held every week (unless the District determines otherwise) for the duration of the Project to review, evaluate, and discuss each Construction Schedule submittal. The location of the meetings shall be determined by the District prior to the first meeting.
- 5. The Contractor shall designate persons to attend these Construction Schedule review meetings who are familiar with the Construction Schedule and with the current construction problems and activities and with the logic of the Work sequences used in preparing the schedule and the updates.
- On the last working day of every week, Contractor shall submit to Engineer, Contractor's plan of activities for the following two (2) weeks (a "two-week look-ahead schedule"). The plan of activities shall describe the activity and location of the activity. Failure to submit a two-week look-ahead schedule, shall subject the contractor to withholding of monthly progress payment for month that the schedule(s) was not submitted.

c. **Progress and Schedule Review**

- 1. The progress of the Work and the Construction Schedule shall be reviewed to verify:
 - a) Actual start and finish dates of completed activities since the last progress meeting.
 - b) Durations and progress of all activities not completed.

- c) Reason, time, and cost data for Change Order Work that is to be incorporated into the Construction Schedule or payment request form.
- d) Payment due to the Contractor based on percentage complete of items in the submitted payment request.
- e) Reasons for, and duration of, required revisions in the Construction Schedule.
- f) After each progress meeting, upon request the Contractor shall submit to the Engineer three (3) prints of the last accepted Construction Schedule, revised in accordance with the progress review.
- g) If the progress meeting coincides with the beginning of the month when Applications for Payment are due, the Contractor shall have his copy of the payment request form and all other data required by the Contract Documents completed prior to the progress meeting. The Engineer will process Contractor's payment request after satisfactory review of the schedule update.

C-52 Record Drawings

a. The Contractor shall maintain one set of Record Drawings at the Site. On these, it shall mark all project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented on the original Plans, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Plans. Said Record Drawings shall be supplemented by any detailed sketches as necessary or directed to fully indicate the Work as actually constructed. These master Record Drawings of the Contractor's representation of as-built conditions, including all revisions made necessary by addenda and change orders shall be maintained up-to-date during the progress of the Work. Red ink shall be used for alterations and notes. Notes shall identify relevant Change Orders by number and date. Record Drawings shall be maintained up to date on a daily basis.

- b. Changes shall be marked directly on the drawings. Green color-coding shall be used when showing information deleted from Drawings. Red color-coding shall be used when showing information added to Drawings. Blue color shall be used for clouding an area or areas affected by the change(s). Information shall be legible and completely detailed. The level of detail shall be sufficient to allow a draftsman to incorporate the changes into a CAD file without reference to other documents besides the marked-up drawing(s). It is not acceptable to simply reference change directives or to mark drawings: "see RFI-XX" or "see survey notes". If there is insufficient space on a drawing to markup the change, the Contractor will be required to draw additional sketches to completely explain the change and attach the sketches to the drawing.
- c. The Engineer has the right to inspect the Contractor's marked-up drawings at any time to ascertain that they are being kept up to date and show sufficient details. The Engineer may require that all as-built records, survey field notes and other documentation be submitted at the completion of certain construction elements of the overall project. Should the Contractor's marked-up drawings, survey field notes, and other as-built documentation not be up to date or lack necessary details, the Engineer may withhold five percent (5%) from each monthly progress payment, until the drawings, survey field notes and other as-built documentation are brought up to date and properly detailed.
- d. Copies of the Record Drawings shall be submitted upon completion of all Work.
- e. In the case of those drawings which depict the detail requirement for equipment to be assembled and wired in the factory, such as motor control centers and the like, the Record Drawings shall be updated by indicating those portions which are superseded by Change Order drawings or final Shop Drawings, and by including appropriate reference information describing the change orders by number and the Shop Drawings by manufacturer, drawing, and revision numbers.
- f. Record Drawings shall be accessible to the Engineer at all times during the construction period.
- g. Final payment will not be acted upon until the Record Drawings have been prepared and delivered to the Engineer. Said up-to-date Record Drawings shall be in the form of a set of prints with carefully plotted information overlaid.

- h. Prior to final acceptance of the Work, the Contractor shall finalize and deliver a complete set of Record Drawings to the Engineer for transmittal to the District, conforming to the construction records of the Contractor. This set of Record Drawings shall consist of corrected drawings showing the reported location of the Work. The information submitted by the Contractor and incorporated by the Engineer into the Record Drawings will be assumed to be correct, and the Contractor shall be responsible for the accuracy of such information, and for any errors or omissions which may appear on the Record Drawings as a result.
- i. Contractor shall refer to Paragraph C-53 for requirements regarding Contract Closeout.

C-53 Contract Closeout

Prior to submitting the Final Application for Payment and issuance of the Final Payment, as described in Paragraph C-50.h., the Contractor must complete the Work described below.

- a. Cleaning Throughout the period of construction the Contractor shall keep the Work site free and clean of all rubbish and debris, and shall promptly remove from the Site, or from property adjacent to the Site, all unused and rejected materials, surplus earth, concrete, plaster, and debris, excepting select material which may be required for refilling or grading.
- b. **Final Site Clean-Up** Upon completion of the Work, and prior to final acceptance, the Contractor **shall** remove from the vicinity of the Work all surplus material, and equipment belonging to him or used under his direction during construction.
- c. **Waste** Disposal The Contractor shall dispose of surplus materials, waste products, demolition materials, and debris. The Contractor shall transport and dispose of waste materials in accordance with applicable laws and regulations.
- d. **Project Record Documents** The Contractor shall maintain at the Site, available to the District and Engineer, one copy of the Contract Documents, Record Drawings, Change Orders, and other modifications in good order and marked to record all changes made during construction. These foregoing documents shall

be delivered to the Engineer upon completion of the Work and will be known as Project Record Documents. Project Record Documents shall be reviewed during progress meetings to ascertain that all changes have been recorded. Contractor shall store Project Record Documents separately from other documents used for construction.

- e. **Touch-Up and Repair** The Contractor shall touch-up or repair finished surfaces on structures, equipment, fixtures, or installations that have been damaged prior to final acceptance. Surfaces on which such touch-up or repair cannot be successfully accomplished shall be completely refinished or in the case of hardware and similar small items, the item shall be replaced. Such items shall include, but not be limited to, the following:
 - 1. Road surfaces (paved and unpaved)
 - 2. All concrete surfaces
 - 3. Equipment exposed surfaces
 - 4. Piping exposed surfaces
- f. **Final Equipment Check** After test operation and before final acceptance, each piece of machinery shall be lubricated and all components and couplings checked for proper alignment and adjustment.

Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer's and District's final review.

Provide submittals to District that are required by governing or other authorities.

Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

g. Warranties

- 1. Provide Manufacturer's Equipment Warranties as required by these Specifications.
- 2. Execute and assemble documents from Subcontractors, Suppliers, and manufacturers.

- 3. Provide Table of Contents and assemble in binder with durable plastic cover.
- 4. Submit prior to final Application for Payment.
- 5. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten (10) days after acceptance, listing date of acceptance as start of warranty period.
- h. **Record Drawings –** Refer to Section C-52.

i. Operation and Maintenance (O&M) Manuals

- 1. Provide four (4) original O&M manuals and one (1) electronic copy (in pdf) to the Engineer prior to final Application for Payment. All O&M manuals shall be provided in a three-ring binder, with tabs and an index describing the contents of the binder. One binder containing the O&M manual for each piece of equipment shall be furnished and be included in a separate binder. All O&M manual copies whose original pages are color shall be provided in color. The binder cover sheet shall include at a minimum: (1) the name of the project; (2) the contents of the binder; (3) the District's name; (4) the date; and (5) the volume number (i.e. Vol 1 of 2 etc.). One hardcopy of the O&M manual shall be provided to the Engineer and District for review prior to reproducing all four sets. Once the sample copy has been approved, the Contractor may proceed with preparing the four original sets.
- 2. Operation and maintenance instructions shall include, at a minimum, the below listed data for each item of mechanical, electrical, and instrumentation equipment. All equipment manufacturers shall be made aware of these requirements and all associated costs shall be included in the costs for furnishing the equipment or system.
 - a) All information provided as part of the Shop Drawings.
 - b) All information required as part of equipment Specification Section.
 - c) Manufacturer's O&M manual customized for equipment provided. Cross out equipment not provided.

- d) Bill of material listing every component of equipment listed by make and part number. An insufficient bill of materials shall result in O&M manual submittal rejection.
- e) An itemized list of all data provided.
- f) Name and location of the manufacturer, the manufacturer's local representative, the nearest supplier, and spare parts warehouse.
- g) Equipment function, normal operating characteristics, and limiting conditions.
- h) Recommended maintenance procedures during storage of equipment prior to installation and after installation but prior to start-up.
- i) Recommended installation, adjustment, start-up, calibration, and troubleshooting procedures.
- j) Recommended lubrication, lubrication intervals, and an estimate of yearly quantity needed.
- k) Recommended step-by-step procedures for all modes of operation. Operating instructions for startup, routine and normal operation, regulation and control, shutdown, and emergency conditions. Instructions shall include keystrokes and procedures required for adjusting control setpoints for equipment operation.
- Complete internal and connection wiring diagrams of actual installation.
- m) Equipment maintenance.
- n) Test data and performance curves, where applicable.
- o) Recommended preventive maintenance procedures and schedule.
- p) Complete parts lists (bill of materials), by generic title and identification number (part number), with exploded views of each assembly.

- 1) Every component shall be listed on the bill of material with its corresponding part number.
- 2) A recommended spare parts list shall include generic title and identification numbers (part numbers).
- q) Recommended spare parts and any special tools required.
- r) Disassembly, overhaul, and reassembly instructions.
- s) Factory and field test results (if applicable).
- t) Manufacturer's contact information and local certified service representative's contact information.
- 3. Following completion of an item, instructions and procedures shall be modified by the Contractor to reflect field changes. In addition, the O&M manuals shall contain reproducible prints of the Contract record wiring diagrams, schematics, and installation drawings required. Information not applicable to equipment installed in the Work shall be excluded.
- 4. Individual O&M manuals shall be broken into sections and indexed. Under each section there shall be a description of the operation and maintenance, and installation instructions of each item. Sections shall be labeled, and each item shall be sub-labeled. No acceptance of equipment will be made until the individual O&M manual has been approved. Contractor's copy of each individual O&M manual shall be available at the site of the Work for use by field personnel and the Engineer during start-up and testing of the equipment.

C-54 Satisfaction of Liens

If any liens or claims remain unsatisfied after final payment to the Contractor, the Contractor shall pay or refund to the District any money that the latter may be compelled to pay to discharge such liens and costs together with reasonable attorneys' fees incurred by the District in enforcing the Contractor's obligations hereunder.

C-55 Waiver of Interest in Certain Situations

The District shall have no obligation to pay and the Contractor hereby waives the right to recover interest with regard to monies which the District is required to withhold by reason of judgment, order, statute or judicial process.

C-56 Protest Procedure

a. Notice of Intent to Protest

A bidder who wishes to protest the award of a Contract shall submit a Notice of Intent to Protest in writing to the contact in A-12 no later than 1 business day after the bid opening. Failure to provide a Notice of Intent to Protest, by 5pm 1 business day after the bid opening and as described above, waives the right to protest.

b. Filing a Protest

By 5pm 2 business days after submitting the Notice of Intent to Protest, the protester shall submit a Protest to the contact in A-12. If protester is not a Disadvantaged Business Enterprise (DBE), a check made out to Southern San Joaquin Municipal Utility District, in the amount of \$50, for an administrative fee, shall accompany the Protest. If protester is a DBE, a copy of documentation of such shall accompany the Protest.

The burden of proof is on the protester. The Protest shall include:

- A detailed basis for the Protest, supported by facts.
- References to the specific alleged deficiencies of the bid(s) being protested.
- The reason that the protester is the lowest responsible and responsive bidder, supported by facts.
- All referenced documents shall be attached to the Protest.

The Protest shall not be on the basis of or include any item not identified in the Specifications. There will not be an opportunity for a Protest to be amended. Failure to comply with this section waives the right to protest.

c. Review of Protest

The District shall provide the bidder(s) whose bid was protested with the Protest within 2 business days of receipt of the Protest. The bidder(s) whose bid was protested will have 5 business days from receipt of the Protest to respond in writing to the District, if they wish. Failure to comply with this section forfeits the bidder's right to respond to the Protest.

The District shall have 10 business days from receipt of the Protest to respond to the protester.

d. Resolution of Protest

The protester may withdraw the Protest at any time. Upon withdrawal, the Protest shall be considered resolved and the District shall proceed with award of Contract, as appropriate.

The District's response to the Protest shall be final, without opportunity for further commentary or challenge from the protester. Should the Contract not be awarded to a bidder as a result of the Protest, the bidder shall be notified at least 1 day prior to award of Contract.

END OF SECTION

SECTION D

SPECIAL CONDITIONS

D-1 The Requirement

It is required that the Project be constructed in accordance with the Contract Documents. The Work is to be performed in Kern County, within the vicinity of Delano, California.

D-2 Description of Work

The description of work is as follows:

Base Contract (Driver Road Pipeline Project):

- 1. Construct a new PVC waterline from the USBR Lateral 119.6 on Bassett Avenue to the existing groundwater recharge spreading basins west of Driver Road. Connect the pipeline to the existing Lateral 119.6-1.5S south of 9th Avenue
- **2.** Abandon in place the existing USBR Lateral 119.6-1.5S from Bassett Avenue to 9th Avenue.
- **3.** Connect several existing turnouts from Lateral 119.6-1.5S to the new PVC pipeline.

Optional Work (Driver Road Pipeline Project):

4. Construct a new PVC waterline from the new Driver Road Pipeline to SSJMUD Giumarra Spreading Basin Project south of 9th Avenue.

D-3 Beginning and Completion of Work

a. **General**

Unless otherwise ordered by the Engineer, as hereinafter provided, the Contractor shall begin the Work within ten (10) calendar days after issuance of the Notice to Proceed and in accordance with Paragraph D-3b. below.

b. **Completion of Work**

The Contractor shall complete all specified onsite-work <u>as follows</u>. within 300-calendar days and all Contract Work within 330 calendar days after issuance of the Notice to Proceed.

Anticipated Notice of Award (NOA): March 13, 2025 April 10, 2025 Completion of the Construction of new Pipelines: January 26, 2026 Completion Date for all Contract Work: February 25, 2026

Failure to perform and complete the construction Work within the time period described in Paragraph D-3b shall subject the Contractor to the assessment of liquidated damages provisions of Paragraph D-7.

D-4 Labor Compliance Program

- 1. The District will implement the provisions of a Labor Compliance Program (LCP) to monitor and enforce prevailing wage requirements. In this regard, by submission of this Bid or the execution of the Contract, or subcontract as appropriate, the Contractor, and Subcontractors, as appropriate, agrees to provide any and all information the District may need to be in compliance.
- 2. The LCP will be implemented by a third-party consultant that will strictly be focused on enforcing labor compliance. Type of monitoring activities will include but not be limited to the following: a) onsite inspections; b) visual monitoring of construction activities; c) interviews with field personnel; d) verification of Contractors and Subcontractors State License Board licensing and Workers Compensation Insurance; e) review and confirmation of monthly submittal/accuracy of certified payroll reports; f) inspection of time records and other source documents maintained by the Contractor and Subcontractors; and g) verification of compliance with LC 226 and other laws enforced by the Labor Commissioner.
- The Contractor and its Subcontractors will be required to submit all of their Certified Payroll Records (CPR) to the Engineer and the third-party consultant at least monthly, or more frequently if required. In addition, The Contractor and its Subcontractors will be required to register online with the Department of Industrial Relations Compliance Monitoring at the following website: https://efiling.dir.ca.gov/PWCR/. Once registered, the Contractor and its Subcontractor's will upload CPRs to the eCPR system.
- 4. The District will provide the DIR Project ID # to the Contractor for the project. The Contractor and its Subcontractors will be required to submit all of their Certified Payroll Records (CPR) electronically to the Labor Commissioner using DIR's electronic certified payroll reporting system at least monthly, or more frequently if required.

- 5. The Department will undertake those activities it deems necessary to monitor and enforce compliance.
- 6. In the event of non-compliance, the District may withhold payment due to delinquent, inadequate, or untimely submission of CPR's. Additionally, if the DIR identifies any non-compliance, there may be civil wage and penalty assessments and BOFE citations imposed by the regulating agencies.
- 7. The Contractor shall be responsible for monitoring the payment of prevailing wages by its Subcontractors by periodic review of the CPR's. If the Contractor becomes aware of non-compliance, the Contractor shall take corrective measures to rectify the non-compliance.
- 8. The Contractor shall be responsible for posting job site notices, as prescribed by regulation including per Labor Code Section 1771.4(a)(2) a copy of the prevailing wage determination for each craft, classification or type of worker needed to execute the Contract at the jobsite in accordance with Labor Code section 1773.2.
- 9. The Contractor is directed to the following website for additional information regarding the public works contractor responsibilities: http://www.dir.ca.gov/Public-Works/publicworks.html. Not all of the requirements have been presented herein and it is the Contractor's responsibility to become informed about the requirements.

D-5 Federal Grant Special Provisions

a. **General**

1. These special provisions shall apply to all Work performed on the Contract by the contractor's own organization and with the assistance of workers under the Contractor's immediate superintendence and to all Work performed on the Contract by piecework, station work, or by subcontract. The Work shall conform to the requirements of all governmental agencies having jurisdiction over the Work. Contractor shall also comply with all federal, state and local laws, ordinances, rules, regulations and orders under the Contract, including all licensing requirements and occupational, health, safety, employment and environmental laws. Such applicable laws, ordinances, rules, regulations and orders shall include, without limitation, those that are specifically incorporated into any Grant Agreements pertaining to the Work, which Grant Agreements and any amendments thereto the District will provide to Contractor following their execution.

- Contractor shall bear all costs, expenses and liabilities related to any changes in the Work to conform to such laws, ordinances, rules, regulations and orders.
- 2. Except as otherwise provided for in each section, the Contractor shall insert in each subcontract all of the stipulations contained in these special provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The special provisions shall not be incorporated by reference in any case. The prime Contractor shall be responsible for compliance by any Subcontractor or lower tier subcontractor with these special provisions.
- 3. A breach of any of the stipulations contained in these special provisions shall be sufficient grounds for termination of the Contract.

b. Contract Provisions

- 1. By submission of this bid, the execution of the Contract or subcontract, or the consummation of the Contract, as appropriate, the bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that it will comply with all applicable Contract provisions as described in this section.
- 2. Federal agencies are permitted to require changes, remedies, changed conditions, access and records retention, suspension of work, and other clauses approved by the Office of Federal Procurement Policy.

c. Contracting With Small And Minority Businesses, Women's Business Enterprises, And Labor Surplus Area Firms

- 1. The Contractor must take all necessary affirmative steps to assure that minority businesses, women business enterprises, and labor surplus area firms are used when possible. As part of the Bid Proposal, the Contractor shall complete and include the Good Faith Efforts Checklist for Disadvantaged Business Enterprises (DBE).
- 2. Affirmative steps must include:
 - a) Placing qualified small and minority businesses and women's businesses enterprises on solicitation lists;
 - b) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

- Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's businesses enterprises;
- Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
- e) Using services and assistance of the Small Business Administration, and the Minority Business Development agency of the department of Commerce; and
- f) Requiring the Subcontractors to take the affirmative steps listed in paragraphs a) through e) above.

d. **Equal Employment Opportunity**

Compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60.

During the performance of the Contract, the contractor agrees as follows:

- The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
 - Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

- 3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- 4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 5. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 6. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 7. In the event of the contractor's noncompliance with the nondiscrimination clauses of the Contract or with any of the said rules, regulations, or orders, the Contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule,

regulation, or order of the Secretary of Labor, or as otherwise provided by law.

8. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in Work on or under the Contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out

such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

e. Davis-Bacon Act

Compliance with the Davis-Bacon Act (440 U.S.C. 3141-3148) as supplemented by Department of Labor regulations (29 CFR Part 5). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination.

f. Anti-Kickback Act

Compliance with Copeland "Anti-Kickback" Act (40 U.S.C. 3145) as supplemented in Department of Labor regulations (29 CFR Part 3).

g. Contract Work Hours and Safety Standards Act

Compliance with 40 U.S.C. 3702 and 3704 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708) as supplemented by Department of Labor Regulations (29 CFR Part 5).

h. Clean Air Act and Federal Water Pollution Control Act

Compliance with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387).

i. **Debarment and Suspension**

By submission of this bid, the execution of the Contract or subcontract, or the consummation of the Contract, as appropriate, the bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that they will comply with all standards and policies contained in the Department of the Interior regulations at 2 CFR 180, Subpart C and 2 CFR 1400.

j. New Restrictions on Lobbying

- 1. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- 2. By submission of this bid, the execution of the Contract or subcontract, or the consummation of the Contract, as appropriate, the bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that they will comply with all standards and policies contained in the Department of the Interior regulations at 43 CFR 18-New Restrictions on Lobbying, including the following certification:
 - a) No Federal appropriated funds have been paid or will be paid, by or on behalf to any person for influencing or attempting to influence and officer of employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or

modification of any Federal contract, grant, loan or cooperative agreement.

- b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal Contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.
 - c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

k. Procurement of Recovered Materials

The District and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Prohibition on Certain Telecommunications and Video Surveillance Equipment or Services

2 C.F.R. § 200.216 prohibits the obligation or expending of federal award funds on certain telecommunication products or from certain entities for national security reasons. Funds may not be obligated or expended to:

- a. Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
- b. Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system; or
- c. Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

The Contractor or subcontractors shall not use covered telecommunications equipment or services as described in section 889 of the 2019 National Defense Authorization Act. This prohibition applies even if the contract is not intended to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services.

m. **Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the Contractor should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for Work or products under this award.

For purposes of this section:

- 1. "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- 2. "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

n. **Inspection**

Reclamation shall have the right to inspect and evaluate the Work performed or being performed, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work.

o. **Drug-Free Workplace**

By submission of this bid, the execution of the Contract or subcontract, or the consummation of the Contract, as appropriate, the bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that they will comply with all standards and policies contained in the Department of the Interior regulations at 2 CFR 1401-Government Requirements for Drug-Free Workplace, and 2 CFR 182.

p. **Assurances and Certifications**

- 1. By submission of this bid, the execution of the Contract or subcontract, or the consummation of the Contract, as appropriate, the bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that they will comply with all of the Assurances, SF 424B or SF 424D as applicable. All antidiscrimination and equal opportunity statues, regulations and Executive orders that apply to the expenditure of funds under federal Contracts.
- 2. The bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, shall comply with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the rehabilitation Act of 1973, The Age Discrimination Act of 1975, and nay program-specific statues with anti-discrimination requirements.
- 3. The bidder, contractor, subcontractor, material supplier, or vendor, as appropriate, shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit reporting Act, The Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

q. Nondiscrimination

1. During the performance of this Project, the Contractors, its Subcontractors and Suppliers shall not unlawfully discriminate, harass, or allow

harassment against any employee or applicant for employment because of sex, race, color, de ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Contractors, its Subcontractors and Suppliers shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractors, its Subcontractors and Suppliers shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated by reference and made a part hereof as if set forth in full. Contractors, its Subcontractors and Suppliers shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. Contractors shall include the nondiscrimination and compliance provisions of this clause in all contracts to perform Work under the project.

D-6 Build America, Buy America Act

As required by Section 70914 of the Bipartisan Infrastructure Law (also known as the Infrastructure Investment and Jobs Act), P.L. 117-58, on or after May 14, 2022, none of the funds under a federal award that are part of Federal financial assistance program for infrastructure may be obligated for a project unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States, unless subject to an approved waiver. The requirements of this section must be included in all subawards and subcontracts, including all contracts and purchase orders for work or products under this program.

Contractor is hereby notified that the following are requirements of the project, and Recipients of an award of Federal financial assistance are hereby notified that none of the funds provided under this award may be used for a project for infrastructure unless:

 all iron and steel used in the project are produced in the United Statesthis means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;

- 2. all manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation; and
- all construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States. The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

For further information on the Buy America preference, please visit www.doi.gov/grants/BuyAmerica. Additional information can also be found at the White House Made in America Office website: www.whitehouse.gov/omb/management/made-in-america/.

Definitions

"Construction materials" includes an article, material, or supply that is or consists primarily of:

- non-ferrous metals;
- plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- glass (including optic glass);
- lumber; or
- drywall.

"Construction Materials" does not include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents or additives.

"Domestic content procurement preference" means all iron and steel used in the project are produced in the United States; the manufactured products used in the project are produced in the United States; or the construction materials used in the project are produced in the United States.

"Infrastructure" includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

"Project" means the construction, alteration, maintenance, or repair of infrastructure in the United States.

D-7 Liquidated Damages for Delays

It will be impractical or extremely difficult to fix the actual damages to the District which may result from any delays in completion of the Work beyond the time agreed upon. It is, therefore, stipulated and agreed that if all of the Work is not completed on or before the expiration of the completion time or times specified in Paragraph D-3, or within such extensions of time as may be granted, the District may retain the sum of \$1,000 each day thereafter, Sundays and holidays included, that the Work remains uncompleted, which sum is agreed upon as the proper measure of liquidated damages which the District will sustain per day by the failure of the Contractor to complete the Work at the time stipulated, and this sum is not to be construed in any sense a penalty or forfeiture.

D-8 Materials

a. Materials Furnished by the Contractor

Unless otherwise specified, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, lights, power, fuel, transportation and other facilities necessary for the execution and completion of the Work. All materials shall be new and both workmanship and materials shall be of a good quality. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials, including the furnishing of written manufacturers' certifications of compliance with applicable designated governing reference specifications.

b. Materials Furnished by the District

No materials will be furnished by the District as part of the Contract.

c. Use of District Water

The District will provide water including sufficient water for earthwork, fire protection, dust abatement and testing requirements, at a rate of \$0/AF. Methods of obtaining water will be provided by the District and coordinated with the awarded Contractor. Contractor shall be responsible for trucking provided water.

If water is supplied from a source other than the District, the cost of the water and the cost and methods of obtaining and conveying water shall be the responsibility of the Contractor.

d. Equipment and Materials to be Furnished as Listed

Each bidder shall submit with his proposal under the "Information Required of Bidder" form, a listing of the names of manufacturers and model numbers or types of listed items of Contractor-furnished Equipment and Materials and said Equipment and Materials shall be furnished without change or deviation from the listing unless a change or deviation is approved in writing by the Engineer, and unless equipment or material of the listed manufacturer or supplier does not meet the requirements of the Specifications.

D-9 Right-of-Way, Construction Roads, Site Access

- a. The District will provide the necessary right-of-way and access for construction of the facilities covered by these Specifications.
- b. The right of way for the Work to be constructed under these Specifications will be provided by the District. Nothing herein contained, however, and nothing marked on the Plans, shall be interpreted as giving the Contractor exclusive occupancy of the territory provided. When two or more contracts are being executed at one time on the same or adjacent land in such a manner that Work on one contract may interfere with that on another, the Engineer shall decide which contractor shall cease Work and which shall continue; or, whether the Work on both contracts shall progress at the same time, and if so, in what manner. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may

be granted by the Engineer to the Contractor so desiring, to the extent, amount, in the manner, and at the time permitted. No such decision as to the method or time of conducting the Work or the use of territory shall be the basis of any claim for delay or damage.

- c. Lands to be furnished by the District for construction operations will be specifically shown on the Plans or provided for in the Special Conditions. Should the Contractor find it necessary to use additional land for his purposes during the construction of the Work, he shall provide for the use of such lands at his own expense. A copy of each written agreement between the Contractor and affected landholder(s) for the use of additional lands shall be filed with the Engineer prior to the use of land.
- d. The Contractor shall construct and maintain all roads necessary to reach the various parts of the Work and for the transportation thereto of construction material and personnel. The cost of constructing and maintaining such roads shall be borne by the Contractor.

D-10 Access Roads and Staging Area

- a. The Contractor shall maintain access roads to and on the Site to provide for delivery of material and for access to existing and operating plant facilities on the Site. For a road to be considered adequately maintained, it shall be reasonably dust free.
- b. Adequately maintained access roads shall be maintained to all storage areas and other areas to which frequent access is required. Similar roads shall be maintained to all existing facilities on the Site to provide access for maintenance and operation. Where such temporary roads cross, buried utilities that might be injured by the loads likely to be imposed, such utilities shall be adequately protected by steel plates or work planking, or bridges shall be provided so that no loads shall discharge on such buried utilities.
- c. The District may designate a storage area for Contractor's use while constructing the Project. It shall be the Contractor's responsibility, and he shall bear all expense for any temporary fence and/or other security measures the Contractor may deem necessary for protection of the equipment and materials.

- d. The Contractor shall provide any additional temporary storage required for the protection of equipment and materials as recommended by manufacturers of such materials.
- e. Storage and protection:
 - 1. Materials and equipment shall be stored in accordance with Supplier's written instructions, with seals and labels intact and legible. Exposed metal surfaces of valves, fittings and similar materials shall be coated in accordance with manufacturers' recommendations to prevent corrosion.
 - 2. Storage shall be arranged to provide access for inspection. The Contractor shall periodically inspect to assure materials and equipment are undamaged and are maintained under required conditions.

D-11 Surveys

Except for the initial design survey and site control points provided in the drawings, the Contractor shall establish all site survey control and construction staking survey necessary to perform the Work including establishing property lines and corners for private property if required and as built information.

Survey control and staking for construction will be done by a Licensed Land Surveyor provided by the contractor. Contractor shall establish the grade, position and alignment to complete the construction project per the plans and specifications.

All surveying for construction shall be performed by a California Licensed Land Surveyor provided by the Contractor. At a minimum, the Contractor's Licensed Surveyor shall set offset stakes with hubs on approximate 100' spacing for the full length of piping including stakes at angle points, turnouts, groundwater connections, air valves, and at the beginning and ends of the pipeline run. Offset stakes and hubs shall be preserved throughout the duration of the project to be used for inspection/verification purposes through the final grading phase.

The Contractor shall have all surveys, including surveys for measurement and payment purposes, supervised by a surveyor licensed to practice land surveying in the State of California. The Engineer may spot-check the Contractor's surveys. Any discrepancies between the Contractor's survey and the Engineer's spot-check will be resolved between the Contractor and the Engineer. The Engineer will make the final determination in the event a satisfactory resolution is not obtained.

The Contractor shall be responsible for preserving permanent survey monuments, benchmarks, and reference stakes/hubs. If any permanent or temporary survey monuments or benchmarks, including the above reference staking, are lost or disturbed during the progress of his work shall be replaced at the Contractor's expense. Said reference staking and control staking shall be provided as follows:

The Contractor shall be responsible for preserving permanent survey monuments and benchmarks. If any permanent or temporary survey monuments or benchmarks are lost or disturbed and need to be replaced as set forth in Section 8771 of the California Business and Professions Code, such replacement shall be made by the Engineer at the expense of the Contractor.

The Contractor shall notify the Engineer at least ten (10) working days before he will require survey services in connection with constructing any portion of the Work Contractor shall compile and maintain all survey notes in an approved form and shall furnish to the Engineer one copy of said notes as they are compiled and, upon completion of Contract work, Contractor shall furnish to the Engineer all original survey notes.

Contractor shall provide at its cost an experienced instrument person, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement work. In addition, Contractor shall furnish at its cost competent persons and such tools, stakes, and other materials as District (and/or any Engineer) may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Contractor.

Contractor shall compile and maintain all survey notes in an approved form and shall furnish to the Engineer one copy of said notes as they are compiled and, upon completion of Contract Work, Contractor shall furnish to the Engineer all original survey notes. At the completion of the Work, Contractor shall submit a topographic map, sealed by the licensed surveyor who supervised the surveying, that includes locations of all permanent features within the Work Area.

D-12 Not Used

D-13 Quality Control – Testing

a. Contractor shall give Engineer timely notice of the Work for all required inspections, tests or approvals and shall cooperate with inspection and testing personnel to facilitate the required inspections or test.

- b. Testing of materials for construction (soils, concrete, compaction, etc.) will be provided by the Contractor. In the event of a failed test, the Contractor shall be responsible to pay for all costs associated with retesting.
- c. The Contractor shall furnish promptly, without additional charge, all facilities, labor and materials reasonably needed by the Engineer for performing all inspection and tests. Contractor shall be charged with any additional cost of inspection when material and workmanship are not ready at the time specified by the Contractor for its inspection.

D-14 Noise During Construction

In accordance with Kern County Code of Ordinances, title 8, Chapter 8.36, noise during construction is allowed between the hours of 6 a.m. and 9 p.m. during the weekdays, and between the hours of 8 a.m. and 9 p.m. on the weekends. Should the contractor work for extended hours during the week, or work weekends or holidays, prior written notice should be provided to the District.

D-15 Soils Report

It is the Contractor's responsibility to carefully and independently examine the Contract Documents, including Plans and Specifications, as well as soils reports and other matters provided by District or its representatives and any other matter that may be necessary to determine local conditions of the Project Site, visit the project site, and be fully informed of all conditions and limitations. A complete soils report is included in Appendix B of the Specifications. The District makes no representation or warranty regarding the accuracy or interpretation of information regarding local conditions contained in the Contract Documents, including Plans and Specifications, or other documents, including soils reports, provided by District or its representatives concerning the project site. It is expressly understood that the District will not be responsible for the accuracy of any soil data derived from the soils report, including indicated ground water levels, nor for any deduction, interpretation or conclusion drawn from such informational data.

D-16 Excavation Safety Plan

a. Not less than fourteen (14) calendar days before beginning excavation required under the Contract, the Contractor shall furnish to the Engineer for review working drawings of his excavation safety plan. Contractor shall not begin excavation until said plan has been reviewed by the Engineer.

b. The excavation safety plan shall include all of the Contractor's excavation operations, and working drawings shall be a detailed plan showing the design or shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground. Plans varying from the shoring system standards established by the Construction Safety Orders of the Cal-OSHA or the Federal Safety Standards of the Department of Health, Education and Welfare, must be prepared by a registered civil or structural engineer. In no event shall the Contractor use a shoring, sloping, or protective system less effective than that required by said Construction Safety Orders, or less effective than that required by said Federal Safety Standards.

D-17 Damage to Growing Crops

Contractor shall have the right to make temporary use of the Site, and in this regard, to remove or cut back any vegetation growing within the working area; provided that the Contractor shall make every reasonable effort to minimize damage to growing crops within the Site and if, in the judgment of the Engineer, Contractor shall have at any time caused unwarranted damage to such crops, the District may deduct from payments due the Contractor pursuant to the Specifications the appraised value of crops judged by the Engineer to have been unnecessarily damaged. Nothing in this Paragraph shall be construed as relieving the Contractor from his obligations under Paragraph C-32 or other provisions of the Specifications. Specifically, the District reserves the right to have its agents or designees prune or remove from and replace in the Site trees or other plantings for the purpose of minimizing damages. No permanent crop shall be disturbed or removed without prior approval of the Engineer. The Contractor shall attempt to schedule construction to minimize damage and loss of crops.

D-18 Destruction of Boll Weevil Host Plants

The Contractor shall be responsible for ascertaining the current regulations of the State Department of Agriculture relative to destruction of "host" plants capable of sustaining the pink boll worm and boll weevil. When required by said regulations, the Contractor shall be responsible for the disposal or destruction of "host" plants or residue of "host" plants remaining within Contract right of way; methods of disposal shall be as applicable prescribed in said State regulations and as approved by the Engineer. The cost of all Work and materials as required for disposal or destruction of "host" plants and residue shall be borne by the Contractor.

D-19 Prevention of Water Pollution and Prevention of Air Pollution

The Contractor shall prepare and submit to the Engineer a Stormwater Pollution Prevention Plan (SWPPP) within 10 calendar days after the Notice to Proceed is issued. The Contractor shall maintain a copy of SWPPP onsite at all times and shall abide by the SWPPP throughout the duration of the Project. It will be the Contractor's responsibility to 1) obtain, on behalf of the District, a Construction Storm Water Permit from the State Water Resources Control Board online via their website; 2) submit all the reports to maintain compliance; and 3) close out the Permit upon completion of the Work. Additionally, the Contractor shall take measures as necessary to effect water pollution control. Construction operations shall be so conducted as to prevent discharge of wastes and pollutants into surface waters and underground water sources. Such water pollution control measures shall be directed toward eliminating discharge, or averting accidental spillage, of such industrial and domestic wastes as oils, gasses, fuels, sewage, toxic materials, and other substances which may be hazardous to public health and welfare or harmful to fish and wildlife. The Contractor shall be responsible for compliance with the applicable State and local regulations for prevention and abatement of pollution of surface and underground water. The Contractor's pollution control methods shall be subject to approval of the Engineer. The District shall have the right to require the Contractor, at his expense, to initiate and maintain such pollution control measures as deemed necessary to eliminate pollution of water caused by, or resulting from the contractor's operation. No separate payment will be made for prevention of water pollution, the costs for all Work and materials required under this paragraph shall be borne by the Contractor.

The Contractor shall prepare and submit to the Engineer and all appropriate parties, a Site dust control and PM-10 Dust Management Plan within 10 calendar days after the Notice to Proceed is issued. The Contractor shall maintain a copy of said plan onsite at all times. The Contractor shall take measures as necessary to effect air pollution control. Construction operations shall be so conducted as to prevent generation of fugitive dust and dispersion of pollutants into the air. Such air pollution control measures shall be directed toward eliminating particulates and potentially toxic or harmful materials from becoming airborne and polluting the air, as these airborne substances may be harmful to public health and/or harmful to wildlife. The Contractor shall be responsible for compliance with the applicable State, regional (APCD) and local regulations for prevention and abatement of pollution of the air and any associated reporting requirements. The Contractor's pollution control methods shall be subject to approval of the Engineer as well as applicable governmental entities with regulative power over air quality. The District shall have the right to require the Contractor, at his expense, to initiate and maintain such pollution control measures as deemed necessary to eliminate pollution of air (and/or nuisance or fugitive dust) caused by, or resulting from the contractor's operation. No separate payment will be made for prevention of air pollution, the costs for all Work and materials required under this paragraph shall be borne by the Contractor.

D-20 Valley Fever - Notices to Employees

A special biological problem of the Project area is the presence of tiny organisms living in the soil which can cause Valley Fever (coccidioidomycosis) in humans. As is typical of many desert areas in the southwestern United States, Valley Fever is endemic to Kern County. Although everyone living in the valley has some contact with the disease-causing organisms, the illness is especially hazardous to those whose work brings them into close contact with the soil, as for example, agricultural and construction workers. The Contractor and all his Subcontractors shall advise all their employees, in writing, of the dangers of Valley Fever, and of precautions which can be taken such as wearing dust masks while working under dusty conditions.

D-21 Special Environmental Requirements

- a. Cultural Resources Requirements
 - 1. If cultural resources or archeological materials are identified during Project-related ground-disturbing activities, all work within 100-footradius of the find shall cease immediately and the District shall be notified. In the event of an inadvertent discovery, additional CEQA review might be necessary to make a determination on a properties' eligibility for listing in the CRHR and any actions that would be necessary to avoid adverse effects. A qualified archaeologist meeting Secretary of the Interior's Professional Standards for Archaeologists should assess the significance of the find, make a preliminary determination, and if appropriate, provide recommendations for treatment. Interested Native American Tribes will also be contacted, and if necessary treatment/investigation shall be developed in coordination with interested Native American Tribes providing recommendations. Any treatment plan should be reviewed by the District prior to implementation. Ground-disturbing activities shall not resume near the find until treatment, if any is recommended, the find is complete or if the qualified archaeologist determines the find is not significant.
 - 2. If human remains are found, the District shall be immediately notified. The California Health and Safety Code requires that excavation be halted in the immediate area and within a 100-foot-radius, and that the Kern County Coroner be notified immediately to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within

48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) by telephone within 24 hours of making that determination (Health and Safety Code, Section 7050.5[c]). Once notified by the coroner, the NAHC shall identify the person determined to be the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This visit should be conducted within 24 hours of the MLD's notification by the NAHC (PRC Section 5097.98[a]). If a satisfactory agreement for treatment of the remains cannot be reached, any of the parties may request mediation by the NAHC (PRC, Section 5097.94[k]). Should mediation fail, the landowner or the landowner's representative must reinter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC, Section 5097.98[b]).

b. Biological Resources Requirements

1. Worker Environmental Awareness Program Training

An Environmental Awareness Program will be presented to all Project personnel working in the field before Project activities begin and before new personnel begin work on the Project site. The program will be presented by a qualified biologist with knowledge of special-status wildlife that could occur on the Project site. The program will address each species biology and habitat needs, regulatory status and protection, measures required to reduce potential impacts during project construction, penalties for non-compliance, and benefits of compliance.

2. Pre-construction Survey

A qualified biologist will conduct a pre-construction survey to determine the potential for Western spadefoot, San Joaquin kit fox, burrowing owl, Swainson's hawk, tri-colored blackbirds, other special-status birds, and common raptors to occur on or adjacent to the Project site. If suitable habitat or sign of presence is observed, a protective buffer or exclusionary zone may be established and implemented. The size of the buffer and/or exclusionary zone will depend on type and intensity of Project disturbance, presence of visual buffers, and other variables that could affect the species to disturbance.

- 3. Construction and Operational Requirements
 - a) A qualified biologist (familiar with kit fox biology, natural history, and recognition of potential dens) will be on call during all construction activities. If a potential kit fox is observed, construction activities within 100 feet of the animal will cease and the qualified biologist will be notified immediately. Construction activities may not resume until the kit fox has left the construction area on its own and the qualified biologist confirms construction can resume.
 - b) Habitat subject to permanent and temporary construction disturbances and other types of project related disturbance shall be minimized.
 - c) To minimize temporary disturbances, all project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated areas.
 - d) Project-related vehicles shall observe a 20 mile per hour speed limit in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. To the extent possible, construction activities shall be limited to daylight hours. Off-road traffic outside the designated construction area shall be prohibited.
 - e) To prevent inadvertent entrapment of kit foxes or other animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps of no more than a 45-degree slope constructed of earth fill or wooden planks.

All covered or uncovered excavations will be inspected at the beginning, middle, and end of each day. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If a trapped or injured animal is discovered, Project activities in the immediate vicinity will stop, and escape ramps or structures will be installed immediately to allow the animal(s) to escape, and the procedures below must be followed. If a San Joaquin kit fox is unable to escape voluntarily, a qualified biologist will be summoned, and the biologist will notify the Service to determine what action should be taken.

f) Kit foxes are attracted to den-like structures such as pipes and may enter stored pipe becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored on the construction site for one or more overnight periods shall be thoroughly inspected for wildlife before the pipe is subsequently buried, capped, or otherwise used or moved in any way.

Pipes laid in trenches overnight will be capped.

If an animal is discovered inside a pipe or other structure, the pipe/structure will not be moved, and the animal will be allowed to leave on its own. If a San Joaquin kit fox is unable to escape voluntarily, a qualified biologist will be summoned, and the biologist will notify the Service to determine what action should be taken.

- g) If a San Joaquin kit fox or other special-status species is inadvertently killed or injured, a qualified biologist will be notified immediately. The biologist, in consultation with agency staff as necessary, shall identify the appropriate action.
- h) Temporary spoils piles and other loose dirt, excavations, trenches, etc., that may attract San Joaquin kit fox and other wildlife will be stockpiled for the minimal length of time and regularly inspected for signs of burrowing mammal activity. If burrowing mammal activities are spotted, the spoils would be disturbed to prevent burrows from becoming established.
- All food-related trash items such as wrappers, cans, bottles or food scraps generated during Project activities will be disposed of in closed containers and removed daily from the Project site.
- j) No deliberate feeding of wildlife will be allowed.
- k) No firearms shall be allowed on the project site.
- To prevent harassment and mortality of kit foxes and wildlife or destruction of dens by dogs or cats, no pets shall be permitted on project sites.

- m) Use of rodenticides and herbicides in project areas shall be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide shall be used because of proven lower risk to kit fox.
- n) A representative shall be appointed by the District who will be the contact for any employee or contractor who finds a dead, injured or entrapped kit fox or other special-status species.
- o) Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. shall be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but that after project completion will not be subject to further disturbance and has the potential to be revegetated.
- p) Inspect under vehicles and equipment before the vehicles and equipment is moved. If a San Joaquin kit fox or other special-status species is present, the worker shall wait for it to move unimpeded to a safe location. If the animal does not move, the worker shall notify a qualified biologist.
- q) Contractor to post signs and/or fencing around the work sites to restrict access of vehicles and equipment unrelated to site operations.
- r) Immediately clean up all spills of hazardous materials (oil, grease and other potentially toxic materials).
- s) Boundaries of approved work areas shall be clearly delineated by stakes, flagging, and/or rope or cord to minimize inadvertent degradation or loss of adjacent wildlife habitats during facility construction.

c. Environmental Requirements

In addition to all other applicable provisions of these Specifications, the Contractor shall comply with the following protections and measures required to reduce impacts to the sensitive receptors during Project construction.

- 1. Control of fugitive dust is required by San Joaquin Valley Air Pollution Control District Regulation VIII. The Contractor shall implement all of the following measures as identified by San Joaquin Valley Air Pollution Control District:
 - a) Apply water to unpaved surfaces and areas.
 - b) Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas.
 - c) Limit or reduce vehicle speed on unpaved roads and traffic areas.
 - d) Maintain areas in a stabilized condition by restricting vehicle access.
 - e) Install wind barriers.
 - f) During high winds, cease outdoor activities that disturb the soil.
 - g) Keep bulk materials sufficiently wet when handling.
 - h) Store and hand material in a three-sided structure.
 - i) When storing bulk material, apply water to the surface or cover the stage pile with a tarp.
 - j) Do not overload haul trucks. Overlanded trucks are likely to spill bulk materials.
 - k) Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions.
 - Clean the interior of cargo compartments on emptied haul trucks prior to leaving the site.
 - m) Prevent track-out by installing a track-out control device.

- n) Clean up track-out at least once a day. If along a busy road or highway, clean up track-out immediately.
- o) Monitor dust-generating actives and implement appropriate measures for maximum dust control.

D-22 Other Special Construction Conditions

- a. **Groundwater Conditions** The Contractor shall have full responsibility for evaluation of available data, including logs of exploration, and development of any necessary additional information on groundwater condition at construction site(s) and for draining and dewatering the sites of any groundwater or surface water during execution and completion of the Contract Work.
- b. **Existing Uses of Lands and Roads** In addition to all other applicable provisions of these Specifications, the Contractor shall:
 - 1. Effectively secure and protect adjacent property, structures, livestock, crops and other vegetation;
 - 2. Exercise extreme care during construction to prevent damage from dust to crops and adjacent property;
 - 3. Be responsible for all damage to any property resulting from trespass by the Contractor or his employees in the course of their employment, whether such trespass was committed with or without the consent or knowledge of the Contractor;
 - 4. See that the Work site is kept drained and free of all surface and ground water;
 - 5. Be responsible for any damage caused by drainage or water runoff from construction areas and from construction plant areas;
 - Maintain all existing roadways, roadway traffic, and irrigation or other water utilities and utility crossings, in an adequate and safe manner to meet all existing service requirements and shall not interfere with any roadway or utility system without prior written permission of the district/operator thereof, and only for any time period permitted by said district/operator; and
 - 7. Provide for all water courses, ditches and pipelines and perform the construction Work so that no damage will result to either public or private

interests, and be liable for all damage that may result from failure to so provide during the progress of the Work.

- b. **Existing Facilities** Existing facilities are owned, operated, and maintained by the District; Southern California Gas Company, Southern California Edison, and AT&T may have utilities located contiguous to the project site.
 - 1. The Contractor shall not obstruct or inhibit the ability of any of the afore mentioned utility companies to access, operate, and maintain their facilities on or adjacent to the project site.
 - 2. The Contractor shall be responsible for contacting and coordinating with the appropriate party prior to conducting Work within 10' of existing facilities.
 - 3. The Contractor shall, at all times, protect in place all existing facilities. The contractor shall be solely liable in any instance of physical or liquidated damages that occur during construction.

END OF SECTION

SECTION 02223

EXCAVATION, BACKFILLING, AND COMPACTING

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section describes the requirements for protection and location of existing utilities and facilities; and materials, testing, and performance of trench excavation, backfilling, and compacting.
- B. The requirements include excavating, backfilling, and compacting for the following:
 - 1. Water Pipelines;
 - 2. Fittings;
 - 3. Air Valve Assemblies;
 - 4. Thrust Blocks; and
 - 5. Other items, as shown.
- C. For projects located in the County right-of-way, Kern County's approved encroachment permit requirements shall take precedence over the requirements specified herein.
- D. All materials used and work performed shall be in strict accordance with the Project Geotechnical Investigation Report.

1.02 RELATED SECTIONS

- A. Section C General Conditions, Section D Special Conditions, and the Drawings shall apply to this section. This section may require direct correlation with the following sections of the contract:
 - 1. Section 01551 Traffic Control.
 - 2. Section 02115 Demolition
 - 3. Section 02220 Structural Earthwork
 - 4. Section 02578 Pavement Removal and Replacement.
 - 5. Section 03300 Concrete.
 - 6. Section 15051 Installation of Pressure Pipelines.

1.03 REFERENCES

- A. The following publications form a part of this specification to the extent referenced.
 - 1. American Society for Testing and Materials (ASTM):
 - a. ASTM C 138 Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete.
 - b. ASTM C 403 Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance.
 - c. ASTM D 2321 Underground Installation of Thermoplastic and Sewers Other Gravity-Flow Applications.
 - d. ASTM D 4832 Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.
 - e. ASTM D 5971 Standard Practice for Sampling Freshly Mixed Controlled Low-Strength Material.
 - f. ASTM D 6024 Standard Test Method for Ball Drop on Controlled Low Strength Material (CLSM) to Determine Suitability for Load Application.
 - 2. California Test (CT):
 - a. CT-216 Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates.
 - b. CT-231 Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates Using Nuclear Gauge.
 - 3. Cal/OSHA (California Title 8, Division 1, Chapter 4).
 - 4. California Department of Industrial Safety.
 - 5. Standard Specifications, State of California Department of Transportation (Caltrans), latest edition.
 - 6. California Labor Code Section 6705.
 - 7. Construction Safety Orders of the California Division of Industrial Safety.
 - 8. Kern County Encroachment Permit.
 - 9. Geotechnical engineering Investigation Proposed SWID Farmer's Co-Op Pipeline Project, February 10, 2022.
 - 10. Standard Specifications for Public Works Construction (SSPWC):
 - a. SSPWC 201-6 Controlled Low Strength Material (CLSM)

1.04 SUBMITTALS

A. Submittals shall be furnished in accordance with Article D-8 of Section D – Special Conditions.

B. Submit the following:

- 1. Shop drawings shall be submitted showing excavation and shoring, bracing, or sloping for worker protection in accordance with the General Conditions. The Contractor shall comply with the provisions for "Shoring and Bracing Drawings" in Section 6705 of the California Labor Code. The Contractor, prior to beginning any trench or structure excavation five feet deep or over shall submit to the Engineer and shall be in possession of the Engineer's written acceptance of the Contractor's detailed plan showing design of all shoring, bracing, sloping of the sides of excavation, or other provisions for worker protection against the hazard of caving ground during the excavation of such trenches or structure excavation. If such plan varies from the shoring system established in the Construction Safety Orders of the State of California, such alternative system plans shall be prepared by a civil or structural engineer licensed in the State of California.
- 2. Copy of the excavation permit issued by the California Department of Industrial Safety.
- 3. Excavation equipment specifications and methods.
- 4. Compaction methods and equipment specifications.
- 5. Placement methods.
- 6. Material samples and grain size analyses shall be submitted for any imported fill and/or engineered fill material used.
- 7. The slurry and CLSM mix designs, prepared by the manufacturer, showing compliance with the specified properties.
- 8. Six copies of a report from a testing laboratory shall be submitted verifying that backfill material conforms to the specified gradations or characteristics.
- 9. Such other samples of materials as the Engineer may require.

1.05 **QUALITY ASSURANCE**

- A. All materials, equipment, and installation methods shall be in accordance with the Project Geotechnical Investigation Report.
- B. Use workers who are thoroughly trained and experienced in the work, who are completely familiar with the specified requirements and methods needed for proper performance of the work in this section.

- C. Place and maintain barricades and safety signs as needed for safety and as required by Section 01551 Traffic Control.
- D. Comply with the Kern County Encroachment Permit and Cal/OSHA codes and regulations.
- E. Rework work not meeting the specified requirements, as determined by the Engineer, at no additional cost to the District.
- F. Provide the necessary field survey to assure compliance with the lines and grades as shown on the drawings. If control stakes are destroyed or removed, restaking will be the sole responsibility of the Contractor at no additional expense to the Department.
- G. Completed subgrade elevations shall be within 0.05 foot of design subgrade.

1.06 FIELD CONTROL

- A. Barricades, cones, safety signs, etc. shall be placed and maintained as required by pertinent safety regulations.
- B. Promptly clean up loose excavation dirt and sweep clean all usable portions of roadway as the work progresses to prevent dirt being scattered. Promptly and regularly apply water or dust palliative to all dust and dirt areas, including stockpiles, to prevent dust from being a nuisance.

1.07 PROTECTION AND LOCATION OF EXISTING UTILITIES AND FACILITIES

A. The protection and location of existing utilities and facilities shall be in accordance with Section 02624 – Exploratory Excavations.

1.08 PROTECTION OF LANDOWNER FACILITIES

A. The Contractor shall be responsible for the protection of all orchards, trees, shrubs, fences, and other agricultural or landscape items adjacent to or within the work area, unless otherwise directed by the Engineer. In the event of damage to agricultural, landscape, or landowner items, the Contractor shall replace the damaged items in a manner satisfactory to the Engineer.

1.09 **DEFINITION OF ZONES**

A. Pavement Zone

1. The pavement zone shall include the asphaltic concrete and aggregate base pavement section placed over the street zone. This zone is often referred to as the "structural section" of the street or highway.

B. Trench Zone

1. The Trench Zone shall include the portion of the trench from the top of the pipe zone to the bottom of the pavement zone in paved areas or to the existing surface in unpaved areas.

C. Pipe Zone

1. The Pipe Zone shall include the full width of trench from the bottom of the pipe or conduit to a horizontal level 6-inches above the top of the pipe. This zone is also part of the "pipe-bedding zone" and as such it shall be filled with bedding material identical to that which is placed in the bedding zone.

D. Bedding Zone

1. The Bedding Zone shall be defined as a layer of material immediately below the pipe zone extending over the full trench width. This is also part of the "pipebedding zone"

E. Pipe-Bedding Zone

1. The pipe-bedding zone shall include the zones defined as the "pipe zone" and the "bedding zone". It shall include the full width of the trench from the bottom of the trench to a point 6-inches above the top of the pipe. Unless otherwise shown or specified, the pipe-bedding zone shall be from 6-inches under the pipe to 6-inches over it.

1.10 TESTING FOR COMPACTION

- A. The Contractor shall cooperate with the District provided soils testing lab to take samples during placement of materials and test for moisture content, density, compaction, gradation, and classification to ensure conformance with these specifications.
- B. The Contractor is responsible for coordinating and scheduling all required sampling and testing with the District provided lab.

C. Relative Compaction

1. "Relative Compaction" shall be expressed as the ratio, expressed as a percentage of the in place dry density to the laboratory maximum dry density.

D. Compaction Compliance

1. Compaction shall be deemed to comply with the specifications when none of the tests fall below the specified relative compaction.

E. Testing Intervals

- 1. Testing of Pipelines shall be completed at the following intervals:
 - a. A minimum of one soil classification and one moisture-density relation test shall be performed for each different type of soil material used for pipe-bedding and trench backfill.
 - b. These tests shall also be performed for every 1,500 cubic yards of material placed.
 - c. A minimum of one field density test shall be performed for each soil type, at the pipe bedding prior to pipeline installation, at pipe springline, 6-inches above the top of pipe, and at least one test for each 24 inches compacted thickness above the pipe zone. These test requirements shall be repeated every 300 feet of trench length, or as directed by the Engineer.
- F. The presence of marginal materials, poor soil conditions or a prevalence of failed test results will be cause for substantially increasing the frequency and intervals of required testing. Alternatively, with approval of the Engineer and the District, the trench zone may be backfilled with a two-sack sand-cement slurry at no additional cost to the District.
- G. Material placed between successful test and failed test shall be tested at one-fifth (1/5) the distance intervals until a passing test is achieved. All material from failed test to successful test shall be removed, recompacted and retested.

PART 2 PRODUCTS

2.01 PAVEMENT ZONE MATERIALS

A. Pavement zone materials shall be as specified in Section 02578 – Pavement Removal and Replacement.

2.02 NATIVE BACKFILL – TRENCH ZONE

- A. Based on the recommendations provided in the Project Geotechnical Investigation Report, the native material encountered at the site is generally suitable for use as Class II or III trench backfill.
- B. Trench backfill material placed above the pipe-bedding zone materials shall be free from roots, debris, and organic matter. The backfill shall generally consist of non-expansive material that is not excessively wet and shall be free of cobbles or hard lumps of material larger than 3 inches in maximum dimension. Cobbles larger than three inches in size shall be broken into smaller pieces and removed from the site. Clay lumps shall be properly processed, and moisture conditioned to break up the lumps and uniformly mix into the trench backfill material.

2.03 BACKFILL MATERIAL – PIPE-BEDDING ZONE

- A. The pipe-bedding zone is defined above in Part 1 paragraph entitled "Definition of Zones." Pipe-bedding material shall consist of imported or suitable native material as described in this section.
- B. Unless otherwise shown or specified, pipelines shall be supported on a minimum 6-inch-thick bedding layer below the pipe. Bedding layer material shall consist of suitable on-site materials from the trench excavations or imported materials specified herein.

2.04 NATIVE MATERIALS – PIPE-BEDDING ZONE

- A. Based on the recommendations provided in the Project Geotechnical Investigation Report, the native material encountered at the site is generally suitable for use as Class II or III pipe-bedding zone backfill.
- B. Pipe-bedding backfill material shall be free from roots, debris, and organic matter. The backfill shall generally consist of non-expansive material that is not excessively wet and shall be free of cobbles or hard lumps of material larger than 1.5 inches in maximum dimension. Clay lumps and cobbles larger than 1.5 inches in size shall be removed from the site.

2.05 IMPORTED MATERIALS – PIPE-BEDDING ZONE

A. Imported bedding material shall be Class II materials per ASTM D 2321, i.e., meeting the Unified Soils Classification System (USCS) criteria for GW, GP, SW, SP, GW-GC or SP-SM gravels and sands.

2.06 WATER FOR COMPACTION

- A. Water used to assist in compaction shall be potable water unless otherwise approved by the Engineer.
- B. Refer to Section D-7 for additional information regarding availability and use of District water.

2.07 SAND-CEMENT SLURRY

- A. Sand-Cement slurry shall only in the locations designated on the plans.
- B. Where Sand-Cement slurry is required, it shall consist of one sack (94 pounds) of Class V Portland cement per cubic yard of sand and sufficient moisture for workability.

2.08 CONTROLLED LOW STRENGTH MATERIAL (CLSM)

- A. CLSM shall consist of free-flowing and self-compacting material that consists of cement, pozzolan fly ash, fine and coarse aggregates, and water in accordance with SSPWC 201-6. The fines content in the CLSM mix (percent material passing the No. 200 sieve including fly ash additives), shall be limited to 20 percent, by weight, per cubic yard.
- B. CLSM shall have a minimum 28-day compressive strength of not less than 300 psi.

2.09 GEOTEXTILE

- A. Geotextile fabric shall be non-woven Mirafi 140NL, or equivalent.
- B. Geotextile shall be placed between the crushed rock and surrounding natural soil and backfill materials to prevent migration of fines into the crushed rock.
- C. The geotextile shall be overlapped at the top by a minimum of one foot.

PART 3 EXECUTION

3.01 CONSTRUCTION METHODS

A. Adequate equipment and methods shall be employed to accomplish the work in accordance with applicable grading codes or County ordinances, these specifications, and the approved grading plans. If, in the opinion of the Engineer, unsatisfactory conditions such as questionable soil, poor moisture condition, inadequate compaction, and adverse weather, have resulted in a quality of work less than required in these specifications, the District may reject the work and recommend that construction be stopped until the conditions are rectified.

B. Control of Water

1. The Contractor shall keep excavations free from water during construction in accordance with Section 02140 – Dewatering.

C. Surplus Material

- 1. Unless otherwise specified, surplus excavated material shall be disposed of in a legal manner at the Contractor's expense.
- 2. The Contractor shall satisfy himself that there is sufficient material available for the completion of the work before disposing of any material inside or outside the site. Shortage of material, caused by premature disposal of any material by the Contractor, shall be replaced by the Contractor at his expense.

D. Hauling

1. When hauling is done over County highways or streets, the loads shall be trimmed and the vehicle shelf areas shall be cleaned after each loading. The loads shall be watered after trimming to eliminate dust.

E. Maintenance of Roadways

1. All earthwork operations shall be performed in a manner which does not disrupt the continuous flow of traffic on existing roadways. All streets shall be swept clean daily where dirt and debris result from contractor's operations.

F. Finish Grading

1. Finish grades and existing or natural grades in the area of work are indicated on the plans. The Contractor shall do all grading, filling or excavating as required to completely grade the site to lines and grades shown, and to provide for the indicated drainage. Where finished grade corresponds practically with existing grade, the ground shall be worked up and graded off evenly with existing grade.

G. Tolerances

1. Finished grade shall be to the line and grade shown on the plans to within a tolerance of plus or minus 0.05 ft. Allowance for topsoil and grass cover, and subbase and pavement thickness shall be made so that the specified thickness can be applied to attain the finished grade.

H. Control of Erosion

1. The Contractor shall maintain earthwork surfaces true and smooth and protected from erosion. Erosion control measures shall be in accordance with Article D-29 of Section D – Special Conditions.

3.02 SITE CONDITIONS

A. Examine the area and conditions under which work of this section will be done. Correct conditions detrimental to timely and popper completion of the work. Do not proceed until satisfactory conditions are corrected.

3.03 SHEETING SHORING AND BRACING OF TRENCHES

A. The Contractor shall be solely responsible for the design of all cut slopes and installation of all temporary shoring systems. The maximum un-shored excavation slope during construction shall be 1-1/2:1 (H:V), per OSHA 1926 Subpart P Appendix A and B. Shoring, bracing, and benching shall be performed by the Contractor in accordance with the current edition of the California Construction Safety Orders.

- B. Shoring systems shall be designed by a California Registered Civil Engineer to meet Cal OSHA regulations. The Contractor shall be responsible for providing the "competent person" required by OSHA standards to perform the excavation.
- C. Trenches shall have sheeting, shoring and bracing conforming to CAL/OSHA requirements and the General Conditions. Lateral pressures for design of trench sheeting, shoring, and bracing shall be based on type of soil exposed in the trench, groundwater conditions, surcharge loads adjacent to the trench, and type of shoring that will be used in the trench.

D. Movable Trench Wall Supports

1. The Contractor shall not disturb the installed pipe and its embedment when using movable trench boxes and shields. Movable supports shall not be used below the top of the pipe-bedding zone, or where moving results in trench wall erosion, unless Engineer approved methods are used for maintaining the integrity of embedment material. Before moving supports, place and compact embedment to sufficient depths to ensure protection of the pipe. As supports are moved, finish placing and compacting embedment.

E. Shoring Removal

- 1. Care shall be taken by the Contractor to remove the shoring system and backfill the trench so as not to disturb the pipe foundation, bedding zone, or backfill materials. Any voids created by removal of support systems shall be filled and all materials compacted to the required percent compaction. Resulting voids shall be filled with sand and cement slurry or another Engineer approved grout mix.
- 2. Where shoring cannot be removed without causing voids or disturbance to nearby project features that cannot be rectified, in the opinion of the Engineer, the shoring shall be cut off 1.5-feet above the pipe and left in place as directed by the Engineer. Leave rangers, whalers, braces, etc. in place as required to support cutoff sheeting and the trench wall in the vicinity of the pipe-bedding zone. Timber sheeting to be left in place is considered a permanent structural member and shall be treated against biological degradation as required, and against decay if above ground water. Preservative and protective compounds that react adversely with thermoplastics are not allowed.

3.04 OPEN TRENCH EXCAVATION

A. Any excavation within the street area subject to traffic loads shall be covered at all times with steel plating when not in use. The steel plating shall be of a thickness adequate to withstand the traffic loads that may be imposed and securely anchored at all times within temporary pavement to prevent displacement of the plate by traffic vibration. Detours,

lane closures, street closures, traffic channelization, barricading and lighting of all excavations shall conform to Section 01551 – Traffic Control, and all requirements specified in the approved traffic control plan.

3.05 **DEWATERING**

A. Dewatering shall be in accordance with Section 02140 – Dewatering.

3.06 TRENCH WIDTHS

A. Unless otherwise shown on the drawings, the minimum trench width shall be 24-inches wider than the outside diameter of the pipe. The pipe shall be centered in the trench.

3.07 GRADE

A. Trenches shall be excavated to the lines and grades as shown on the drawings with allowance for the thickness of the pipe and bedding. If the trench is excavated below the required grade, the portion of trench excavated below the grade shall be refilled with refill material at no additional cost to the District. Refill material shall be placed over the full width of the trench in compacted layers not exceeding 6 inches deep to the required grade. Hard spots that would prevent a uniform thickness of pipe bedding shall be removed. Before laying pipe sections, the grade shall be checked, and any irregularities corrected. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point.

3.08 STORAGE OF EXCAVATED MATERIAL

A. During trench excavation, excavated material shall be stored only within the working area. Roadways or streets shall not be obstructed. The safe loading of trenches with excavated material shall conform to federal, State, and local laws.

3.09 LENGTH OF OPEN TRENCH

- A. The length of open trench shall be limited to 500 feet in advance of the pipe laying or amount of pipe installed in one working day.
- B. Driveways and other traveled ways shall be backfilled or adequately bridged to provide safe access and egress at the completion of each day's work.
- C. For work within the County Right of way, open excavations shall be backfilled at the end of each day or protected using K-rail and crash cushions to the satisfaction of the County Inspector.

3.10 PIPE SUBGRADE PREPARATION

- A. Pipe subgrade soils at the project area are expected to be suitable for support of the proposed PVC pipelines, with proper bedding and embedment placement as specified herein.
- B. Loose, soft, or disturbed materials encountered at the subgrade level shall be removed until firm, unyielding material is encountered. If loose, soft, or unstable areas are encountered, these materials shall be over-excavated 12 inches or until a firm layer is encountered and replaced with compacted bedding material as specified herein.
- C. If an unstable subgrade condition is still present at the bottom of the over-excavation, such as areas with perched groundwater, the use of a geotextile fabric will be required by the Engineer at the bottom of an over-excavated trench. The geotextile fabric shall be non-woven type, as specified in Section 02220 Structural Earthwork and installed per the manufacturer's recommendations. The geotextile fabric shall be placed, only after Engineer approval has been given to proceed, with trench construction, at the bottom of the over excavated areas with crusted rock placed on it. The crushed rock shall be placed in lifts that are no more than 1-foot thick, then compacted using vibratory techniques up to the bottom of the pipe-bedding zone. The crushed rock layers shall be firm and unyielding, and the geotextile shall then be folded over the top (minimum 12-inch overlap) of the crushed rock layers before pipe bedding is placed.
- D. If cobble materials are encountered at the subgrade level, the pipe subgrade may be undulating and require over excavation to provide uniform bedding support with minimum bedding thickness below the pipe as specified in the Contract Documents. If over excavation is required to provide the minimum bedding thickness below the pipe, the subgrade shall be over-excavated a minimum of 12-inches and replaced with compacted bedding material.
- E. In the event that groundwater is encountered at any of the anticipated trench depths, groundwater control measures shall be taken in accordance with Section 02140 Dewatering. Loss of fines due to seepage or dewatering can cause soil voids in the vicinity of the pipe. Where the subgrade becomes disturbed due to localized seepage, surface water, or dewatering, the Contractor shall excavate the disturbed soils to a maximum depth of 2 feet and replace the disturbed soils with Engineer approved compacted bedding material.
- F. The subgrade preparation recommendations presented above are also applicable to the foundations for above grade pipe supports, and appurtenant pipeline structures, such as manholes, and vaults.

3.11 PIPE TRENCH COMPACTION REQUIREMENTS

- A. Unless otherwise shown on the drawings or otherwise described in the specifications for the particular type of pipe installed, relative compaction in pipe trenches shall be as specified herein.
- B. Compaction of materials by ponding and jetting is prohibited.

C. Material Testing

1. All imported or native materials shall be tested before the start of compaction operations to determine the moisture density relationship for materials with cohesive components, and the maximum density for cohesionless materials. Variations in imported or native earth materials may require a number of curves of the moisture-density relationship.

D. Consolidation of Crushed Rock

- 1. Crushed rock shall be consolidated by one of three methods, as follows:
 - a. A minimum of three passes with a vibrator plate compactor.
 - b. Tamping of the crushed rock as it is placed, using the bucket of the backhoe.
 - c. Thoroughly wheel rolling with equipment.
- 2. Each lift of rock shall not exceed 12 inches of unconsolidated thickness.

E. Asphalt Concrete Pavement with Aggregate Base

1. Compaction of Aggregate Base shall be in accordance with Kern County Standards and Section 02578 – Pavement Removal and Replacement.

F. Water Piping

- 1. Bedding
 - a. The specified thickness of bedding material shall be placed over the full width of the trench. The top and bottom of the pipe bedding shall be graded ahead of the pipe laying to provide firm, uniform support along the full length of the pipe.

2. Bell Holes

- a. Bell holes shall be excavated at each joint to permit proper assembly and inspection of the entire joint.
- 3. Pipe-Bedding Zone (Pipe Zone and Bedding Zone)
 - a. After the pipe has been bedded, pipe zone material shall be placed simultaneously on both sides of the pipe, keeping level of backfill the

same on each side. Material shall be carefully placed around the pipe so that the pipe barrel is completely supported and that no voids or uncompacted areas are left beneath the pipe. Particular care shall be taken in placing material on the underside of the pipe to prevent lateral movement during subsequent backfilling. Material placed within the pipe zone shall be compacted by hand tamping only.

b. Pipe-bedding zone materials shall be placed and compacted in horizontal lifts to at least 95–90 percent relative compaction per CT-216. Material placed within 12 inches of the outer surface of the pipe shall be compacted by hand tamping equipment only.

4. Trench Zone

- a. Trench backfill settlement is anticipated to be one inch or less in street right of way areas and two inches or less in unpaved areas, provided the compaction recommendations of this section are followed.
- b. Backfill material shall be carefully deposited onto the backfill previously placed in the pipe zone. Free fall of material until at least two feet of cover is provided over the top of the pipe. Sharp, heavy pieces of material shall not be dropped directly onto the pipe or the tamped material around the pipe. Special care shall be taken to avoid damaging the pipe when compacting trench backfill above the pipe.
- c. Backfill in the trench zone within the County right of way, greater than 30 inches below the pavement zone, or the top of ground surface, shall be compacted to not less than 95 percent relative compaction per CT-216.
- d. In unpaved areas, outside of the County right of way, the backfill shall be compacted to at least 95 percent relative compaction per CT-216.
- e. The appropriate lift thickness of the backfill will depend on the compaction equipment used but generally shall not exceed a thickness of six inches of loose placed material.

5. Foundation Stabilization

a. Rock refill material for foundation stabilization, where required shall be placed and consolidated to 95 percent relative density.

6. Over-Excavation:

a. Rock refill for over-excavation shall be placed and consolidated to 95 percent relative density.

G. Equipment

1. Axle-driven or tractor-drawn compaction equipment shall not be used within 5 feet of walls and structures.

H. Pavement Zone Backfill

- 1. Pavement zone backfill shall be done in accordance with the requirements and satisfaction of Kern County.
- I. Miscellaneous items, including, but not limited to, valves and fittings:
 - 1. Unless otherwise shown on the Drawings, compact the pipe zone to at least 95-90 percent relative compaction in accordance with CT-216.

3.12 BEDDING THICKNESS

A. Thickness of the bedding shall be as shown on the drawings or as otherwise described in the specifications for the particular type of pipe installed, but in no cases shall the thickness be less than 6 inches.

3.13 MATERIAL REPLACEMENT

A. Trenching and backfill material, which does not meet the specifications, shall be removed, disposed of, and replaced with Engineer approved material at no additional expense to the District.

3.14 FOUNDATION STABILIZATION

- A. After the required excavation has been completed, the Engineer shall inspect the exposed trench subgrade to determine the need for any additional excavation. It is the intent that additional excavation shall be conducted in all areas within the influence of the pipeline where unacceptable materials exist at the subgrade. Over excavation shall include the removal of all such unacceptable materials that exist beneath the bedding and to the depth required.
- B. The presence of unacceptable material may require excavating a wider trench. The width and depth of known areas to be over excavated shall be shown on the drawings. The over excavated portion of the trench shall be backfilled to the subgrade of the bedding with refill material for foundation stabilization. Foundation stabilization material shall be placed over the full width of the excavation and compacted in layers not exceeding six inches in depth, to the required grade.

3.15 PLACEMENT OF CLSM

A. General

- 1. Placement of CLSM shall be in accordance with Section 03300 Concrete and SSPWC 201-6.
- 2. This paragraph applies to slurry placement, where applicable.

B. Preparation

1. Following excavation and subgrade preparation, remove all loose soil from trench walls and floor. Remove any unstable soil at the top of the trench which might fall into the trench during placement.

C. Placement

- 1. As CLSM is placed in excavations it shall be thoroughly settled and compacted, throughout the entire depth of the layer, which is being consolidated, into a dense, homogeneous mass, filling all spaces and voids and bringing only a slight excess of water to the exposed surface. The CLSM shall be placed and consolidated by means that will not cause segregation of the mix.
- 2. If vibrators are used, they shall be high speed power vibrators (8,000 to 10,000 rpm) of an immersion type in sufficient number and with standby units as required. Vibrators shall not be used within 20 feet of connections to existing RCP.
- 3. Contractor shall use placement methods that ensure that the CLSM completely fills the trench around the pipe, including spaces and voids around the pipe, spaces between pipes, keyways in trench plugs, and spaces and voids around adjacent and crossing utilities. The placement method shall achieve complete consolidation and contact between the CLSM, the pipe, thrust blocks, and the trench walls.
- 4. CLSM shall be continuously placed against fresh material unless otherwise directed by the Engineer. When new material is placed against existing CLSM, the placement area shall be free from loose and foreign material. The surface of the existing material shall be soaked a minimum of one (1) hour before placement of fresh material but no standing water shall be allowed when placement begins.
- 5. When placed, temperature of the CLSM shall be between 50 and 90 degrees F. CLSM shall not be placed when the air temperature is below 40 degrees F. No CLSM shall be placed against frozen subgrade or other materials having temperature less than 32 degrees F. CLSM shall not be placed in pipe trenches during inclement weather or when the trench contains water.
- 6. To prevent flotation of the pipe, Contractor shall place the fresh CLSM in two or more lifts, with each lift reaching an initial set before the succeeding fresh CLSM is placed. Contractor shall be responsible for prevention and, if necessary, correction of flotation and displacement of the pipeline due to the use of CLSM. No movement of the pipe caused by flotation shall be allowed. If any movement occurs, CLSM shall be removed and the pipe placed back on line and grade. Any damage to the pipeline system caused by movement of the pipe shall be removed and/or repaired at no additional cost to the District.

D. Finishing

1. The finish surface shall be smooth and to the grade indicated or directed by the Engineer. Surfaces shall be free from fins, bulges, ridges, offsets, and honeycombing. Finishing by wood float, steel trowel, or similar methods is not required.

E. Curing

1. CLSM shall be kept damp for a minimum of seven (7) days or until final backfill is placed.

F. Protection

- 1. CLSM shall be protected from freezing for seventy-two (72) hours after placement.
- 2. Placement of backfill or concrete on top of or against the CLSM is not allowed until the CLSM passes a ball drop test described in ASTM D 6024.
- 3. CLSM shall be protected from running water, rain, and other damage until the material has been accepted and final fill completed.

G. Sampling and Testing

- 1. Sampling and Testing of CLSM shall be in accordance with Section 03300 Concrete.
 - a. Sampling shall be in accordance with ASTM D 5971.
 - b. Compression testing shall be in accordance with ASTM D 4832.
 - c. Setting test shall be in accordance with ASTM C 403.
 - d. Density tests shall be in accordance with ASTM C 138.

3.16 PAVEMENT CUTTING REQUIREMENTS

A. AC pavement shall be removed and replaced in accordance with Kern County Standards, and Section 02578 – Pavement Removal and Replacement.

3.17 IMPORT OR EXPORT OF BACKFILL MATERIAL

A. Excess Material

- 1. Excess excavated soil material shall be removed and disposed of off the project site at no additional expense to the District.
- 2. Excess soil material shall be disposed of in a legal manner and in accordance with local regulations.

B. Imported Material

1. Any additional backfill material necessary to return all grades to plus or minus 0.2 feet from the grade encountered at the beginning of construction or as shown on the contract drawings shall be imported, placed, and compacted at no additional expense to the District.

3.18 MOISTURE CONTENT OF BACKFILL MATERIAL

A. During the compacting operations, optimum practicable moisture content required for compaction purposes shall be maintained in each lift of the backfill material. Moisture content throughout the lift shall be maintained at a uniform level. If placement is discontinued and proper moisture content not maintained, the upper layer shall be brought back to proper moisture content by sprinkling, cultivating and rolling the backfill material before placing new material. At the time of compaction, the water content of the material shall be at optimum water content plus two or minus zero percentage points. Material which contains excessive moisture shall not be worked to obtain the required compaction. Material having excessive moisture content may be dried by blading, discing, or harrowing to hasten the drying process.

3.19 FOUNDATIONS FOR BELOW-GRADE STRUCTURES

A. Backfill and compaction of below-grade structures shall be in accordance with Section 02220 – Structure Earthwork and Section 03461 – Precast Concrete Manholes.

3.20 MAINTENANCE

A. Protection of Graded Areas

1. Newly graded areas shall be protected from traffic and erosion. Settled, eroded, and rutted graded areas shall be repaired and re-established to specified tolerances.

B. Reconditioning Compacted Areas

1. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, these areas shall be scarified, re-shaped, and compacted to required density prior to further construction.

3.21 CLEAN UP

A. After completing all earthwork, the Contractor shall leave the site in a neat and clean condition, doing all such grading as is required by the plans. Any existing features, structures, and other facilities damaged or affected by the work shall be replaced, repaired, or restored to their original condition or better.

END OF SECTION

SECTION 02316

OPEN TRENCH AND TRENCHLESS STEEL CASING

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section describes materials and installation of steel carrier pipe by the open trench method or trenchless method.
- B. In the performance of the Work, the Contractor shall comply with the lawful requirements of the State of California, Kern County Public Works Department, California Division of Industrial Safety, California Regional Water Quality Control Board, and all other applicable third-party requirements, with respect to safeguarding traffic and other improvements that might be endangered by the open trench casing operations.
- C. The Contractor shall secure all necessary permits for start and prosecution open trench casing pipe. All Work shall conform to the necessary permits, these Specifications and other lawful and third-party agency requirements.
- D. If the Contractor is not ready to place the carrier pipe in the casing at the time of completion of open trench casing operations, the ends shall be bulkheaded. Approach trenches in public streets shall be backfilled, temporary surfacing placed thereon, and the affected portion of the street reopened to traffic.
- E. The Contractor and/or excavator shall notify "DIGALERT" forty- eight (48) hours prior to beginning excavation operations.

1.02 RELATED SECTIONS

- A. Other sections and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:
 - 1. Section 02223 Excavation, Backfilling and Compacting.
 - 2. Section 09900 Protective Coatings.
 - 3. Section 15042 Hydrostatic Testing of Pressure Pipelines.
 - 4. Section 15064 PVC Pressure Pipe (AWWA C900).
 - 5. Section 15151 Facility Identification.

1.03 REFERENCES

A. All Work specified herein shall conform to or exceed the applicable requirements of the referenced portions of the following publications to the extent that the provisions thereof

are not in conflict with other provisions of these Specifications. Where there is a conflict between these provisions and these Specifications, the more stringent requirement shall govern.

- B. The following publications (latest edition, unless otherwise noted) form a part of this specification to the extent referenced.
 - 1. Industry Standards
 - a. ANSI/AWS D1.1 Structural Welding Code Steel
 - b. ASTM A 36 Standard Specification for Carbon Structural Steel
 - c. ASTM A 283 Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates
 - d. ASTM A 1011 Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength
 - e. AWWA C206 Field Welding of Steel Water Pipe
 - f. CALTRANS' Standard Specifications
 - g. CALTRANS Guidelines and Specifications for Trenchless Technology Projects
 - 2. Permits
 - a. Kern County Public Works Department encroachment permit.
 - 3. Project Geotechnical Investigation Report
 - a. Geotechnical Engineering Investigation Report Giummara Pipeline Project, BSK and Associates, January 18. 2023.
- C. Comply with the applicable reference Specifications as directed in the General Conditions and the Special Conditions.

1.04 SUBMITTALS

- A. Submittals shall be furnished in accordance with Article D-8 of Section D Special Conditions and as specified herein.
- B. Contractor to submit Statement of Contractor Staff Qualifications in accordance with Section 1 article entitled Quality Assurance.
- C. For steel casing, submit manufacturer's mill specification sheet listing diameter, thickness, and class of steel used in making the casing, and the mill certification.
- D. Submit drawings showing the location and type of joint for both casing and carrier pipe, and spacers.

- E. Soil and Groundwater Analysis Contractor shall provide a statement that they have reviewed the Project Geotechnical Investigation Report, along with any soils and groundwater level analysis as obtained by the Contractor. The Contractor is solely responsible for verifying soil and groundwater level conditions as necessary to ensure well-informed casing pipe installation plan.
- F. Submit all permits associated with open trench and trenchless steel operations.
- G. Submit an engineered shoring plan. Shoring submittals shall be wet-signed and stamped by a California-licensed Civil or Structural Engineer.
- H. Submit a traffic control plan in accordance with the CALTRANS-Kern County Encroachment Permit.
- I. Submit a dewatering plan, if required per Section 02223 Excavation, Backfilling, and Compacting.
- J. Submit drawings, data sheets, and installation manuals for casing spacers and end seals
- K. Submit carrier pipe testing plan and results.
- L. Submit preconstruction and postconstruction photographs.
- M. Submit as-built alignment.

1.05 **QUALITY ASSURANCE**

- A. All work shall conform to the specifications and requirements of the State of California Department of Transportation Kern County encroachment permit and as directed by the Engineer.
- B. Installations shall be monitored as specified herein and to the satisfaction of the Engineer and CALTRANS Kern County to ensure that the integrity of the existing roadway elevations are maintained.
- C. All Work shall be performed in the presence of the Engineer, <u>CALTRANS Kern County</u>, and other public agency representatives as required by the Contract.
- D. Welding Requirements
 - 1. All welding procedures used to fabricate steel casings shall be prequalified under the provisions of AWS D1.1. Welding procedures shall be required for, but not necessarily limited to, longitudinal and girth or special welds for pipe cylinders, casing joint welds, reinforcing plates, and grout coupling connections.
- E. Contractor Staff Qualifications

- 1. Superintendent in charge of carrier pipe installation: Shall have experience with similar work on a minimum of two (2) projects of equivalent size and complexity within the past five (5) years.
- 2. All welding shall be done by certified welders, welding operators, and tackers who have had adequate experience in the type of materials to be used. Welders shall be qualified under the provisions of AWS D1.1 by an independent local, approved testing agency not more than six (6) months prior to commencing work on the casing or pipeline. Machines and electrodes similar to those used in the work shall be used in qualification tests. The Contractor shall furnish all material and bear the expense of qualifying welders.

F. Scheduling

1. If the pipeline is not installed within the casing as a continuous operation following completion of the open trench casing, the casing portals shall be bulkheaded and the approach trenches backfilled and later reopened for pipe installation as directed by the Engineer.

G. Line and Grade

- 1. Contractor shall survey pipe casing for conformance with design line and grade.
- 2. Tolerances
 - a. Carrier pipe as measured from theoretical alignment at each casing joint location:
 - 1) Within 2.0 inches of design horizontal alignment.
 - 2) Within 1.0 inch of design vertical elevation.
 - 3) No reverse grades or ponding of water.

1.06 PERMITS

- A. All work shall conform to the specifications and requirements of the Kern County Department of Public Works encroachment permit.
- B. The Contractor shall secure all required permits for construction of casing pipe installation.

1.07 DELIVERY, STORAGE AND HANDLING

- A. The Contractor shall store steel pipe casing in the field by supporting the pipe uniformly per AWWA M11.
- B. Proper care shall be used to prevent damage in handling, moving and placing the pipe casing. All pipe casing materials shall be lowered into the trench in a manner that

prevents damage. The pipe casing shall not be dropped, dragged or handled in a manner that will cause bruises, cracks, or other damage.

1.08 PROJECT CONDITIONS

A. Contractor shall review the Project Geotechnical Investigation Report and verify field conditions prior to construction.

1.09 PROTECTION OF EXISTING UTILITIES AND FACILITIES

A. Identification, marking, and potholing of existing utilities in accordance with Section 02223 – Excavation, Backfilling, and Compacting.

1.10 PROTECTION OF CROPS AND TREES

- A. Protection of landscaping shall be in accordance with Section 02223 Excavation, Backfilling, and Compacting.
- B. The cost of restoring pavement, curb, sidewalk, walls, driveways, lawns, storm drains, etc., and other landscaped facilities shall be borne by the Contractor.

PART 2 PRODUCTS

2.01 STEEL CASING

- A. Steel casings shall be welded steel pipe of the minimum diameter and minimum plate thicknesses indicated on the Drawings and specified herein.
- B. Casing pipe includes an external steel casing pipe and host a PVC C900 interior carrier pipe (diameter, SDR, and CL as shown and as specified in Section 15063 PVC Pressure Pipe (AWWA C900)).
- C. Unless otherwise shown or specified on the Drawings, the casing pipe shall be used within the entire roadbed influence area and as shown on the Plans. The roadbed influence area is defined as the subsurface area located under the road and shoulder surface, between each shoulder point or back of curb; and continues transversely outward and downward from each shoulder point or back of curb on a 1 on 1 slope. Additionally, the influence area includes the area projected by a 45-degree line projected from the springline of the casing to the ground surface.

D. Materials

- 1. Steel casing shall be ASTM A 283, Grade C; ASTM A 1011 Structural Steel Grade 30 or 33; or ASTM A 36 unless noted otherwise.
- 2. Only new casing pipe shall be used, unless otherwise approved by the Engineer.

- 3. Unless otherwise shown or specified on the Drawings, the 52-inch casing pipe shall have a minimum wall thickness of 1/2-inch (0.500 inch).
 - a. Greater casing thickness and diameter shall be used as required for the method of work and loadings involved, as suitable for the site and as limited by possible interferences, but at no additional cost to the District.
 - b. The Contractor shall select a size of casing at or above the minimum specified, in order that the open trench casing may be done with a sufficient degree of accuracy to permit installation of the carrier pipe to the grades shown on the plans and to properly accommodate the largest dimension of the carrier pipe and restrained joints.
- 4. Casing pipe shall have square and machine beveled ends. The pipe end maximum out-of-square tolerance shall be 0.04-inch, (measured across the diameter).
- 5. Casing pipe shall be straight. The maximum allowable straightness deviation over any 10-foot length of steel casing pipe is 1/8-inch. The maximum straightness deviation in fabricated sections up to 40 feet shall be 3/8-inch.
- 6. Pipe shall be without any significant dimensional or surface deformities. All pipes shall be free of visible cracks, holes, foreign material, foreign inclusions, blisters, or other deleterious or injurious faults or defects. Any section of the pipe with a gash, blister, abrasion, nick, scar, or other deleterious fault greater in depth than ten percent (10%) of the wall thickness, shall not be used.
- 7. Casing pipe shall normally be constructed without any longitudinal seams. However, longitudinally welded casing pipe is allowed for 48-inch or larger diameter pipes when an AWS certified welder performs all the welding
- 8. The inside diameter (ID) of the casing pipe shall be at least six (6) inches larger than the largest outside diameter (OD) of the carrier pipe to allow the carrier pipe to be inserted or removed subsequently without disturbing the casing or the roadbed

E. Watertight Joints

1. Watertight casing pipe joints are required to ensure the integrity of the roadbed. Casing pipe shall be constructed to prevent water leakage or earth infiltration throughout its entire length.

F. Joints & Welding

- 1. Casing sections shall be joined by full circumference welding. Field welds shall be full-penetration bevel welds in accordance with the standards of quality as set forth in the specifications of the American Welding Society and ANSI/AWWA C206.
- 2. All welding shall be performed by skilled welders qualified under the provisions of ANSI/AWS D1.1. Welder qualifications shall be certified by an independent,

- local approved testing agency not more than six (6) months prior to commencing work.
- 3. Prepare ends of casings for proper bevel weld by providing a 45-degree bevel on the end of one of the two casing pieces being joined.

2.02 INTERIOR OF CASING (BETWEEN CARRIER PIPE AND CASING)

A. Annular space backfill is not required.

2.03 CASING SPACERS

- A. Casing spacers are required for all carrier pipes. Casing spacers shall consist of stainless steel shell and risers, PVC liner, and composite runner skids runners.
- B. Casing spacer skids and blocking shall be bolt-on style with a shell made of at least two halves. The band material shall be manufactured of a minimum 14-gauge T-304 stainless steel. Risers shall be 10-gauge T-304 stainless steel. All welds are to be chemically passivated. The runners shall be at least 12 inches long and shall be manufactured of high abrasion resistant and low coefficient of friction, glass filled polymer. Fasteners and hardware for securing the spacers and runners shall be stainless steel.
- C. Casing spacers shall have a flexible EPDM liner having a minimum thickness of 0.090-inches with a hardness of Durometer "A" 85-90. The liner shall have a rating of no less than 60,000 VPM and water absorption of 1% maximum.
- D. Casing spacers shall be provided at 5-foot intervals (minimum of four spacers per 20-foot joint) along the carrier pipe and casing spacers shall be centered and restrained. Alternate spacing may be used if recommended by the casing spacer manufacturer and approved by the Engineer.
- E. Detailed product submittals showing all dimensions shall be provided.
- F. Casing spacers shall be as manufactured by Advance Products & Systems, Inc., Cascade Waterworks Mfg. Co., Pipeline Seal & Insulator, Inc., or equal.

2.04 END SEALS

- A. When the casing is not filled with sand or other Engineer approved material, the casing end seals shall be 1/8-inch thick synthetic, rubber, designed to fit snugly around pipe and casing. Casing seals may be one piece with no field seams or the wrap-around style to facilitate installation after the casing and carrier pipe are already installed. Seamless style is preferred. Bands and hardware for attachment to pipe and casing OD shall be 316 stainless steel.
- B. When the casing is filled with sand or other Engineer approved material, the annular space at each end of the casing shall be packed with mortar to seal the casing. The

mortar closure shall extend a minimum of 12 inches into the casing. Casing end seals are required in addition to the mortar seal. Alternate sealing methods can be submitted for Engineer review and approval.

C. End seals shall be as manufactured by Advance Products & Systems, Inc., Cascade Waterworks Mfg. Co., Pipeline Seal & Insulator, Inc., or equal.

2.05 LINING AND COATING

- A. Lining
 - 1. Lining of the casing pipe is not required.
- B. Coating
 - 1. Coating of the casing pipe is not required.

2.06 TRACER WIRE

A. Tracer wire is not required.

2.07 LOCATING TAPE

A. Locating tape material shall be in accordance with 15151 – Facilities Identification.

PART 3 EXECUTION

3.01 GENERAL

A. Casing shall be installed in accordance with the <u>CALTRANS</u> <u>Kern County</u> Encroachment Permit Requirements.

3.02 INSTALLATION OF CASING

- A. Casing shall be installed, backfilled, and compacted as shown and in accordance with Section 02223, Trenching, Backfilling, and Compacting.
- B. Casing shall be lowered onto the bedding at the proper lines and grades to accommodate the specified lines and grades of the carrier pipe.

3.03 INSTALLATION OF CARRIER PIPE

- A. Insertion of Carrier Pipe Open Trench Method
 - 1. After properly supporting the casing in the trench, the interior shall be thoroughly cleaned and the carrier pipe installed. The carrier pipe shall be installed on at least two skids of sufficient dimension to prevent the pipe bells and, if applicable,

joint restraint, from touching the casing pipe and to allow for proper alignment of the carrier pipe to meet the specified grade.

B. Installation of Carrier Pipe - Trenchless Method

C. Securement

1. The top of the carrier pipe shall be blocked to prevent flotation. The carrier pipe shall be secured in a manner satisfactory to the Engineer to prevent floating and subsequent change of grade.

D. Pipe Skids and Blocking

1. Spacers shall be installed at mid-sections and in accordance with paragraph 2.04 entitled "Casing Spacers" if the carrier pipe segment is over ten (10) feet long. Detailed product submittals showing all dimensions shall be provided to the Engineer for approval.

E. Grade Adjustment

- 1. The carrier pipe grade shall be adjusted as required by changing the height of the casing spacer riser and/or the thickness of the runner pad skids to compensate for any grade variations of the casing pipe. The Contractor shall ensure that the carrier pipe does not come in contact with and is insulated from the casing pipe.
- 2. Upstream and downstream elevations of the carrier pipe shall be verified prior to sealing the casing ends.

F. Failure to Achieve Required Grade

- 1. If the alignment of the casing pipe is such that the carrier pipe grade cannot be met, the grade of the casing pipe shall, if required by the Engineer, be adjusted. If realignment is not deemed feasible by the Engineer, another casing pipe meeting the required grade shall be installed.
- 2. The failed casing pipe shall be removed by methods approved by the Engineer, CALTRANS Kern County, and the District. Abandonment of any component of the installation shall only be allowed as approved by the Engineer, CALTRANS Kern County, and the District.
- 3. Realignment or replacement and abandonment work shall in no way result in additional cost to the District.

G. Annular Space between Carrier Pipe and Casing

1. The annular space between the carrier pipe and casing shall not be filled unless otherwise shown or directed by the Engineer.

3.04 TESTING

A. Before backfilling the annular space, if required, installing end seals, and backfilling the casing pipe, the carrier pipe shall have passed an initial pressure test in accordance with Section 15042 – Hydrostatic Testing of Pressure Pipelines.

3.05 PIPE IDENTIFICATION AND LOCATING

A. Locator tape shall be installed as shown and in accordance with Section 15151 – Facilities Identification. Tracer wire from the carrier pipe shall be connected to the casing with the use of exothermic weld connections.

3.06 SITE RESTORATION

- A. The disturbed work site area shall be restored to existing grades and original material condition and to the satisfaction of the Engineer.
- B. Upon completion of the work, the Contractor shall remove and properly dispose of all excess materials and equipment from the work site.

END OF SECTION

SECTION 15051

INSTALLATION OF PRESSURE PIPELINES

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section covers the installation of pressure pipelines fabricated of polyvinyl chloride, ductile iron, and welded steel, including pipeline closures and connections, and pipeline encasement.
- B. Provide materials, equipment and labor required to execute this work as indicated on the drawings, specified herein and necessary to complete the work of this section.

1.02 RELATED SECTIONS

- A. Section C General Conditions, Section D Special Conditions, and the Drawings shall apply to this section. This section may require direct correlation with the following sections of the contract:
 - 1. Section 02223 Excavation, Backfilling, and Compacting.
 - 2. Section 03300 Concrete.
 - 3. Section 09900 Protective Coatings.
 - 4. Section 15042 Hydrostatic Testing of Pressure Pipelines.
 - 5. Section 15056 Ductile Iron Pipe and Fittings.
 - 6. Section 15063 PVC Pressure Pipe (AWWA C900)
 - 7. Section 15089 Air Valves.
 - 8. Section 15100 Valves.
 - 9. Section 15151 Facilities Identification.

1.03 REFERENCES

- A. The following publications form a part of this specification to the extent referenced.
 - 1. AWWA Manuals and Standards American Water Works Association.
 - 2. ANSI Standards American National Standards Institute.
 - 3. ASME Standards American Society of Mechanical Engineers.
 - 4. ASTM Standards American Society for Testing and Materials.
 - 5. AWS Standards American Welding Society.

6. California Test (CT) - 216 – Method of Test for Relative Compaction of Untreated and Treated Soils and Aggregates.

1.04 SUBMITTALS

- A. Submittals shall be furnished in accordance with Article D-8 of Section D Special Conditions.
- B. Submit the following:
 - 1. An installation schedule (tabulated layout) shall be submitted which includes:
 - a. Order of installation and closures.
 - b. Pipe centerline station and elevation at each change of grade and alignment.
 - c. Elements, curves, and bends, both in horizontal and vertical alignment including elements of the resultant true angular deflections in cases of combined curvature.
 - d. The location, length, size, design designation, and number designation of each pipe section and pipe special.
 - e. Locations of junction structures.
 - 2. Welder qualification certificates shall be submitted.
 - 3. Manufacturer's catalog data on insulation kits and fittings.
 - 4. Test procedure and records from all insulated joint tests.

PART 2 PRODUCTS

2.01 INSTALLATION MATERIAL

A. As shown on the Drawings.

2.02 PIPING SCHEDULE

A. Unless noted otherwise on the Drawings or in the Technical Specifications, pipe shall be furnished in accordance with the following materials schedule.

Diameter	Irrigation Water Service	
Up to 27-inch	PVC C900 Pipe and Ductile Iron Fittings as shown on the Drawings	
Over 27-inch and up to 54-inch	PVC C900 Pipe and Ductile Iron Fittings as shown on the Drawings	
Over 54-inch	As shown on the Drawings	

2.03 LOCATOR TAPE

A. Locator tape shall be in accordance with Section 15151 – Facilities Identification.

2.04 TRACER WIRE

A. Tracer wire shall be in accordance with Section 15151 – Facilities Identification.

2.05 FLANGE INSULATION KITS

- A. Insulating material shall be of the designated by the manufacturer as suitable for the operating temperature and pressure of the service.
- B. Flange insulation kits shall consist of the following items:
 - 1. Insulating Gaskets
 - a. Gaskets shall be Type E full-faced, 1/8-inch minimum thickness, dielectric neoprene faced phenolic.
 - b. Gaskets shall be Advance Products & Systems, Inc.; George Fischer Central Plastics; Pipeline Seal & Insulator, Inc; or equal.
 - 2. Insulating Sleeves and Washers
 - a. Insulating stud sleeves and washers shall be one-piece and full-length, made of Minlon or Mylar.
 - b. One 1/8-inch thick gasket shall be attached to the sleeve, while the other shall be loose.
 - c. Single insulating washers and sleeves shall be used on buried insulating flanges.
 - 3. Insulating Washers for Bolts
 - a. Insulating washers shall be 1/8-inch thick glassclad phenolic.
 - b. Single insulating washers shall be used on buried insulating flanges.

- c. Double insulating washers and full length sleeves shall be used on insulating flanges above ground, in structures, or in vaults.
- 4. Steel Washers Over Insulating Washer
 - a. Steel backing washers shall be 1/8-inch thick Type 316 stainless steel.
- 5. Manufacturers
 - a. Flange insulation kits shall be as manufactured by Advance Products & Systems, Inc.; George Fischer Central Plastics; Pipe Seal & Insulators; or equal.

2.06 POLYETHYLENE ENCASEMENT

- A. Unless specified otherwise, all fittings, couplings, and valves shall be polyethylene encased in accordance with ANSI/AWWA C105/A-21.5.
 - 1. Wrap shall be a two layers of loose 8-mil thick LLD or 4-mil thick HDCL polyethylene tube.
- B. Polyethylene adhesive tape shall be two inch-wide and 10-mil thick, Polyken 900, Scotchwrap 50, or equal.

2.07 MARKER POSTS

A. Marker posts shall be in accordance with Section 15151 – Facilities Identification.

2.08 CONTROLLED LOW STRENGTH MATERIAL (CLSM)

A. CLSM materials shall be in accordance with Section 02223 – Excavation, Backfilling, and Compacting.

PART 3 EXECUTION

3.01 DELIVERY AND TEMPORARY STORAGE OF PIPE AT SITE

- A. Onsite Storage Limitation
 - 1. Onsite pipe storage shall be limited to a maximum of one week, unless exception is approved by District.
- B. Care of Pipe
 - 1. Care shall be taken to avoid cracking of the cement mortar coating and/or lining on steel pipe. If necessary, plastic sheet caps shall be used to close pipe ends and keep coatings and linings moist.

3.02 HANDLING OF PIPE

A. Moving the Pipe

1. Pipes shall be lifted with handling beams or wide belt slings as recommended by the pipe manufacturer. Cable slings shall not be used. Pipe shall be handled in a manner to avoid damage to the pipe. Pipe shall not be dropped or dumped from trucks or into trenches under any circumstances.

B. Internal Pipe Braces

1. Internal braces placed in steel pipes shall be maintained until backfilling and compaction are completed.

C. Pipe Caps

1. Plastic caps placed over the ends of steel pipe shall not be removed until the pipe is ready to be placed in the trench. Plastic caps may be opened temporarily to spray water inside the pipe for moisture control.

D. Inspection of Pipe

1. The pipe and accessories shall be inspected for defects prior to lowering into the trench. Any defective, damaged or unsound pipe shall be repaired or replaced. All foreign matter or dirt shall be removed from the interior of the pipe before lowering into position in the trench.

3.03 PLACEMENT OF PIPE IN TRENCH

A. General

1. Excavation, shoring, sheeting, bracing, backfilling, material placement, material compaction, compaction testing, and pipe laying requirements and limitation shall be in accordance with Section 02223 – Excavation, Backfilling, and Compacting.

B. Sanitation of Pipe Interior

1. During laying operations, tools, clothing, or other materials shall not be placed in the pipe.

C. Prevention of Entry into Pipe

1. When pipe laying is not in progress, the ends of the pipe shall be closed using plugs constructed in a manner to prevent entry by any debris or animal.

D. Laying Pipe on Grades over 5 Percent

1. Pipes shall be laid uphill with the bell on the uphill end of each pipe length, whenever the grade exceeds 5 percent.

E. Pipe Base Thickness

1. Unless otherwise shown on the Drawings, the pipe base thickness shall be as specified in Section 02223 – Excavation, Backfilling, and Compacting.

F. Depressions at Joints and Pipe Sling Points

1. Depressions shall be dug into the pipe bedding material to accommodate the pipe bell, and to permit the removal of the pipe handling slings.

G. Placement of Pipe on Pipe Base

1. Pipe shall be lowered onto the bedding and installed to line and grade its full length on firm bearing except at the bell and at sling depressions. Unless specified otherwise, the tolerance on grade shall be 1/4-inch; the tolerance on line shall be one (1) inch. Grade shall be measured along the pipe invert.

H. Pipe Installation

- 1. Installation of the pipe shall be as specified herein.
- 2. The Engineer shall be notified at least two (2) weeks prior to field installation of pipe or fittings.
- 3. Pipe shall be installed without springing, forcing, or stressing the pipe or any adjacent connecting valves or equipment. Precautions shall be taken to prevent pipe from being displaced by water entering trench. Damaged or displaced pipe shall be replaced or returned to specified condition and grade.

I. Trench Curvature and Pipe Deflection

- 1. The radius of curvature of the trench shall be determined by the maximum length of pipe section that can be used without exceeding the allowable deflection at each pipe joint and without causing deviation from the trench width requirements.
- 2. The deflection at any flexible joint shall not exceed that prescribed by the manufacturer of the pipe.
- 3. The manufacturer's printed installation guide outlining the radius of curvature that can be negotiated with pipe sections of various lengths shall be followed.

J. Equipment for Installation of Pipe

1. Proper implements, tools, and facilities as recommended by the pipe manufacturer's standard printed installation instructions shall be provided and used by the Contractor for safe and efficient execution of the work.

- 2. All pipe, fittings, valves, and accessories shall be carefully lowered into the trench using suitable equipment in such a manner as to prevent damage to pipe and fittings.
- 3. Under no circumstances shall pipe or accessories be dropped or dumped into the trench.

K. Cutting, Machining, and Tapping Pipe

- 1. Cutting, machining, and tapping of the pipe shall be accomplished in accordance with the pipe manufacturer's standard procedures for this operation.
- 2. Pipe shall not be cut with a cold chisel, standard iron pipe cutter, nor any other method that may fracture the pipe or produce ragged, uneven edges.

3.04 ASSEMBLING RUBBER-GASKETED JOINTS

A. Cleaning Ends of Pipe

1. The ends of the pipe to be jointed shall be cleaned of all foreign material.

B. Lubrication

- 1. After placing in the trench, a nontoxic water-soluble soap solution shall be applied to the inside of the bell in the trench and to the rubber gasket and spigot of the pipe to be installed.
- 2. The rubber gasket shall be stretched into the groove in the bell end of the pipe and distributed uniformly around the circumference.

C. Joint Assembly

- 1. Without tilting the pipe to be installed, the spigot shall be inserted into the bell of the pipe. Come-a-longs or pipe jacks shall be used to drive the spigot end into the bell until properly seated.
- 2. The joint recess recommended by the pipe manufacturer for made-up joints shall be maintained.
- 3. Where deflections at joints are required for curved alignment, the manufacturer's recommended allowable joint opening on one side shall not be exceeded.
- 4. A feeler gauge shall be used to verify proper placement of the gasket for each joint of pipe installed.

3.05 POLYETHYLENE ENCASEMENT

A. All fittings, couplings, and valves buried underground shall be protected with two layers of polyethylene encasement wrap.

B. Seams in polyethylene encasement shall be overlapped a minimum of one foot and wrapped with a polyethylene adhesive tape.

3.06 FLANGED CONNECTIONS

A. Bolt Hole Alignments

1. Pipe shall be set with flange bolts straddling the pipe horizontal and vertical centerlines.

B. Nuts and Bolts

- 1. Bolts and nuts for flanged valves and flanges shall be Type 316 stainless steel conforming to ASTM A 193, Grade B8M, for bolts and ASTM A 194, Grade 8M, for nuts.
- 2. Nuts and bolts shall be lubricated with anti-seize, recommended for use with stainless steel prior to installation.
- 3. Use torque-limiting wrenches to provide uniform bearing and proper bolt tightness.
- 4. Tighten flange bolts progressively, drawing up bolts on opposite sides gradually until bolts have uniform tightness around the flange.
- 5. Exposed bolt heads and threads shall be coated with grease.

3.07 INSTALLATION OF BENDS, TEES, AND REDUCERS

- A. Fittings shall be installed utilizing standard installation procedure. Fittings shall be lowered into the trench by means of rope, cable, chain, or other acceptable means without damage to the fittings.
- B. Cable, rope, or other devices used for lowering fitting into trench, shall be attached around exterior of the fitting for handling.
- C. Under no circumstances shall the cable, rope, or other device be attached through the fitting's interior for handling.
- D. Fittings shall be carefully connected to the pipe and the joint shall be checked to insure a sound and proper joint.
- E. Fittings shall be wrapped with eight (8) mil. sheet polyethylene film as specified herein.

3.08 INSTALLING THREADED PIPING

A. Threaded piping shall be reamed, deburred, and cleaned before making up joints.

B. Thread lubricant approved by the engineer shall be applied to threaded pipe ends before installing fittings, couplings, unions, or joints.

3.09 PIPELINE CLOSURE ASSEMBLIES

- A. Pipeline closure assemblies shall be employed to unite sections of pipeline laid from opposite directions; to adjust the field length of the pipeline to meet structures, tie-ins to existing pipelines, and points established by design stations; and to close areas left open to accommodate temporary test bulkheads for hydrostatic testing.
- B. Closure assemblies shall be an ASTM C153 ductile iron restrained mechanical joint long sleeve, manufactured by Tyler Union or equal.

3.10 THRUST RESTRAINT AND ANCHOR BLOCKS

A. Location

- 1. Thrust restraint and anchor blocks shall be provided on all pressure pipelines and shall be installed as shown on the Drawings at all rubber gasketed fittings that are not otherwise restrained.
- 2. Thrust restraint blocks or anchor blocks shall be installed at all valves, tees, crosses, ends of pipelines, and at all changes in direction of the pipeline greater than five (5) degrees deflection either vertically or horizontally when joints are not otherwise restrained.

B. General Requirements

- 1. Unless otherwise noted, thrust restraint and anchor blocks shall be of not less than 3,250 PSI concrete (Class B) and shall provide a thrust bearing area to resist horizontal and/or downward thrust.
- 2. Thrust restraint and anchor blocks shall also be of sufficient gross weight and area to give bearing against undisturbed vertical earth banks sufficient to absorb the thrust, allowing an earth bearing of 300 pounds per square foot per foot of cover, whichever value is less.
- 3. Thrust protection shall be set prior to pressurizing the line.
- 4. Exposed reinforcement shall be coated with one (1) inch of an approved non-shrink grout after the concrete has sufficiently cured. See Section 03300 Concrete.

C. Thrust Restraint Not Called for on the Drawings

1. Thrust restraint elements, where not called for on the plans, shall be sized for 150 percent of operating pipeline pressure or the pipeline test pressure, whichever is greater.

2. Prior to construction, thrust and anchor block sizing shall be submitted to the Engineer for approval.

D. Concrete Placement

- 1. Concrete shall be placed against wetted and undisturbed soil, and the exterior of the fitting shall be cleaned and wetted to provide a good bond with the concrete.
- 2. The concrete interface with the fitting shall be an area of not less than the projected area of the fitting normal to the thrust resultant and centered on the resultant.
- 3. Cure concrete in accordance with Section 03300 Concrete.
- 4. Concrete shall set prior to pipeline testing in accordance with Section 15042 Hydrostatic Testing of Pressure Pipelines.

E. Disturbed Soil

- 1. Where soil is disturbed, horizontally, the Contractor shall extend the excavation line a minimum of 5-feet beyond the thrust block bearing face. The appropriate lift thickness of the backfill will depend on the compaction equipment used but generally shall not exceed a thickness of six inches of loosely placed material. Native material shall be placed and compacted in horizontal lifts to at least 90 95 percent relative compaction per CT-216. At the Contractor's option, the excavated area can be backfilled with CLSM in accordance with Section 02223 Excavation, Backfilling, and Compacting.
- 2. Where soil is disturbed, vertically, the Contractor shall overexcavate and recompact in accordance with Section 02223 Excavation, Backfilling, and Compacting.

F. Accessibility to Joints and Fittings

- 1. Unless otherwise directed by the District, thrust restraint and anchor blocks shall be placed so that the pipe and fitting joints are accessible for repair.
- 2. Placement shall include isolation of adjacent utilities and shall ensure that the bearing is against undisturbed soil.

G. Harness and Tie-Rods

- 1. Metal harness or tie-rods and pipe clamps shall be used to prevent movement if shown on the plans or directed by the Engineer.
- 2. The rods and clamp harnessing arrangement shall be installed utilizing flanged harness holddowns or lugged fittings and pipe with saddle clamps placed (where feasible and practical) to bear against the pipe bells.

- 3. Saddle clamps around the barrel of the pipe, which depend on friction to prevent sliding of the clamp, are acceptable. However, restraints with pointed set-screws which bear into the pipe wall are not acceptable and shall not be used.
- 4. All surfaces of exposed and buried steel rods, reinforcing steel, bolts, clamps, and other metal work shall be coated prior to backfilling, and touched up after assembly as specified in Section 09900 Protective Coatings, System CS-2, "Buried Metal Coating Systems".

H. In-line Valves

- 1. Reinforcing steel tiedowns rods shall be used on all in-line valves. Refer to the plans for details.
- 2. Exposed metal portions shall be coated one (1) inch of an approved non-shrink grout after the valve pad has sufficiently cured. See Section 03300 Concrete.

3.11 COMBINATION AIR AND VACUUM RELEASE VALVE ASSEMBLIES

A. General

- 1. Air valve assembles shall be installed in accordance with the manufacturer's instructions and Section 15089 Air Valves.
- 2. Air release valve assemblies and combination air and vacuum valves shall be installed at each point in the pipeline as shown on the drawings or as specified by the Engineer.

B. Location

1. The tap for air valves shall be made in a level section of pipe no closer than 24 inches to a bell, coupling, joint, or fitting.

3.12 LOCATOR TAPE

A. Pipe locater tape shall be installed above the pipe in accordance with Section 15151 – Facilities Identification.

3.13 TRACER WIRE

A. Tracer wire shall be installed on top of the pipe in accordance with Section 15151 – Facilities Identification.

3.14 FLANGE INSULATION KITS

A. Flange insulation kits shall be installed as follows:

1. Cleaning

a. Faces of flange pairs shall be cleaned of all dirt, rust or fouling materials which would interfere with a watertight joint and insulating properties of the flange kit.

2. Alignment

- a. Alignment pins shall be used to properly align the flange and gasket. The manufacturer's recommended bolt tightening sequence shall be followed.
- b. Bolt insulation sleeves shall be centered within the insulated washers so that the insulating sleeve is not compressed or damaged.

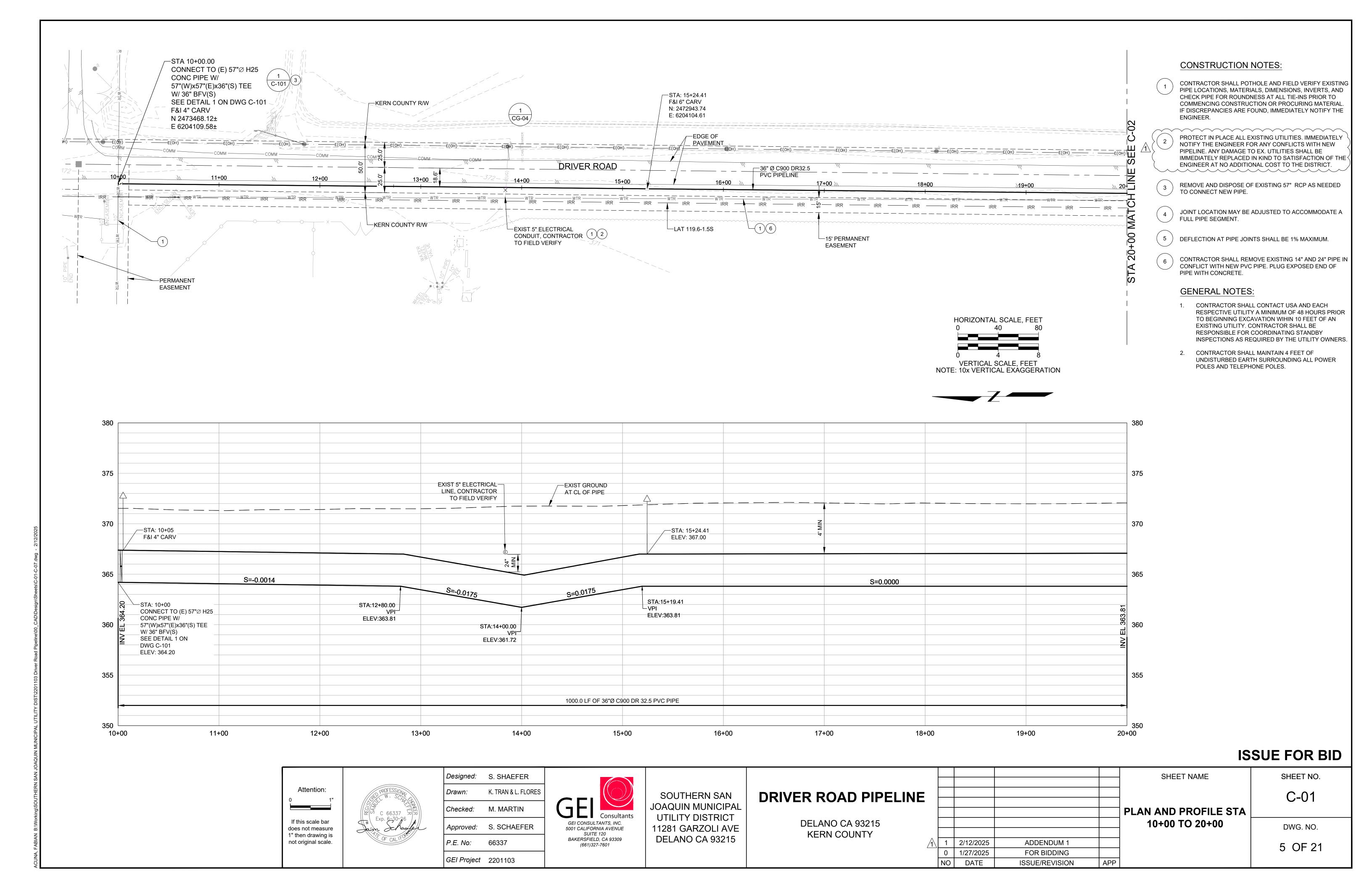
3.15 MARKER POSTS

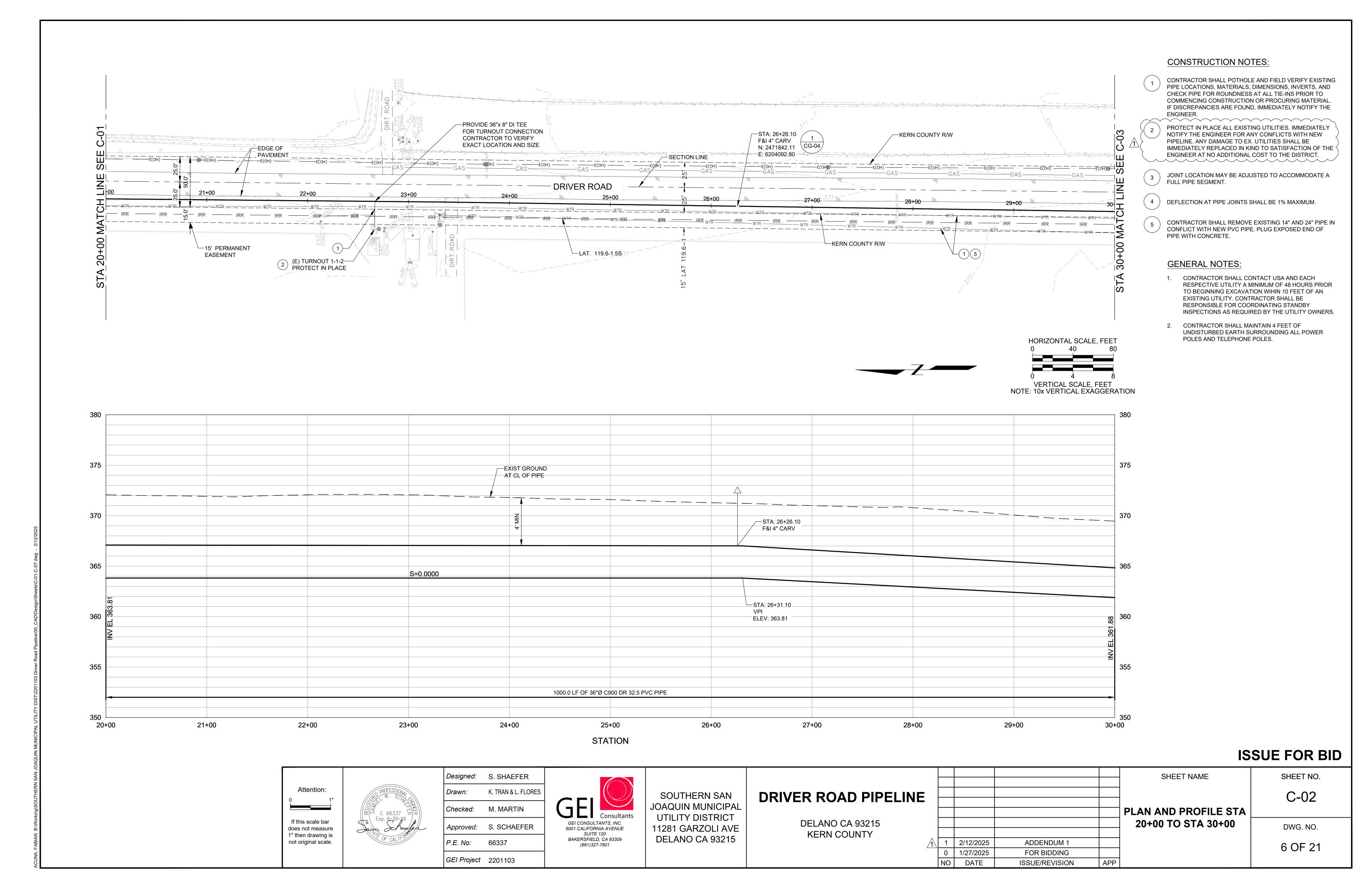
A. Marker posts shall be installed in accordance with Section 15151 – Facilities Identification.

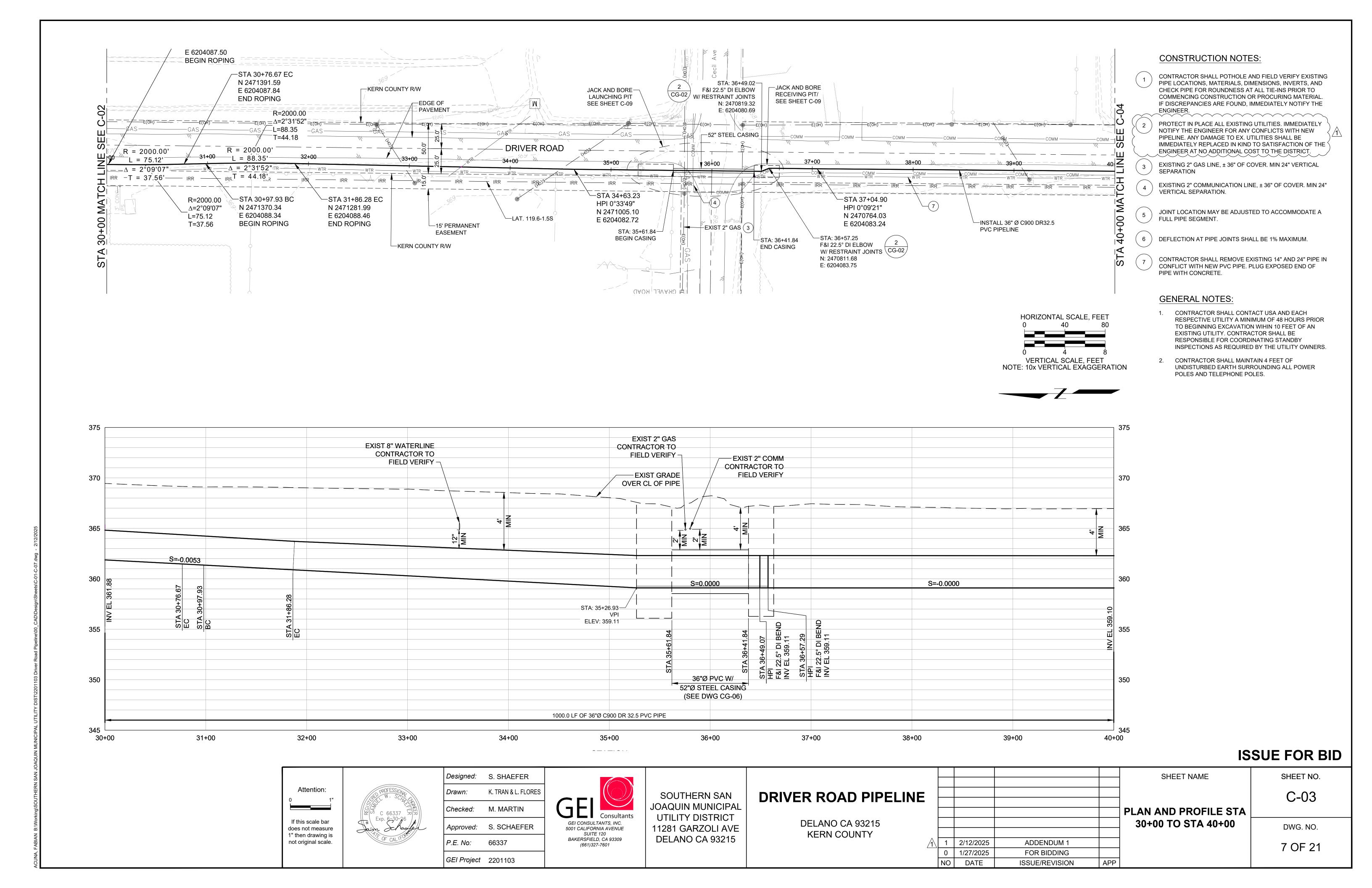
3.16 TESTING AND RECORD KEEPING

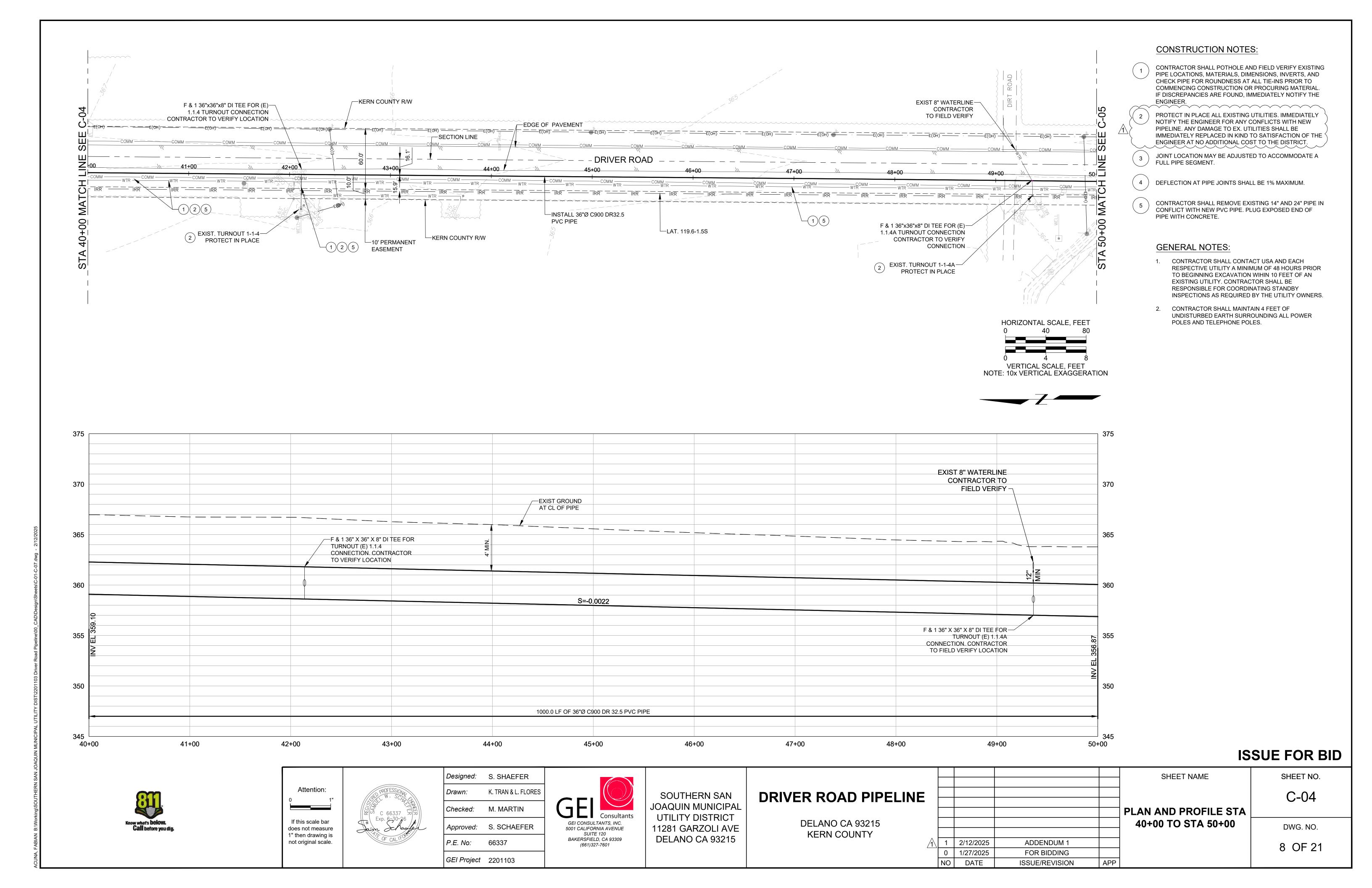
- A. The Contractor shall furnish all necessary equipment, material and qualified personnel required to perform all testing described herein:
 - 1. All piping shall be hydrostatically pressure tested in accordance with Section 15042 Hydrostatic Testing of Pressure Pipelines.
 - 2. Insulation Joints
 - a. The Contractor shall test each insulated joint with the insulator tester in accordance with the manufacturer's written instructions.
 - b. All damaged or defective insulation parts shall be replaced and retested.
 - c. Records shall be kept of all insulated joint tests and shall be submitted to the District.

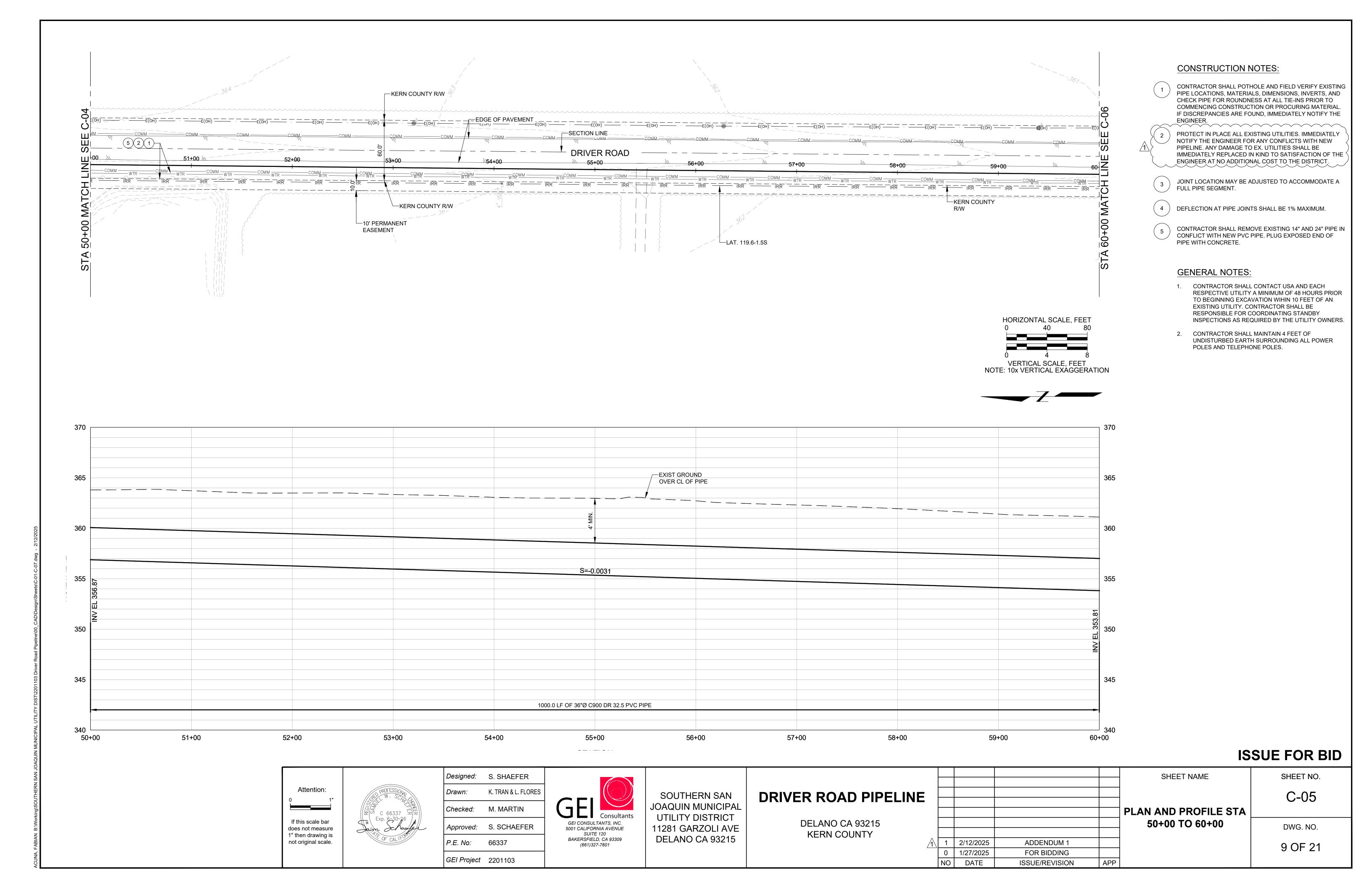
END OF SECTION

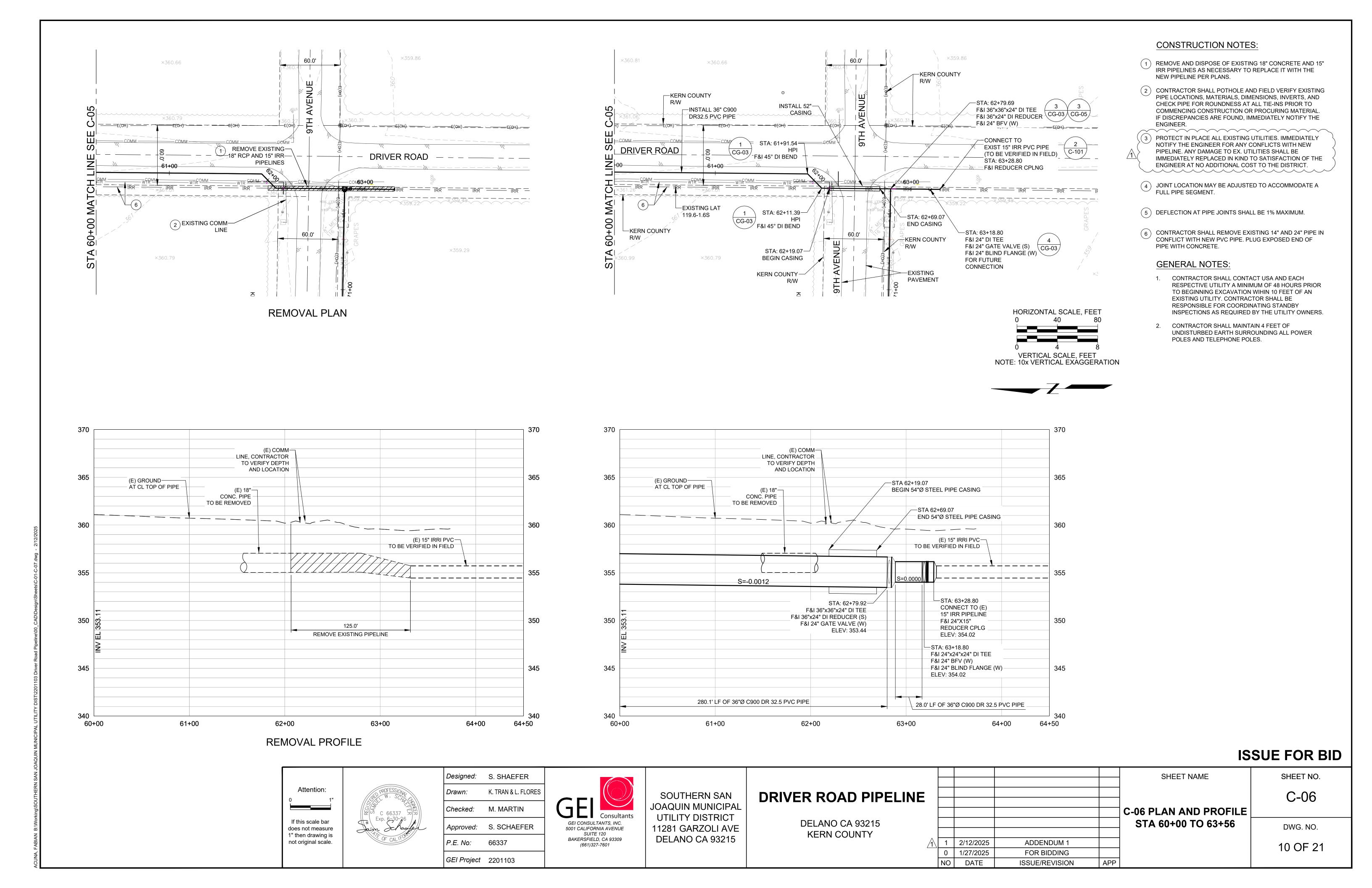


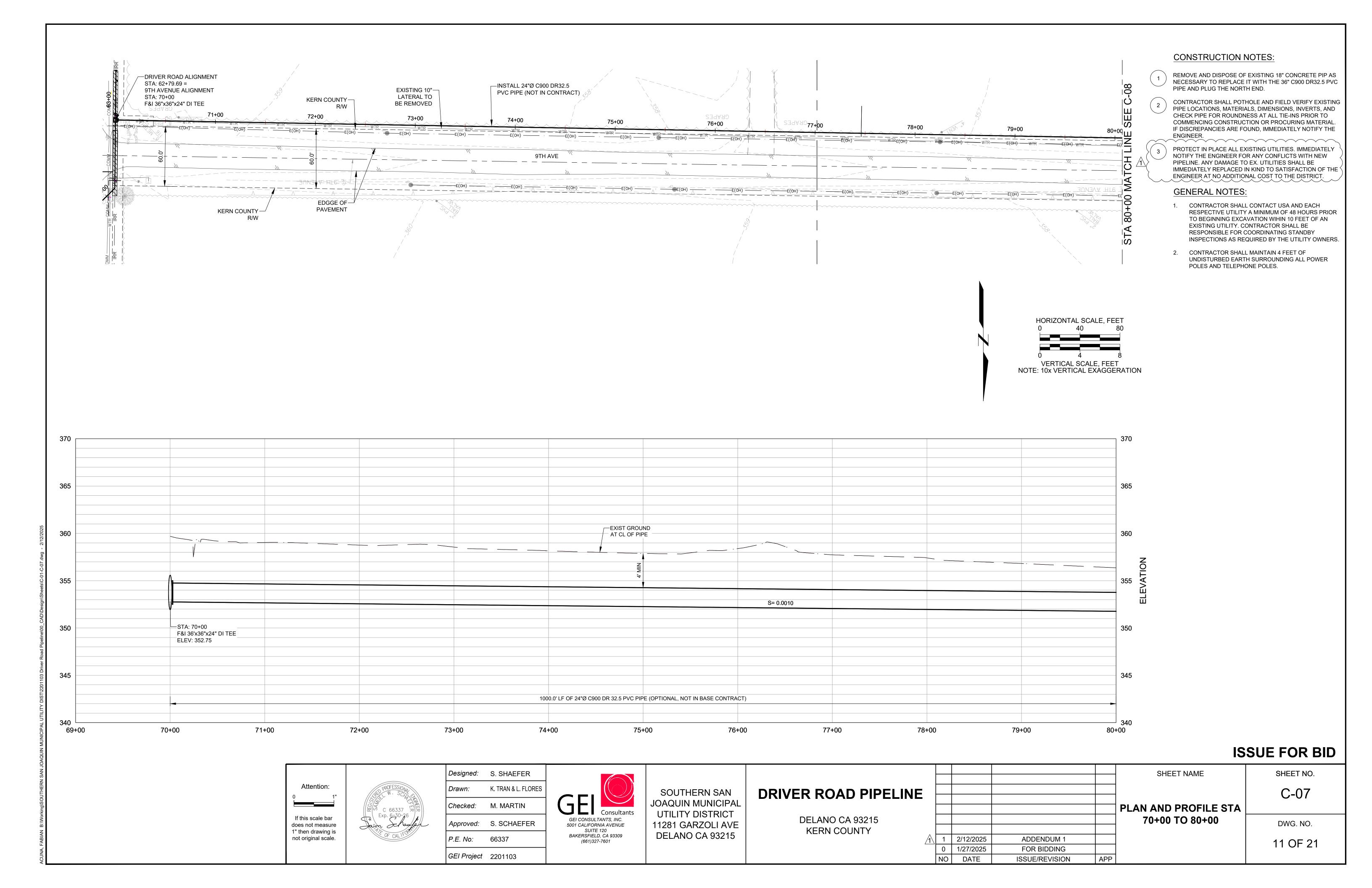


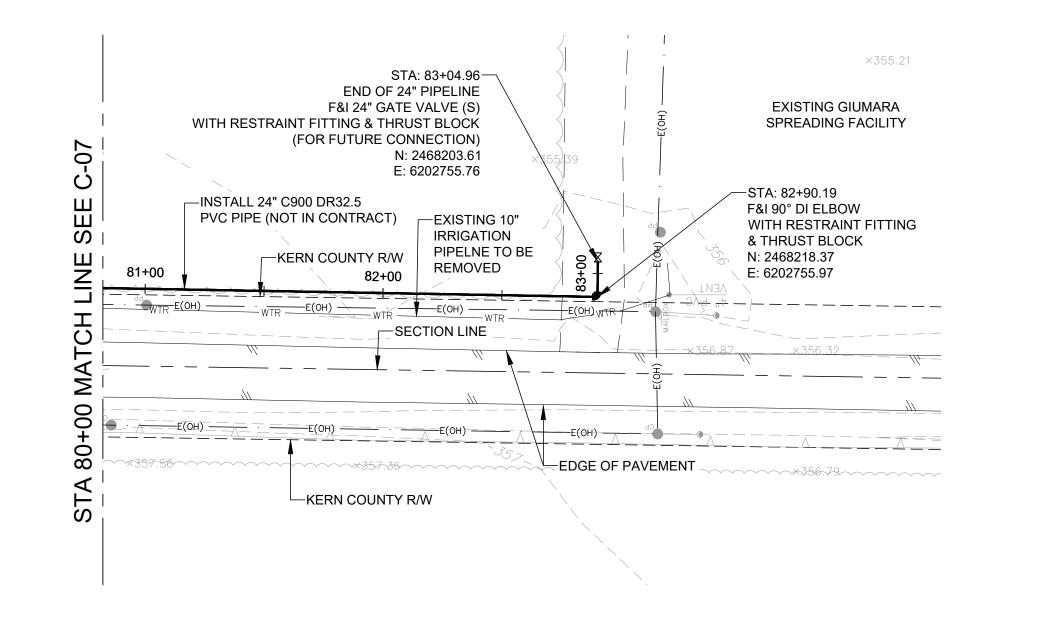


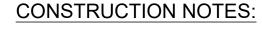












1 REMOVE AND DISPOSE OF EXISTING 18" CONCRETE PIP AS NECESSARY TO REPLACE IT WITH THE 36" C900 DR32.5 PVC PIPE AND PLUG THE NORTH END.

CONTRACTOR SHALL POTHOLE AND FIELD VERIFY EXISTING PIPE LOCATIONS, MATERIALS, DIMENSIONS, INVERTS, AND CHECK PIPE FOR ROUNDNESS AT ALL TIE-INS PRIOR TO COMMENCING CONSTRUCTION OR PROCURING MATERIAL. IF DISCREPANCIES ARE FOUND, IMMEDIATELY NOTIFY THE ENGINEER.

PROTECT IN PLACE ALL EXISTING UTILITIES. IMMEDIATELY
NOTIFY THE ENGINEER FOR ANY CONFLICTS WITH NEW
PIPELINE. ANY DAMAGE TO EX. UTILITIES SHALL BE
IMMEDIATELY REPLACED IN KIND TO SATISFACTION OF THE
ENGINEER AT NO ADDITIONAL COST TO THE DISTRICT.

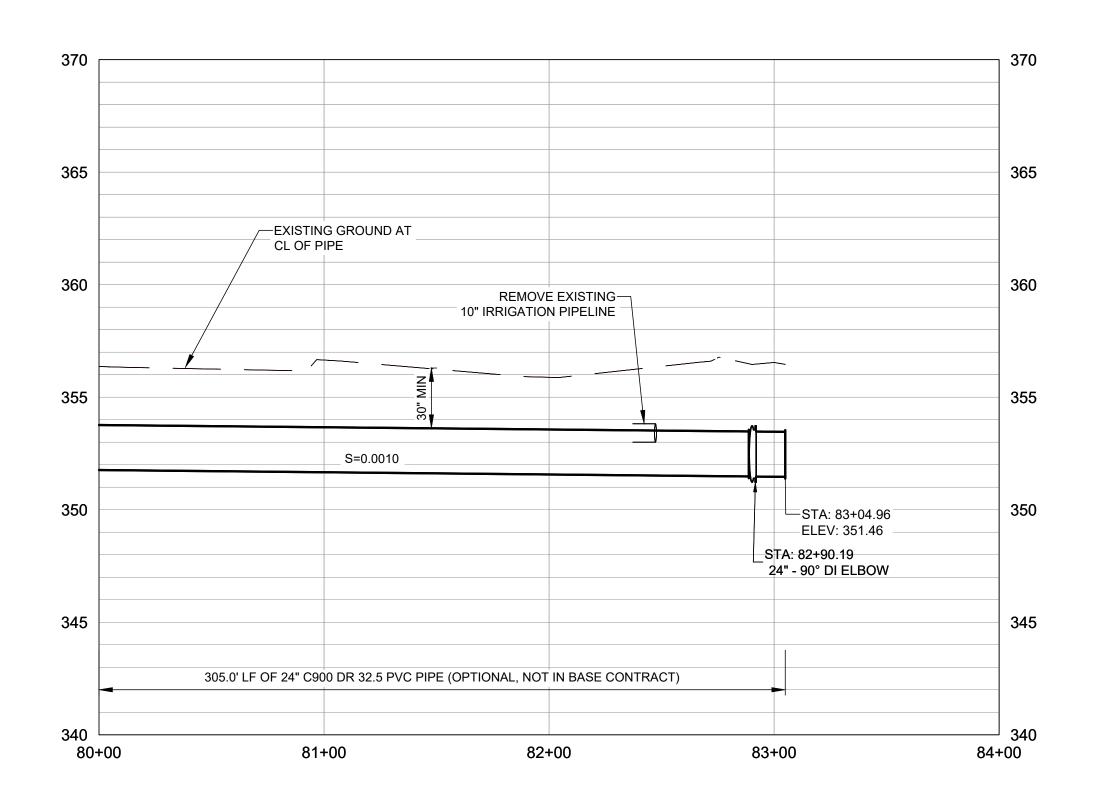
GENERAL NOTES:

HORIZONTAL SCALE, FEET

VERTICAL SCALE, FEET

NOTE: 10x VERTICAL EXAGGERATION

- 1. CONTRACTOR SHALL CONTACT USA AND EACH RESPECTIVE UTILITY A MINIMUM OF 48 HOURS PRIOR TO BEGINNING EXCAVATION WIHIN 10 FEET OF AN EXISTING UTILITY. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING STANDBY INSPECTIONS AS REQUIRED BY THE UTILITY OWNERS.
- 2. CONTRACTOR SHALL MAINTAIN 4 FEET OF UNDISTURBED EARTH SURROUNDING ALL POWER POLES AND TELEPHONE POLES.



ISSUE FOR BID

Attention:

0 1"

If this scale bar does not measure 1" then drawing is not original scale.



Designed: S. SHAEFER

Drawn: K. TRAN & L. FLORES

Checked: M. MARTIN

Approved: S. SCHAEFER

P.E. No: 66337

GEI Project 2201103



SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT 11281 GARZOLI AVE DELANO CA 93215 DRIVER ROAD PIPELINE

DELANO CA 93215

KERN COUNTY

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ADDENDUM 1

FOR BIDDING

ISSUE/REVISION

APP

PLAN AND PROFILE STA 80+00 TO STA 83+04.96

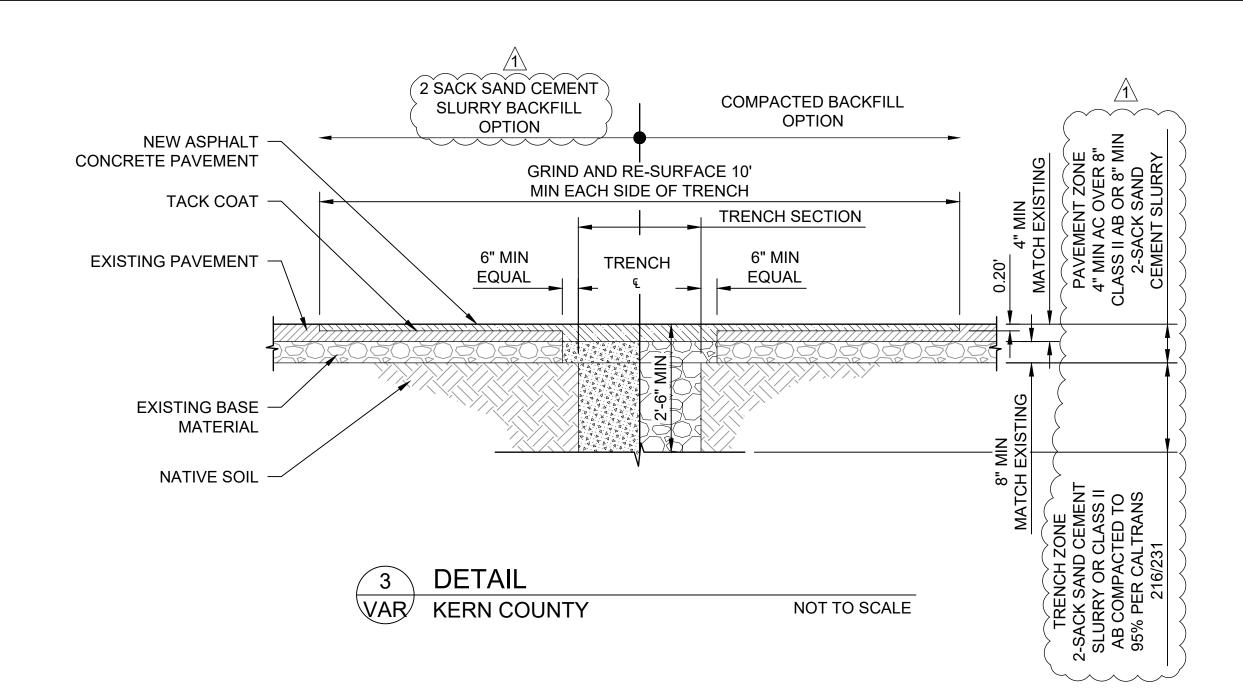
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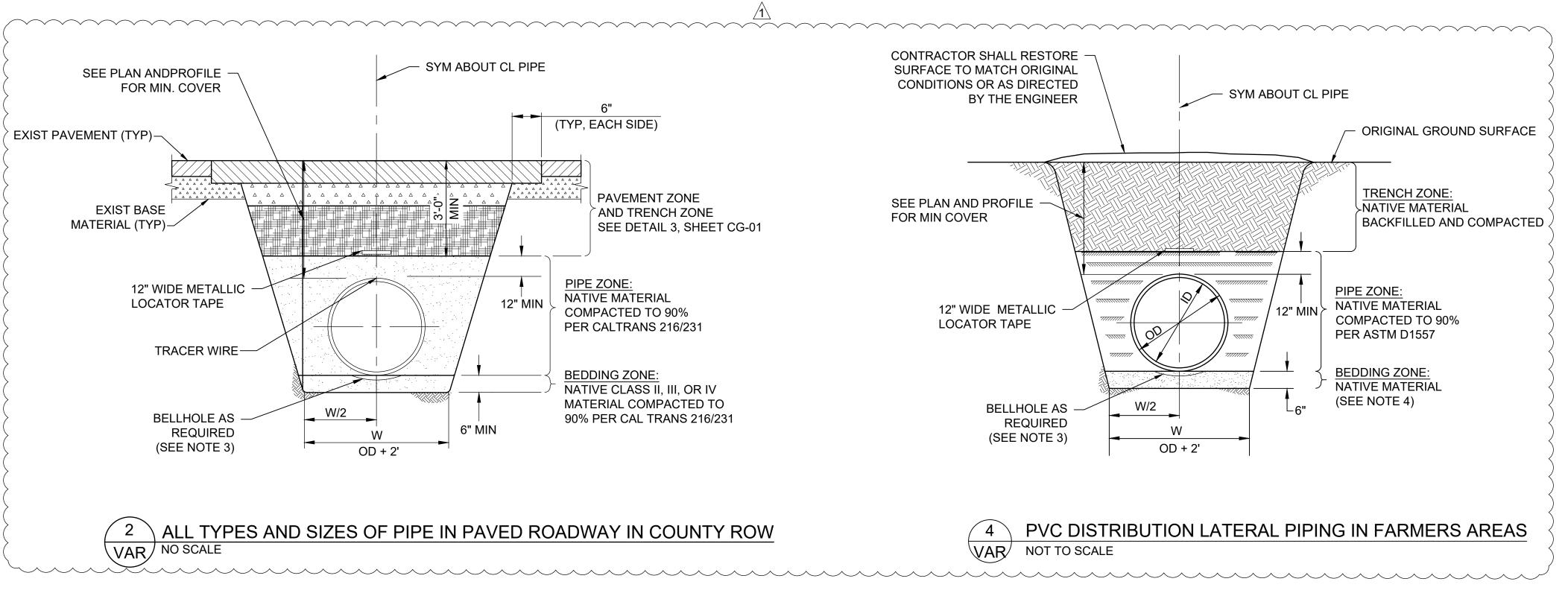
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12 OF 21





KERN COUNTY NOTES:

- AFTER EXCAVATION HAS BEEN BACKFILLED, THE EXISTING PAVEMENT SHALL BE REMOVED TO A LINE AT LEAST 6-INCHES BACK TO THE FIRM BANKS OF THE TRENCH ("T-CUT"), ON EACH SIDE.
- 2. WITHIN 30 CALENDAR DAYS AFTER BACKFILLING, ASPHALT CONCRETE SHALL BE PLACED AND COMPACTED OVER THE FULL WIDTH OF THE TRENCH, COLD MILLED, AND RESURFACED
- IT IS ASSUMED THAT THE EXISTING ROADWAY SURFACES CAN BE REPAIRED AS SHOWN IN THE DETAILS HEREON. A FULL DEPTH REPAIR IN LIEU OF MILL AND REPAVE, MAY BE REQUIRED AND WILL BE ALLOWED BY THE COUNTY. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THIS DETERMINATION PRIOR TO BIDDING. IF CONTRACTOR ELECTS TO PERFORM A FULL DEPTH REPLACEMENT. THE EXISTING AB SHALL BE COMPACTED TO A MINIMUM OF 90% PER CAL 216/231

GENERAL NOTES:

- ALL EARTHWORK SHALL BE IN ACCORDANCE WITH SECTION E EARTHWORK AND SITEWORK OF THE SPECIFICATIONS.
- 2. TRENCH BOTTOM OR BEDDING FOR ALL PIPE SHALL BE GRADED TO PROVIDE UNIFORM SUPPORT FOR THE ENTIRE LENGTH OF THE PIPE EXCEPT AT BELLHOLES AND RESTRAINED JOINTS.
- BELLHOLES FOR PIPE SHALL HAVE A CLEARANCE OF 3" BETWEEN THE BOTTOM OF THE BELLHOLE AND THE EXTERIOR OF THE PIPE BELL, BUT IN NO CASE SHALL BELLHOLES BE SMALLER THAN REQUIRED TO FACILITATE PLACING OF THE PIPE OR PROPER JOINING OF THE PIPE. WHERE THE BELL AND SPIGOT JOINS ARE RESTRAINED THE 3" CLEARANCE SHALL BE FROM THE TIE-ROD RESTRAINERS AND HORIZONTAL LENGTH SHALL BE AS REQUIRED TO FACILITATE INSTALLATION.
- COMPĂCŤEĎ BĂCKFILL SHALL BE COMPĂCŤEĎ TŎ A DĚGŘEĚ AŤ LĚASŤ EQUÍVÁLEŇT TO THE EXISTING DEGREE OF COMPACTING OF ADJACENT IN-PLACE EARTH MATERIALS AGAINST WHICH SUCH COMPACTED BACKFILL IS TO BE PLACED, OR TO A \ \(\frac{1}{2} \) MINIMUM OF 90% PER ASTM 1557, WHICHEVER IS GREATER. FOR DEFINITION OF COMPACTED BACKFILL AND OF MAXIMUM DENSITY, SEE SPECIFICATIONS.
- MINIMUM 3-INCH DEEP LAYER OF SCARIFIED MATERIAL WHEN IN HARD MATERIAL. IN UNSUITABLE MATERIAL, OVEREXCAVATE AS DIRECTED BY THE ENGINEER (6" MIN.) AND REPLACE WITH COMPACTED BACKFILL.
- W = PIPE O.D. + 24" MIN.
- ALL TRENCH SECTIONS SHALL COMPLY WITH CAL-OSHA REQUIREMENTS.
- 8. ALL SHORING SHALL BE DESIGNATED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.
- CONTRACTOR SHALL MAINTAIN MINIMUM 3-FEET OF UNDISTURBED EARTH BETWEEN EDGE OF TRENCH AND THE EDGE OF ALL UTILITY POLES.
- 10. ALL UNDERGROUND UTILITIES AND ABOVE GROUND UTILITIES SHALL BE PROTECTED IN PLACE. IF THE CONTRACTOR FINDS CONFLICT BETWEEN CONTRACT FACILITIES AND EXISTING FEATURES, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY AND FOLLOW NOTIFICATION UP IN WRITING WITHIN 24 HOURS.
- 11. BEDDING FOR ALL PIPE SHALL BE GRADED TO PROVIDE UNIFORM SUPPORT FOR THE ENTIRE LENGTH OF THE PIPE EXCEPT AT BELLHOLES.

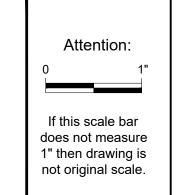
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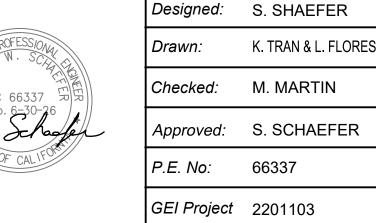
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SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT 11281 GARZOLI AVE **DELANO CA 93215**

DRIVER ROAD PIPELINE DELANO CA 93215 KERN COUNTY

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