

CITY OF YUBA CITY
STAFF REPORT

Date: September 17, 2019
To: Honorable Mayor & Members of the City Council
From: Public Works Department
Presented by: Benjamin Moody, Deputy Public Works Director – Engineering

Summary

Subject: 2019 Wastewater Collection Project (Approval of Plans & Specifications)

Recommendation: Adopt a Resolution approving the plans and specifications for the 2019 Wastewater Collection Project and authorizing advertisement for bids on the project.

Fiscal Impact: \$335,000 – Engineer’s Estimate (CIP Account No. 1104)

Purpose:

To maintain the City’s wastewater collection system’s service and efficiency through ongoing rehabilitation and major maintenance.

Background:

The existing wastewater collection system in Yuba City is aging. In some cases, pipelines are beyond their service life and at or near failure. Public Works has discovered through maintenance activity and the use of the City’s Closed Circuit Television (CCTV) truck that there are existing sewer lines at various locations in need of repair. Wastewater pipelines in this project contain sections of pipe that are missing, cracked, sagging, and/or deteriorated to a point that has led to pipe failure.

In an ongoing effort to replace failed and failing sewer pipelines, a list of priority locations was developed. The list prioritizes pipelines based on age, material, location, length, and number of services.

The sewer pipeline locations included in the proposed 2019 project are:

- Royal River Drive at Cold Water Street
- Page Avenue at Robinson Avenue
- Francis Avenue at Colusa Avenue
- Washington Avenue between Upland Drive and Wendell Way

The proposed 2019 Wastewater Collection Project would replace approximately 1,517 LF of sewer pipe.

Analysis:

Public Works has prepared the project plans, specifications, and cost estimate for the 2019 Wastewater Collection Project. With Council approval of the plans and specifications and authorization to advertise for bids, staff proposes the following schedule:

| | |
|--------------------|---------------|
| Advertise for Bid: | October 2019 |
| Award Contract: | December 2019 |
| Construction: | Winter 2019 |
| Completion: | Spring 2020 |

The plans and specifications for the project are on file in the Public Works office for review. The City's Public Works Department will perform construction management and inspection.

Fiscal Impact:

The estimated total project cost to rehabilitate and/or remove existing sewer pipelines is \$335,000. This estimate includes 10% contingency and 5% construction management costs. CIP Account No. 1104 (Reoccurring Collection or Rehabilitation System Project) has sufficient funding programmed for this project.

Alternatives:

Delay or modify the recommended action to approve the plans and specifications. Delaying the project may interrupt sewer service to City residents and businesses.

Recommendation:

Adopt a resolution approving the plans and specifications for the 2019 Wastewater Collection Improvements Project – Various Locations and authorizing advertisement for bids on the project.

Attachments:

1. Resolution
 - a. Plans & Specifications
2. Location Map

Prepared by:

/s/ Nick Menezes
Nick Menezes
Assistant Engineer

Submitted by:

/s/ Michael Rock
Michael Rock
City Manager

Reviewed by:

Department Head

[DL](#)

Finance

[RB](#)

City Attorney

[SLC by email](#)

ATTACHMENT 1

RESOLUTION NO.

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUBA CITY
APPROVING THE PLANS AND SPECIFICATIONS FOR THE 2019
WASTEWATER COLLECTION IMPROVEMENTS – VARIOUS LOCATIONS
PROJECT AND AUTHORIZE ADVERTISEMENT FOR BIDS ON THE
PROJECT**

BE IT RESOLVED AND ORDERED by the City Council of the City of Yuba City that the plans and specifications for the 2019 Wastewater Collection Improvements – Various Locations Project be approved.

BE IT FURTHER RESOLVED AND ORDERED by the City Council of the City of Yuba City that the Public Works Department is hereby authorized and directed to advertise for bids for the 2019 Wastewater Collection Improvements – Various Locations Project.

The foregoing resolution was duly and regularly introduced, passed, and adopted by the City Council of the City of Yuba City at a regular meeting thereof held on the 17th day of September 2019.

AYES:

NOES:

ABSENT:

Shon Harris, Mayor

ATTEST:

Patricia Buckland, City Clerk

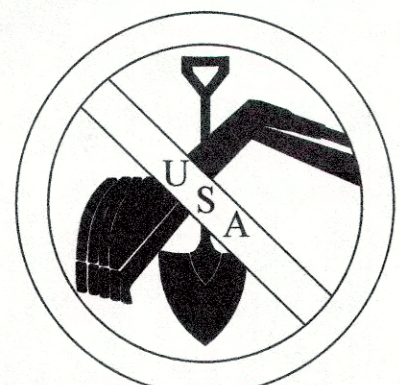
APPROVED AS TO FORM
COUNSEL FOR YUBA CITY:

Shannon Chaffin, City Attorney
Aleshire & Wynder, LLP

Attachment(s): Plans & Specifications

ATTACHMENT

CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



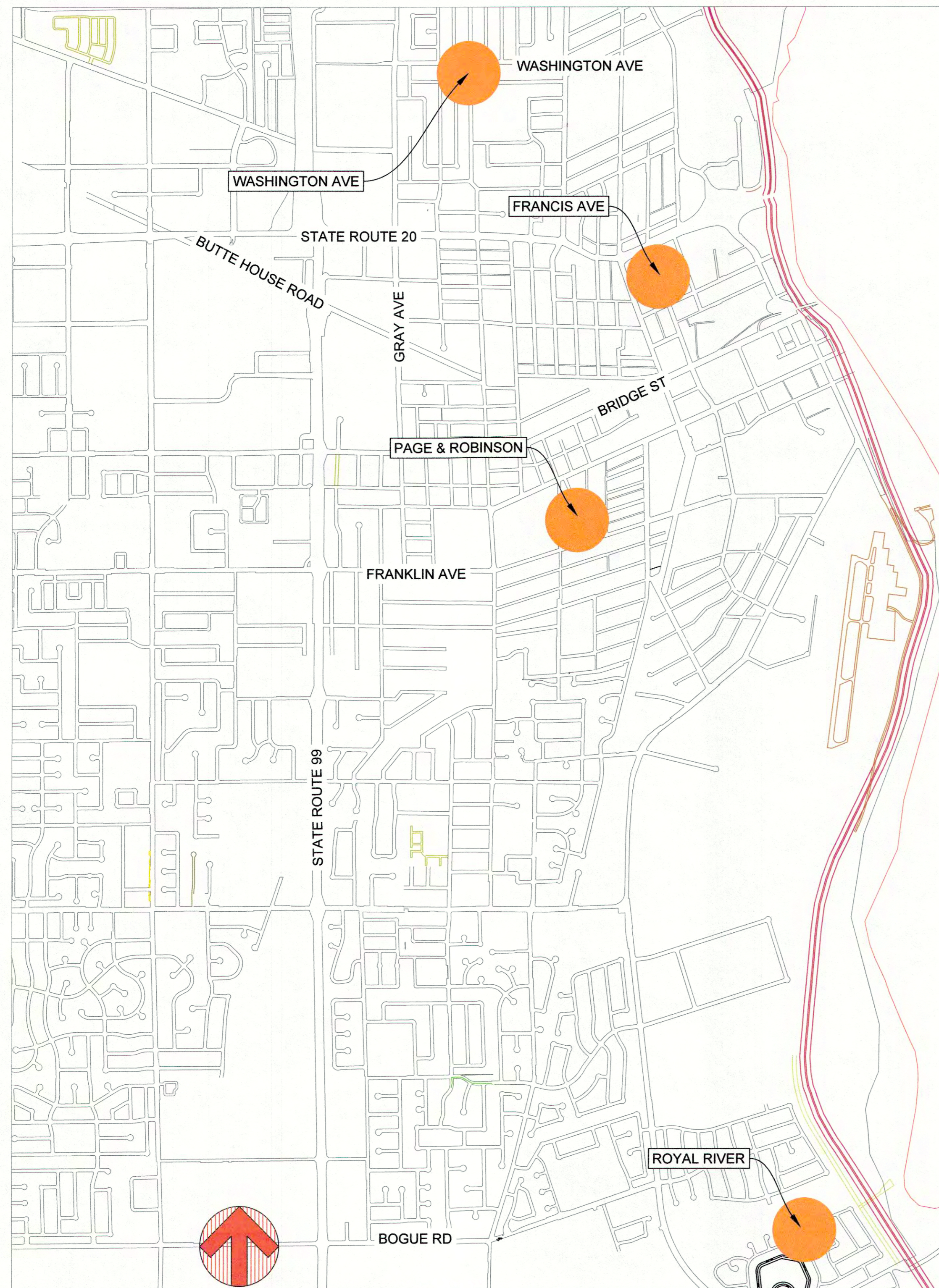
UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY
COMPANIES TWO (2) WORKING DAYS PRIOR
TO GRADING OR DIGGING

CITY of YUBA CITY

Plans For

2019 WASTEWATER COLLECTION IMPROVEMENTS

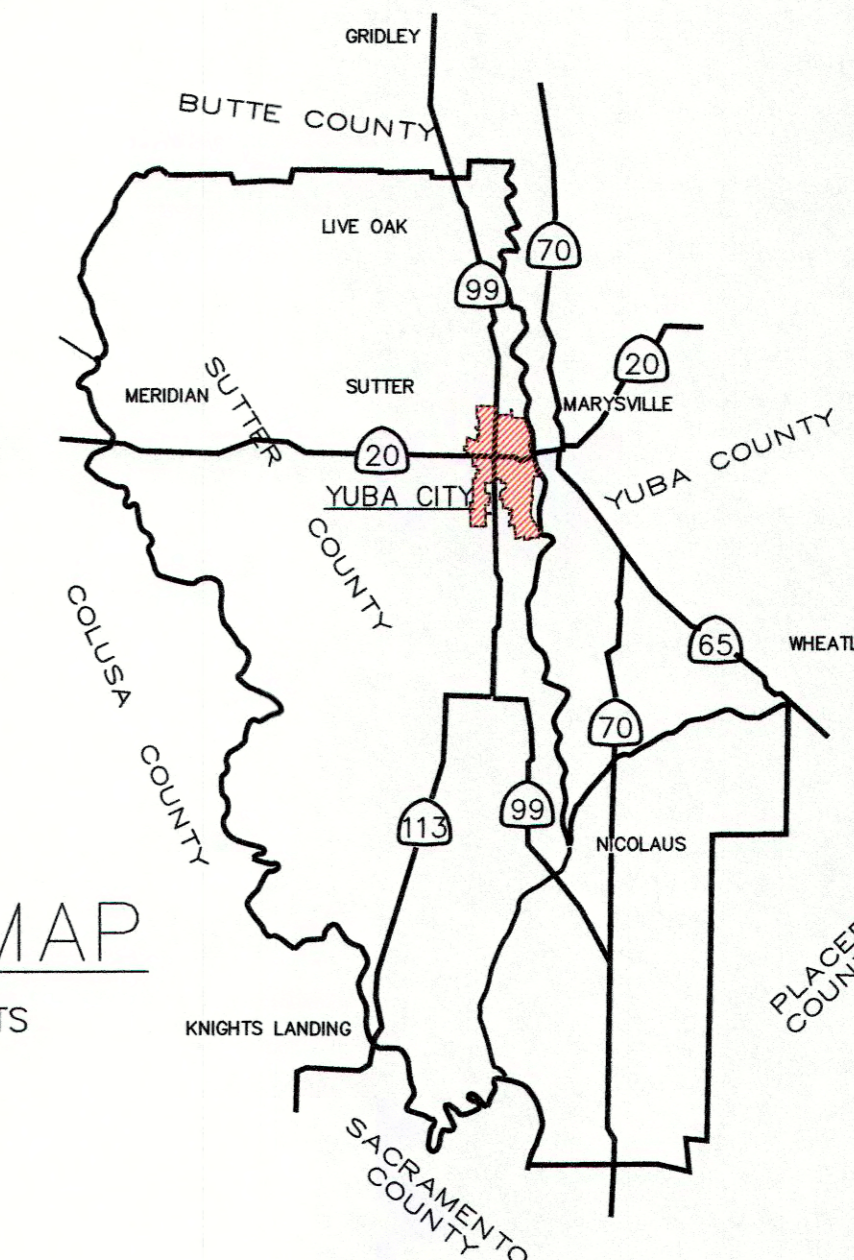
VARIOUS LOCATIONS



LOCATION MAP

GENERAL NOTES

- ALL WORK EMBODIED ON THESE PLANS SHALL BE DONE IN CONFORMITY WITH THE APPLICABLE PROVISIONS OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF LOCAL STREETS AND ROADS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION DATED MAY 2010.
- PER SECTION 4215 OF THE CALIFORNIA GOVERNMENT CODE THE LOCATION OF EXISTING SERVICE LATERALS IF SHOWN ON THESE PLANS IS APPROXIMATE ONLY AND THE CITY OF YUBA CITY IN NO CASE GUARANTEES EITHER THE ACCURACY OR THE COMPLETENESS OF THE LOCATIONS INDICATED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL SERVICES AND TO CONDUCT HIS OPERATIONS SO THAT THEY ARE NOT DAMAGED.
- CONTRACTOR IS TO VIDEO OR PHOTOGRAPH JOBSITE AREA TO DOCUMENT EXISTING CONDITIONS PRIOR TO START (i.e. CULVERTS, DRIVEWAYS, EXISTING PAVEMENT CONDITIONS, STRIPING, EDGE OF ROAD, PRIVATE PROPERTY, LANDSCAPING, FENCING, ETC.) TO MINIMIZE UNDUE CLAIMS. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL PROPERTY TO ORIGINAL OR BETTER CONDITION, INCLUDING TRAFFIC MARKINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TRAFFIC MARKERS AND/OR MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION. TEMPORARY MARKERS SHALL BE USED DURING CONSTRUCTION.
- SOIL IN YUBA CITY IS GENERALLY CLAYEY SAND, CLAYEY SILT, SILTY SAND, SAND, ETC. THE CITY OF YUBA CITY MAKES NO REPRESENTATIONS AS TO THE TYPE OF SOIL THAT WILL BE ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DO ANY SOILS TESTS NECESSARY TO DETERMINE THE ACTUAL SOIL CONDITIONS THAT WILL BE ENCOUNTERED ON THIS PROJECT.
- THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE, OR ANY OTHER LICENSE(S) REQUIRED BY THE STATE OF CALIFORNIA.
- THE CONTRACTOR SHALL PROVIDE THE USA TICKET NUMBER FOR THIS PROJECT TO THE CITY PRIOR TO COMMENCING ANY EXCAVATIONS.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC FLOW ON AFFECTED ROADWAYS DURING NON-WORKING HOURS, AND MINIMIZE TRAFFIC IMPACTS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW TRAFFIC SAFETY MEASURES IN ACCORDANCE WITH THE CALTRANS "MANUAL OF TRAFFIC SAFETY CONTROLS FOR CONSTRUCTION AND MAINTENANCE ZONES." CITY OF YUBA CITY EMERGENCY SERVICE PROVIDERS SHALL BE NOTIFIED, AT LEAST TWO WORKING DAYS IN ADVANCE (530) 822-4661, OF PROPOSED CONSTRUCTION SCHEDULED BY THE CONTRACTOR. COORDINATE NOTIFICATION WITH THE CITY INSPECTOR.
- THE CONTRACTOR SHALL KEEP THE TRAVELED WAY AND ADJOINING PUBLIC STREETS FREE AND CLEAN OF PROJECT DIRT, MUD, MATERIALS, AND DEBRIS DURING THE CONSTRUCTION PERIOD, AND/OR AS FOUND NECESSARY BY THE CITY. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AS NEEDED TO CONTROL TRANSPORT OF CONSTRUCTION DEBRIS.
- ANY EXCESS MATERIALS SHALL BE CONSIDERED THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- PER SECTION 4215 OF THE CALIFORNIA GOVERNMENT CODE THE LOCATION OF EXISTING SERVICE LATERALS AND UNDERGROUND UTILITIES IF SHOWN ON THESE PLANS IS APPROXIMATE ONLY AND THE CITY OF YUBA CITY IN NO CASE GUARANTEES EITHER THE ACCURACY OR THE COMPLETENESS OF THE LOCATIONS INDICATED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATION OF ALL SERVICES AND UTILITIES AND TO CONDUCT OPERATIONS SO NO DAMAGE IS MADE.
- CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO EXCAVATION TO ENSURE NO UTILITY CONFLICTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AT THE CONTRACTORS EXPENSE.
- ANY CURB, GUTTER, OR SIDEWALK WHICH IS DAMAGED BY CONTRACTORS OPERATIONS BEFORE OR DURING CONSTRUCTION, SHALL BE REPLACED.
- STORAGE OF CONSTRUCTION MATERIAL IS NOT ALLOWED IN THE TRAVEL WAYS.



VICINITY MAP

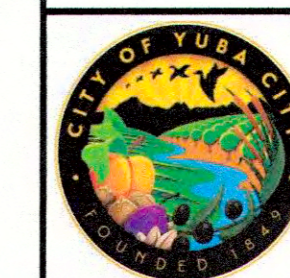
NTS

INDEX TO PLANS

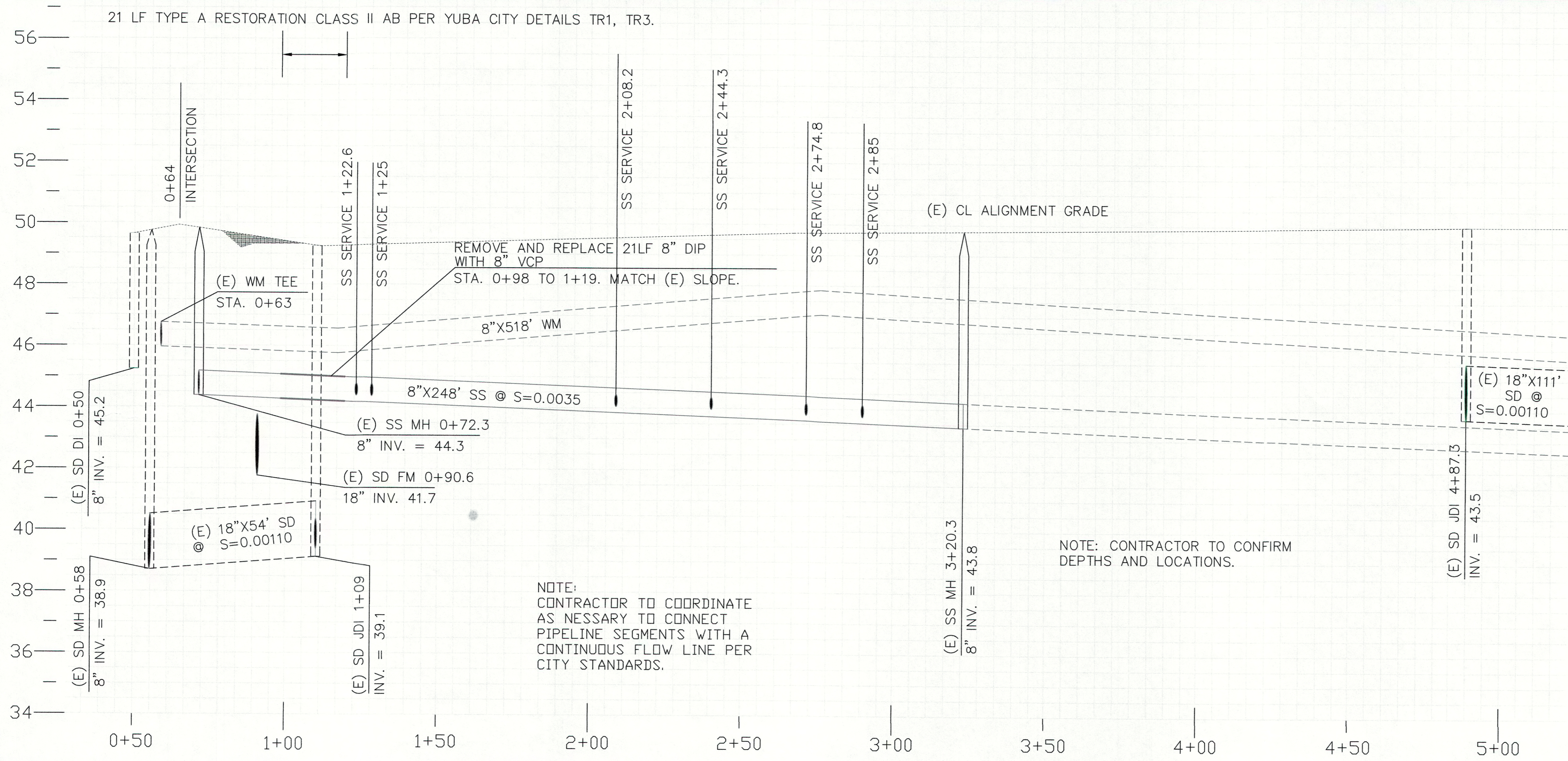
| SHEET No. | DESCRIPTION |
|-----------|---|
| 1 | COVER |
| 2 | ABBREV |
| 3 | COLDWATER PLAN & PROFILE |
| 4 | PAGE/ROBINSON PLAN & PROFILE |
| 5 | FRANCIS PLAN & PROFILE STA 0+00 TO STA 3+72 |
| 6 | FRANCIS PLAN & PROFILE STA 3+72 TO STA 8+50 |
| 7 | WASHINGTON PLAN & PROFILE |
| 7 | DETAILS |

CITY OF YUBA CITY

2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT

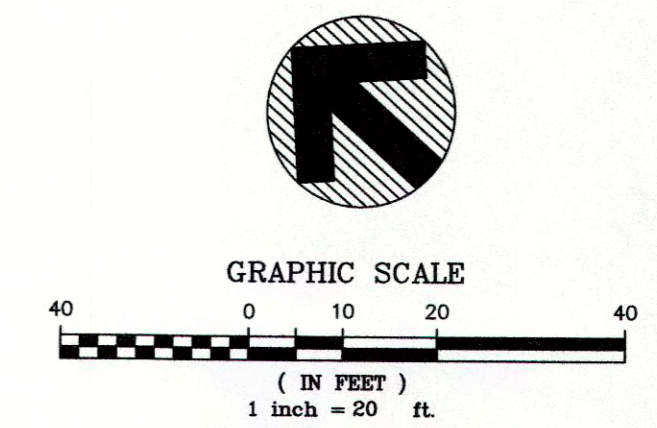
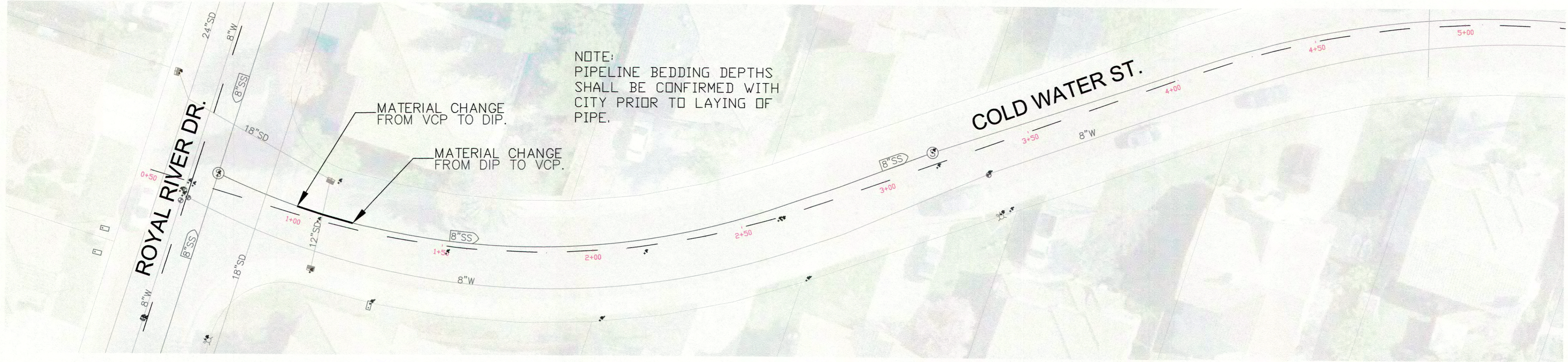


| | | |
|--|------------------------------|------------------------------|
| SUBMITTED BY: NICK MENEZES | DESIGN BY: NM | DRAWING NO. 5450-D |
| 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM | SHEET <u>1</u> |
| | CHECKED BY: KB | OF <u>8</u> SHEETS |
| | DATE OF PLANS: 03-19-2019 | |

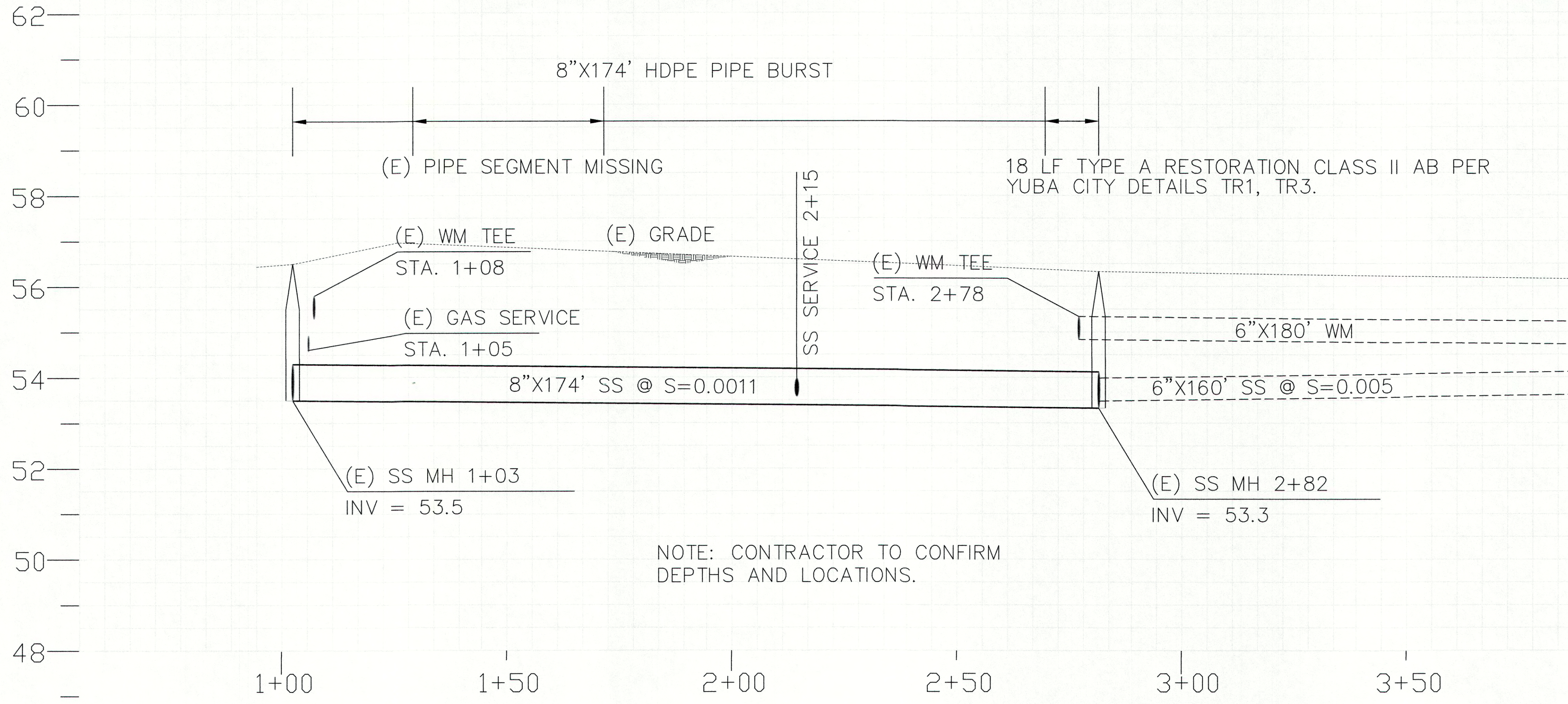


GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE PUBLIC NOTICE AND SCHEDULE TO HOMES EFFECTED BY WORK A MINIMUM OF (1) WEEK PRIOR TO START OF WORK.
2. CONTRACTOR SHALL CLEAN MAIN, CONDUCT MAIN INSPECTION, AND RECONNECT ALL SERVICE LATERALS.
3. CONTRACTOR SHALL PREPARE AND IMPLEMENT A BYPASS PLAN DESIGNED TO MAINTAIN EXISTING SEWAGE FLOWS TO ALL ACTIVE SERVICES EFFECTED DURING THE SHUT DOWN OF ANY EXISTING SEWER MAINS.
4. ALL DAMAGE TO EXISTING PROPERTY THAT OCCURS DURING THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
5. CONTRACTOR IS RESPONSIBLE FOR POTHOLING ALL UTILITIES TO VERIFY LOCATIONS AND ELEVATIONS PRIOR TO ANY WORK.
6. CONTRACTOR TO PROVIDE APPROVED TRAFFIC CONTROL PLAN.
7. SEWER LINE IS IN CLOSE PROXIMITY TO EXISTING UTILITIES AND STORM DRAINS. CONTRACTOR TO COORDINATE ACTIVITIES NECESSARY TO REMOVE AND REPLACE SEWER MAIN TO AVOID ANY DAMAGE TO ADJACENT UTILITIES.
8. SOIL IN THIS AREA IS MOSTLY SAND. CONTRACTOR SHALL ADJUST EXCAVATION AND TRENCHING ACTIVITIES TO INCLUDE SLOWER EXCAVATIONS AND/OR ADDITIONAL SHORING.
9. CONTRACTOR TO CONFIRM INITIAL BACKFILL DIMENSIONS WITH CITY PRIOR TO PLACEMENT OF VCP.

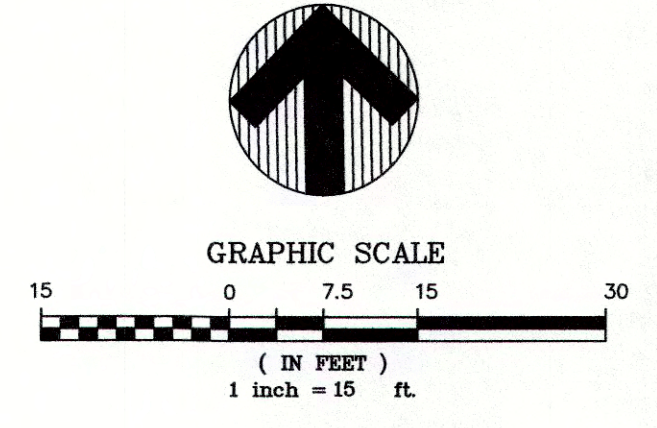
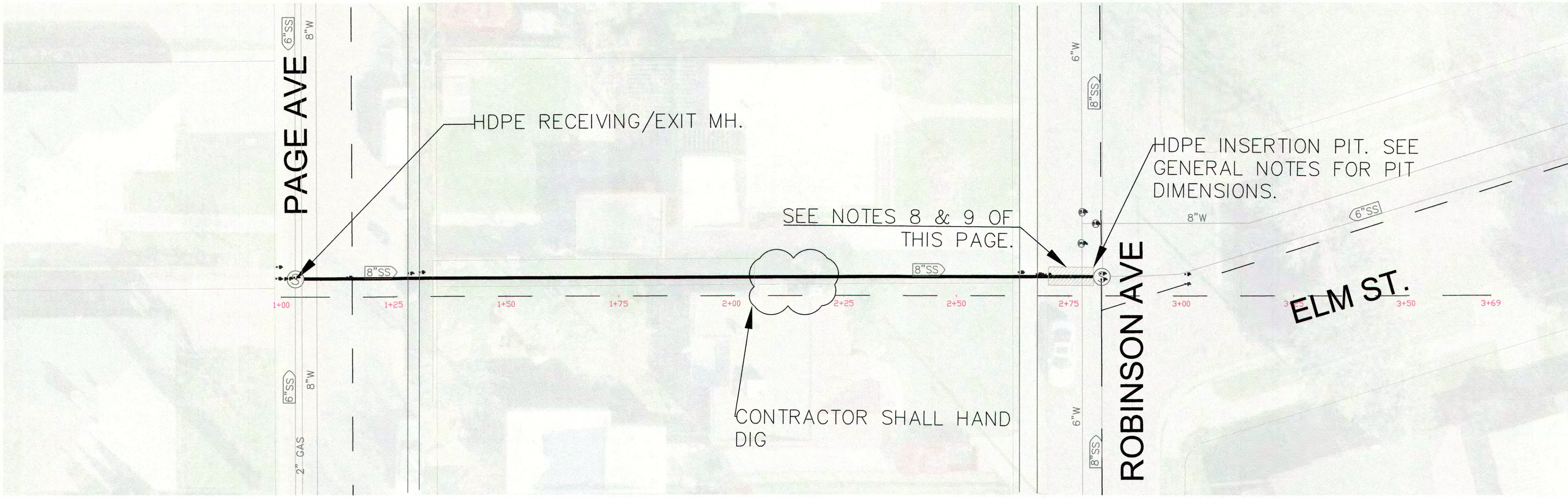


| | | |
|--|--|--------------------------------------|
| CITY OF YUBA CITY | | |
| 2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT - COLDWATER @ ROYAL RIVER | | |
| | SUBMITTED BY: NICK MENEZES | DESIGN BY: NM |
| | 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM |
| | CHECKED BY: KB | DATE OF PLANS: 03-19-2019 |
| | | |
| | | DRAWING NO. 5450-D |
| | | SHEET 3 OF 8 SHEETS |

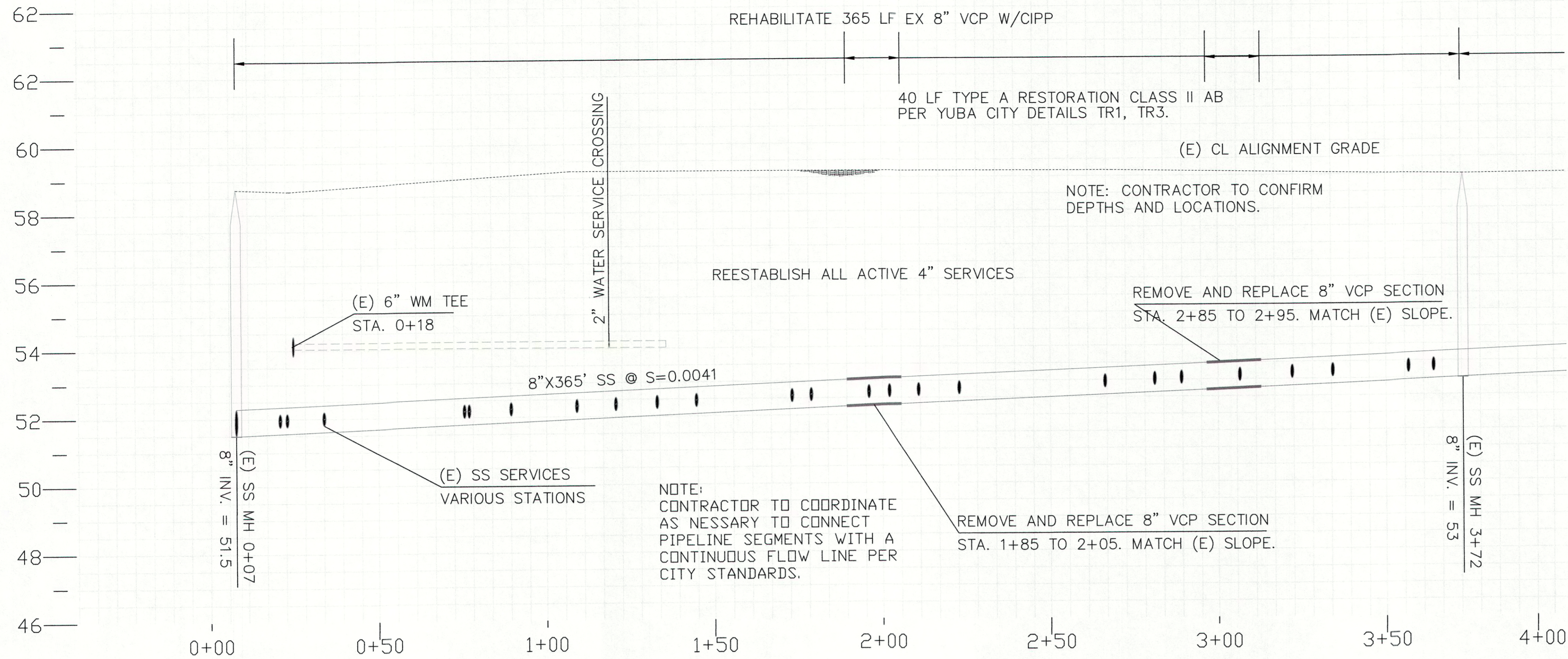


GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE PUBLIC NOTICE AND SCHEDULE TO ALL HOME OWNERS IN AREA A MINIMUM OF (1) WEEK PRIOR TO START OF WORK.
2. CONTRACTOR SHALL CLEAN MAIN, CONDUCT MAIN INSPECTION, AND RECONNECT ALL SERVICE LATERALS.
3. CONTRACTOR SHALL PREPARE AND IMPLEMENT A BYPASS PLAN DESIGNED TO MAINTAIN EXISTING SEWAGE FLOWS TO ALL ACTIVE EFFECTED SERVICES DURING THE SHUT DOWN OF EXISTING SEWER MAINS.
4. ALL DAMAGE TO EXISTING PROPERTY THAT OCCURS DURING THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
5. CONTRACTOR IS RESPONSIBLE FOR POTHOLING ALL UTILITIES TO VERIFY LOCATIONS AND ELEVATIONS PRIOR TO ANY WORK.
6. CONTRACTOR TO CONFIRM ACTIVE LATERALS AND REESTABLISH CONNECTIONS. CONTRACTOR MUST ALLOW FOR RELAXATION PERIOD PER MANUFACTURER REQUIREMENTS PRIOR TO REESTABLISHING CONNECTIONS.
7. CONTRACTOR SHALL SELECT PIPE BURSTING METHOD APPROPRIATE TO THE SURFACE/SUBSURFACE CONDITIONS AND EXISTING PIPE MATERIALS. PIPE BURSTING METHOD SHALL BE APPROVED BY CITY ENGINEER BEFORE PRIOR TO ANY PIPE BURSTING ACTIVITIES
8. CONTRACTOR SHALL ENSURE PIT DIMENSIONS FOLLOW HDPE MANUFACTURER BENDING RADIUS REQUIREMENTS AND MAINTAIN EXISTING GRADE OF SEWER LINE. CONTRACTOR MUST CONFIRM UTILITY LOCATIONS AND DEPTHS PRIOR TO PIT EXCAVATION.
9. CONTRACTOR TO GRIND AND PAVE TO (E) LIP IF PIT EXTENDS TO OR WITHIN 12" OF (E) LIP.
10. MODIFICATIONS TO MANHOLE WALLS, FLOORS, AND CHANNELS MAY BE PERFORMED AS NEEDED. AFTER PIPELINE BURSTING, CONTRACTOR SHALL SEAL ANY VOIDS OR CRACKS. HDPE PIPE SHALL EXTEND A MINIMUM OF SIX (6) INCHES INTO EACH MANHOLE AT TIME OF INSTALLATION AND BE CUT FLUSH WITH MANHOLE WALL AFTER THERMAL RETRACTION. TRANSITIONS SHALL BE SMOOTH.
11. ALLOW A MINIMUM OF TWELVE HOURS BEFORE CONNECTING PIPE TO MANHOLES AND LATERALS TO ALLOW PIPE TO ADJUST FOR TEMPERATURE AND STRAIN.
12. SEWER LINE IS IN CLOSE PROXIMITY TO EXISTING UTILITIES AND STORM DRAINS. CONTRACTOR TO COORDINATE ACTIVITIES NECESSARY TO REMOVE AND REPLACE SEWER MAIN TO AVOID ANY DAMAGE TO ADJACENT UTILITIES.

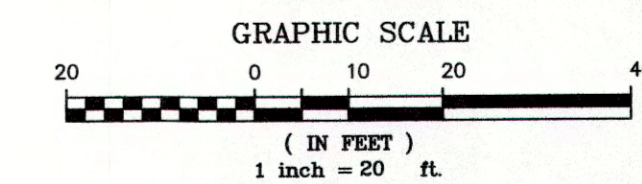
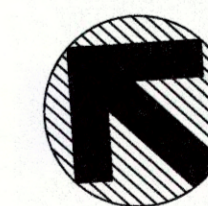


| | | | |
|--|--|---------------------------|--------------------|
| CITY OF YUBA CITY | | | |
| 2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT - PAGE AND ROBINSON | | | |
| | SUBMITTED BY: NICK MENEZES | DESIGN BY: NM | DRAWING NO. |
| | 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM | 5450-D |
| | CHECKED BY: KB | DATE OF PLANS: 03-19-2019 | SHEET <u>4</u> |
| | | | OF <u>8</u> SHEETS |



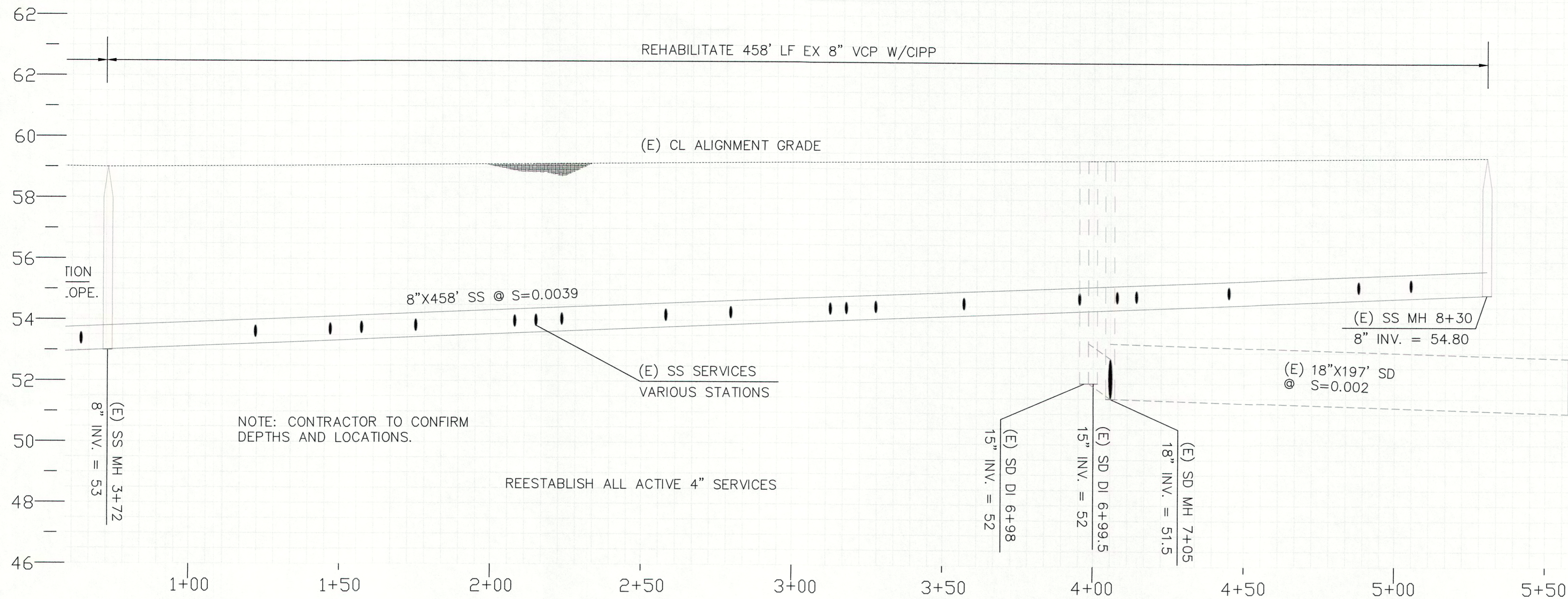
GENERAL NOTES:

1. CALTRANS TRAFFIC CONTROL DOUBLE ENCROACHMENT PERMIT REQUIRED FOR TRAFFIC SIGN PLACEMENT ON HWY 20. TRAFFIC CONTROL PLAN TO BE APPROVED BY CALTRANS AND MUST FOLLOW CALTRANS STANDARDS AND SPECIFICATIONS. PERMIT MUST BE OBTAINED BEFORE ANY WORK BEGINS ON THIS SEGMENT.
2. CONTRACTOR SHALL PROVIDE PUBLIC NOTICE AND SCHEDULE TO ALL BUSINESSES IN AREA A MINIMUM OF (1) WEEK PRIOR TO START OF WORK.
3. CONTRACTOR SHALL CONDUCT MAIN INSPECTION AFTER LINING OPERATION, AND RECONNECT ALL ACTIVE SERVICE LATERALS.
4. CONTRACTOR SHALL PREPARE AND IMPLEMENT A BYPASS PLAN DESIGNED TO MAINTAIN EXISTING SEWAGE FLOWS TO ALL ACTIVE EFFECTIVE SERVICES DURING THE SHUT DOWN OF EXISTING SEWER MAINS.
5. ALL DAMAGE TO EXISTING PROPERTY THAT OCCURS DURING THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
6. CONTRACTOR TO VERIFY ALL ACTIVE LATERALS PRIOR TO RECONNECTION.



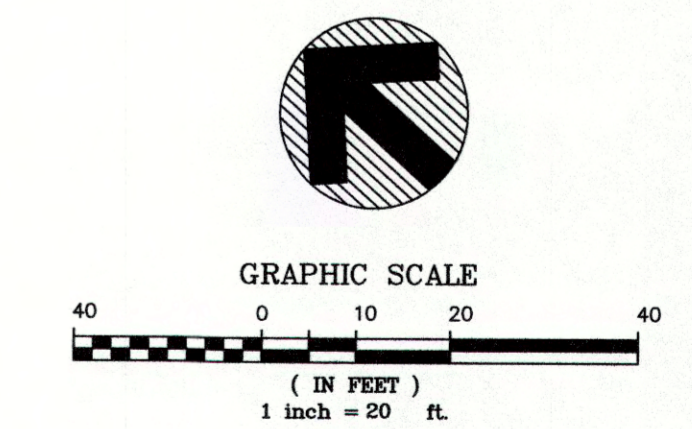
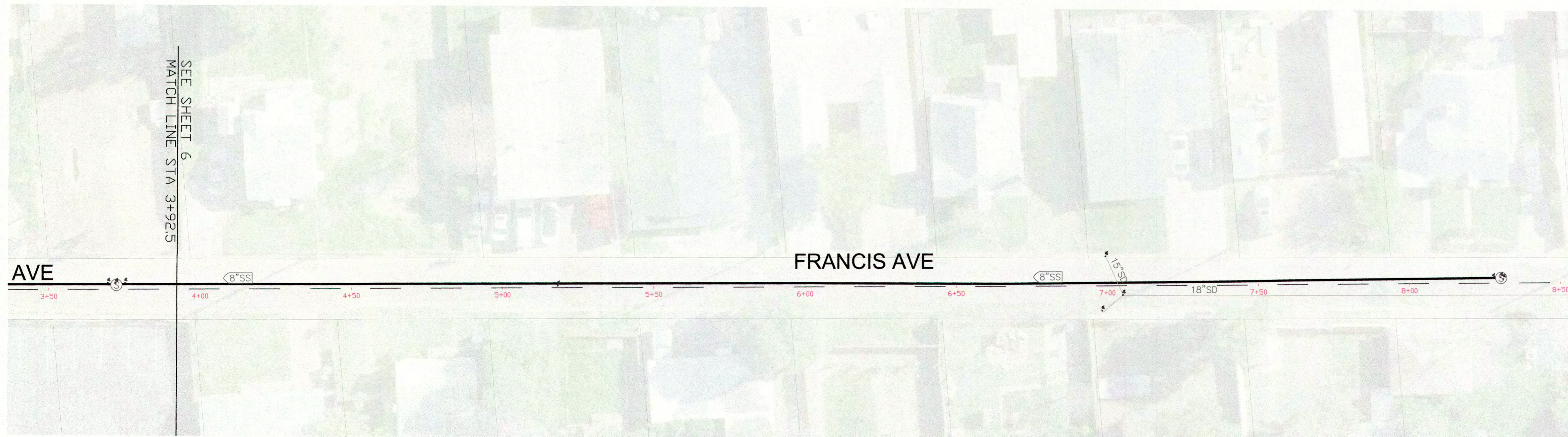
| | | | |
|---|--|--------------------|----------------|
| CITY OF YUBA CITY | | | |
| 2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT - FRANCIS STA. 0+00 TO STA. 3+72 | | | |
| | SUBMITTED BY: NICK MENEZES | DESIGN BY: NM | DRAWING NO. |
| | 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM | 5450-D |
| | DATE OF PLANS: 03-19-2019 | CHECKED BY: KB | SHEET <u>5</u> |
| | | OF <u>7</u> SHEETS | |



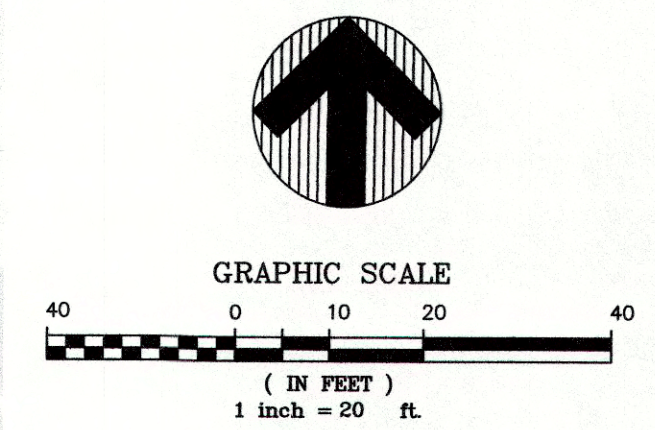
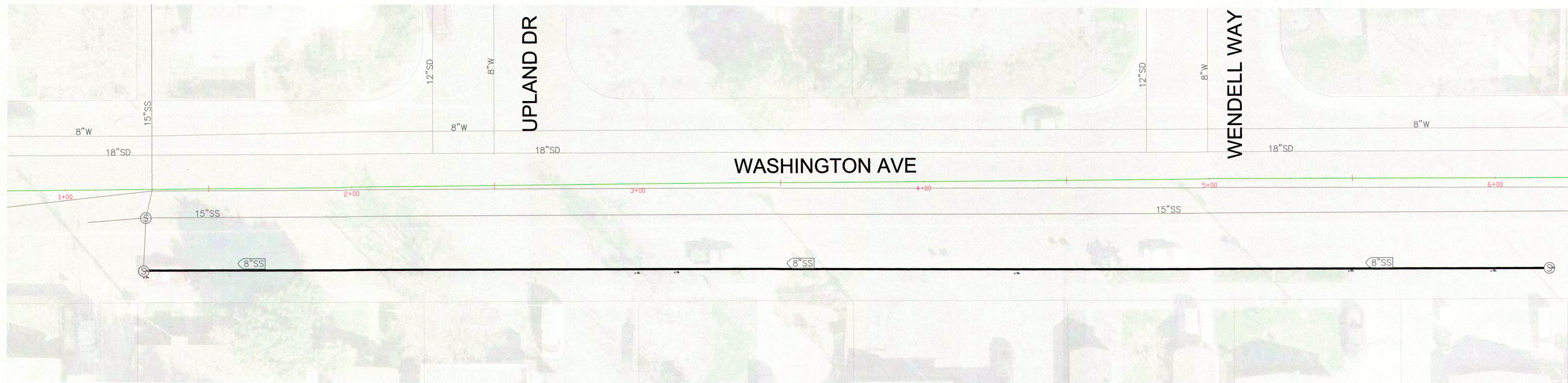
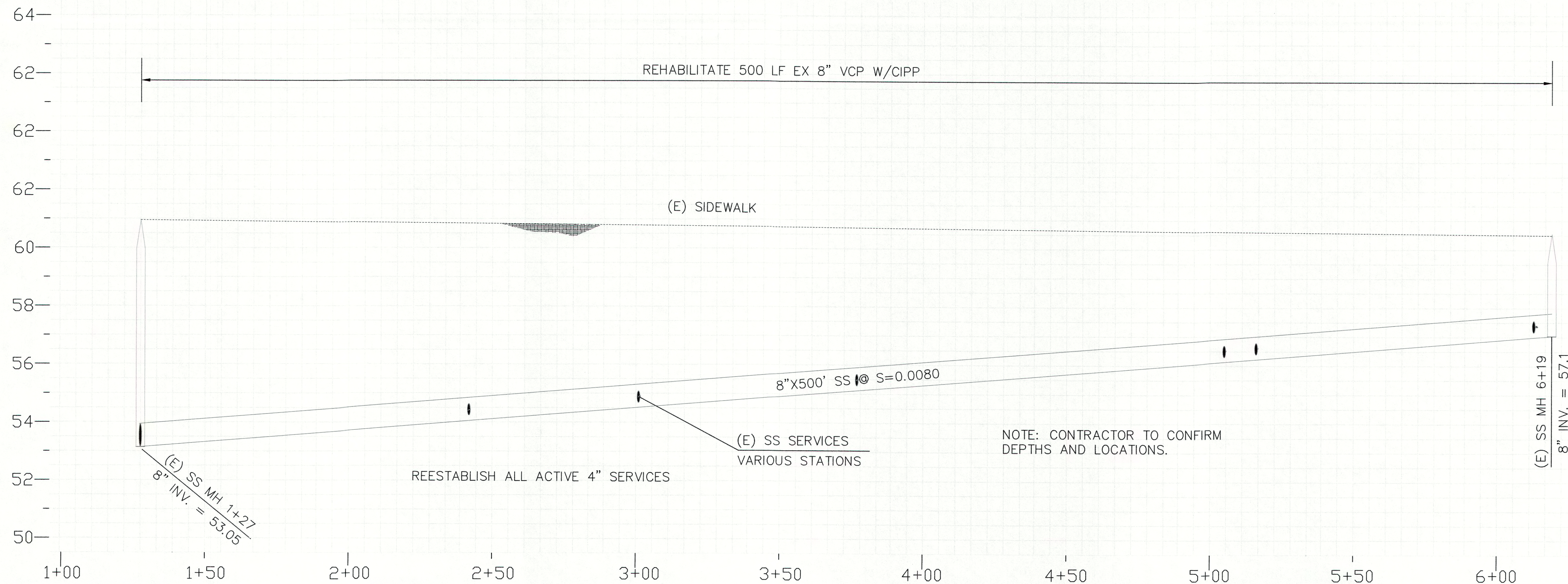


GENERAL NOTES:

1. CALTRANS TRAFFIC CONTROL DOUBLE ENCROACHMENT PERMIT REQUIRED FOR TRAFFIC SIGN PLACEMENT ON HWY 20. TRAFFIC CONTROL PLAN TO BE APPROVED BY CALTRANS AND MUST FOLLOW CALTRANS STANDARDS AND SPECIFICATIONS. PERMIT MUST BE OBTAINED BEFORE ANY WORK BEGINS ON THIS SEGMENT.
2. CONTRACTOR SHALL PROVIDE PUBLIC NOTICE AND SCHEDULE TO ALL BUSINESSES IN AREA A MINIMUM OF (1) WEEK PRIOR TO START OF WORK.
3. CONTRACTOR SHALL CONDUCT MAIN INSPECTION AFTER LINING OPERATION, AND RECONNECT ALL ACTIVE SERVICE LATERALS.
4. CONTRACTOR SHALL PREPARE AND IMPLEMENT A BYPASS PLAN DESIGNED TO MAINTAIN EXISTING SEWAGE FLOWS TO ALL ACTIVE EFFECTED SERVICES DURING THE SHUT DOWN OF EXISTING SEWER MAINS. ALL DAMAGE TO EXISTING PROPERTY THAT OCCURS DURING THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.
5. CONTRACTOR TO VERIFY ALL ACTIVE LATERALS PRIOR TO RECONNECTION.



| | | | |
|---|--|---------------------------|--------------------|
| CITY OF YUBA CITY | | | |
| 2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT - FRANCIS STA. 3+72 TO STA. 8+50 | | | |
| | SUBMITTED BY: NICK MENEZES | DESIGN BY: NM | DRAWING NO. |
| | 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM | 5450-D |
| | CHECKED BY: KB | DATE OF PLANS: 03-19-2019 | SHEET 6 |
| | | | OF 8 SHEETS |

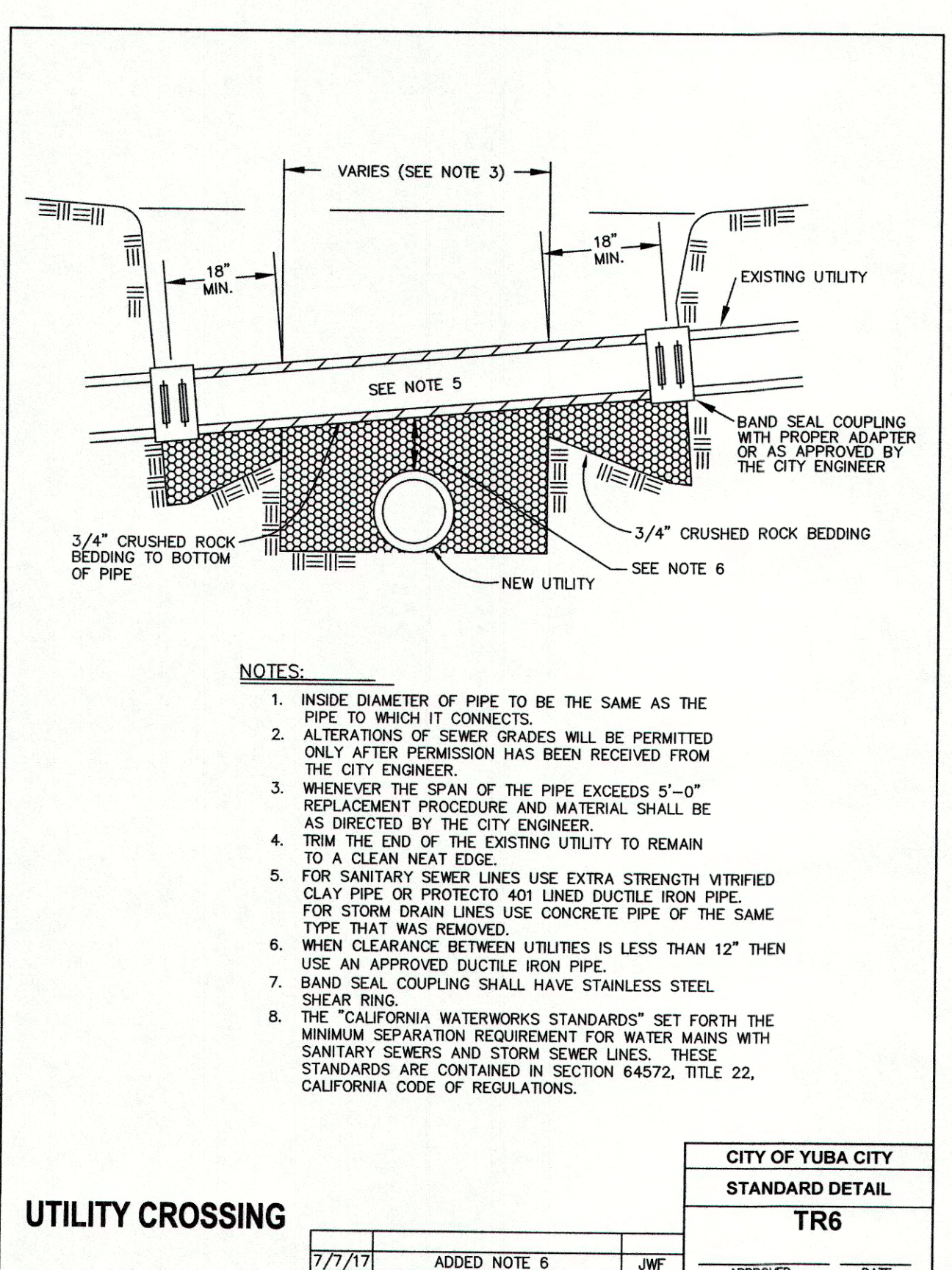
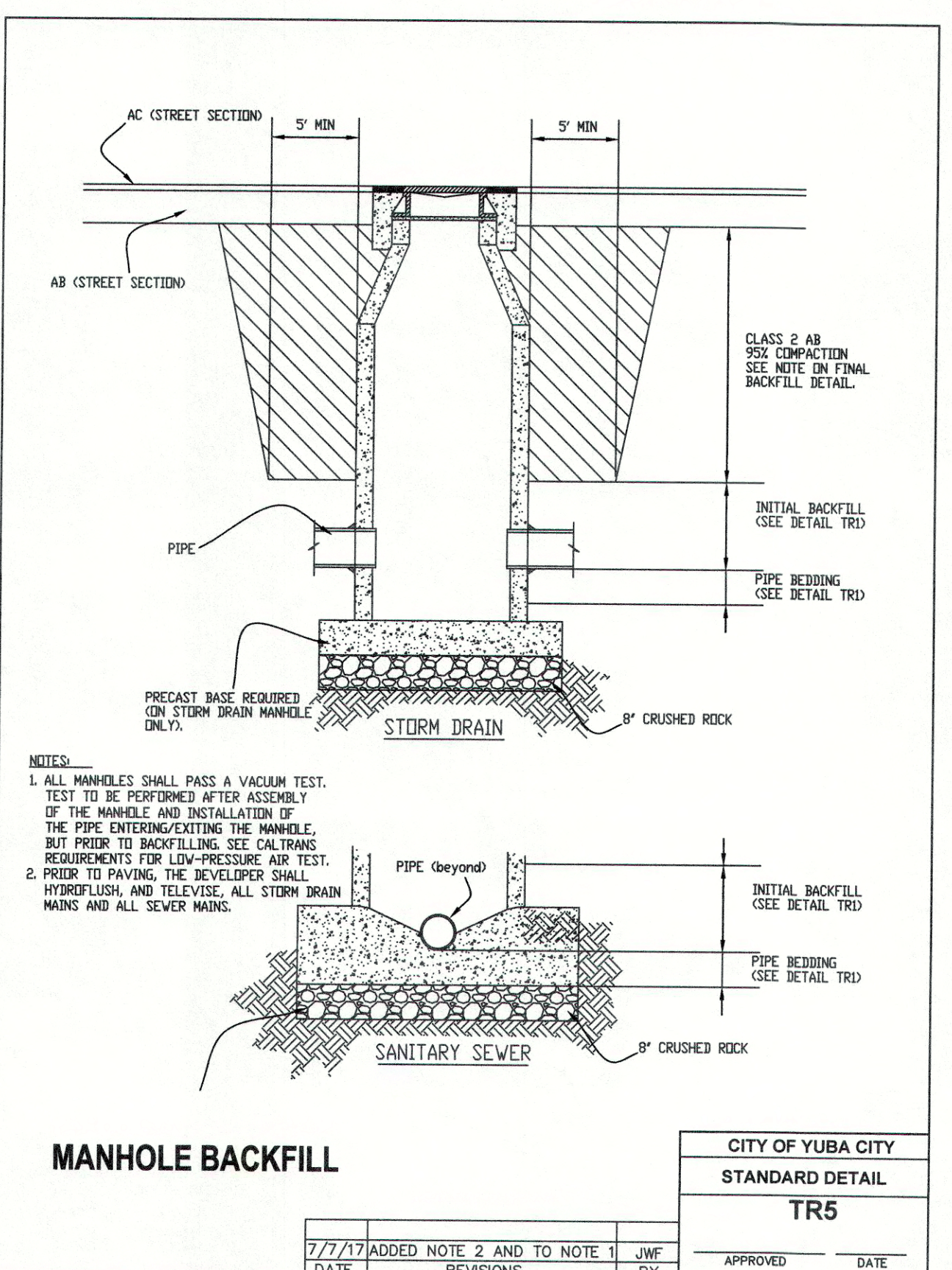
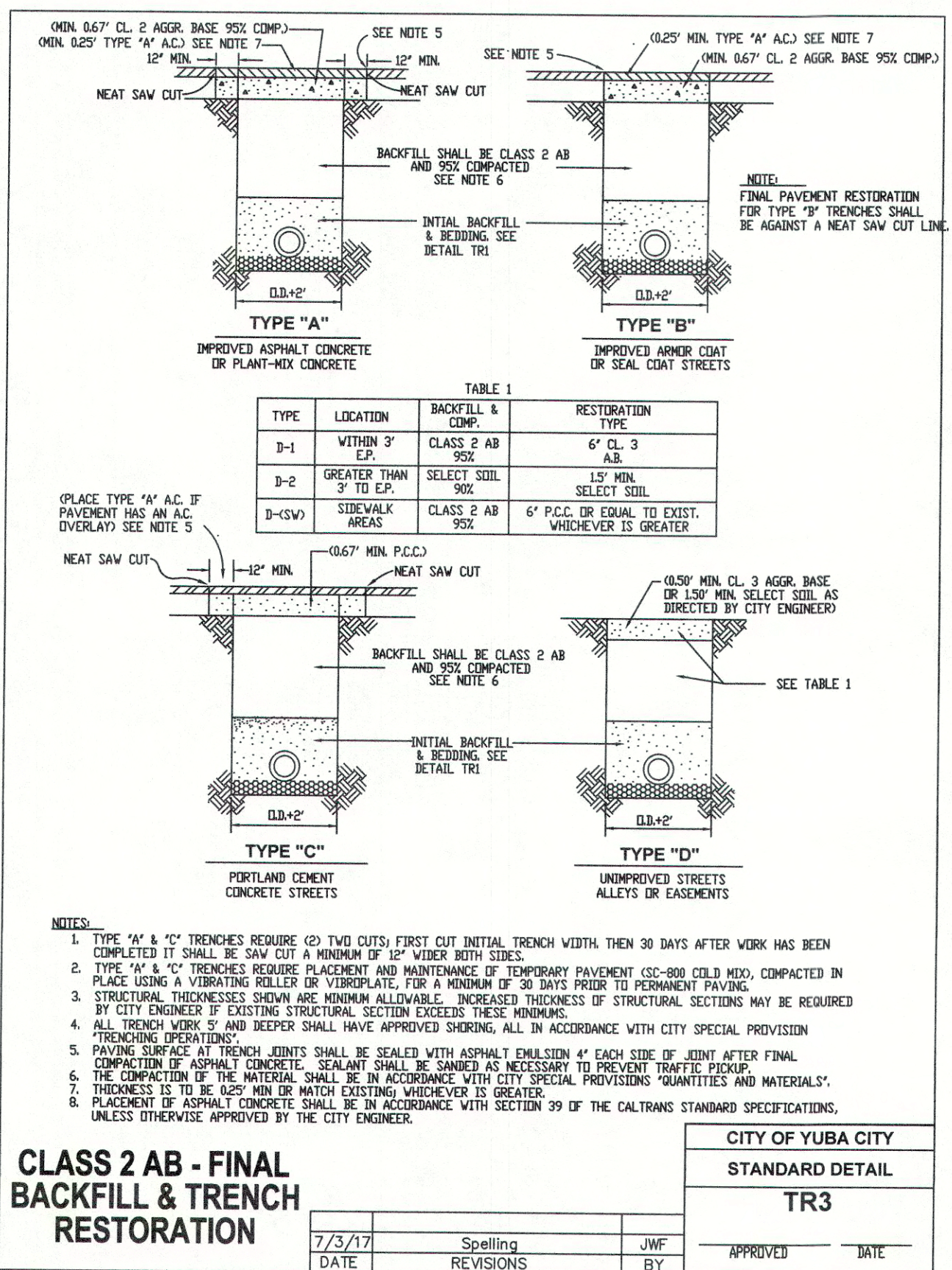
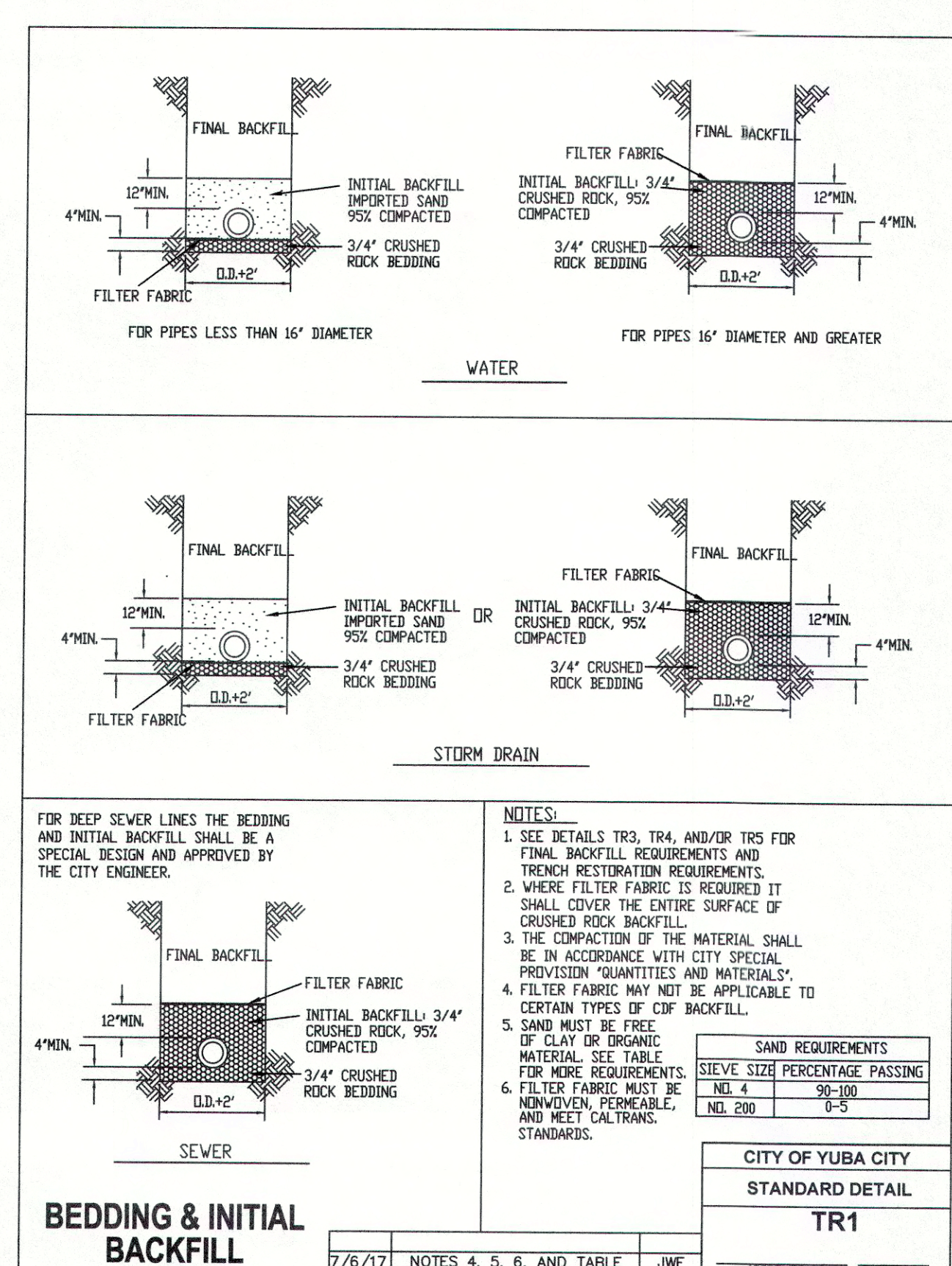
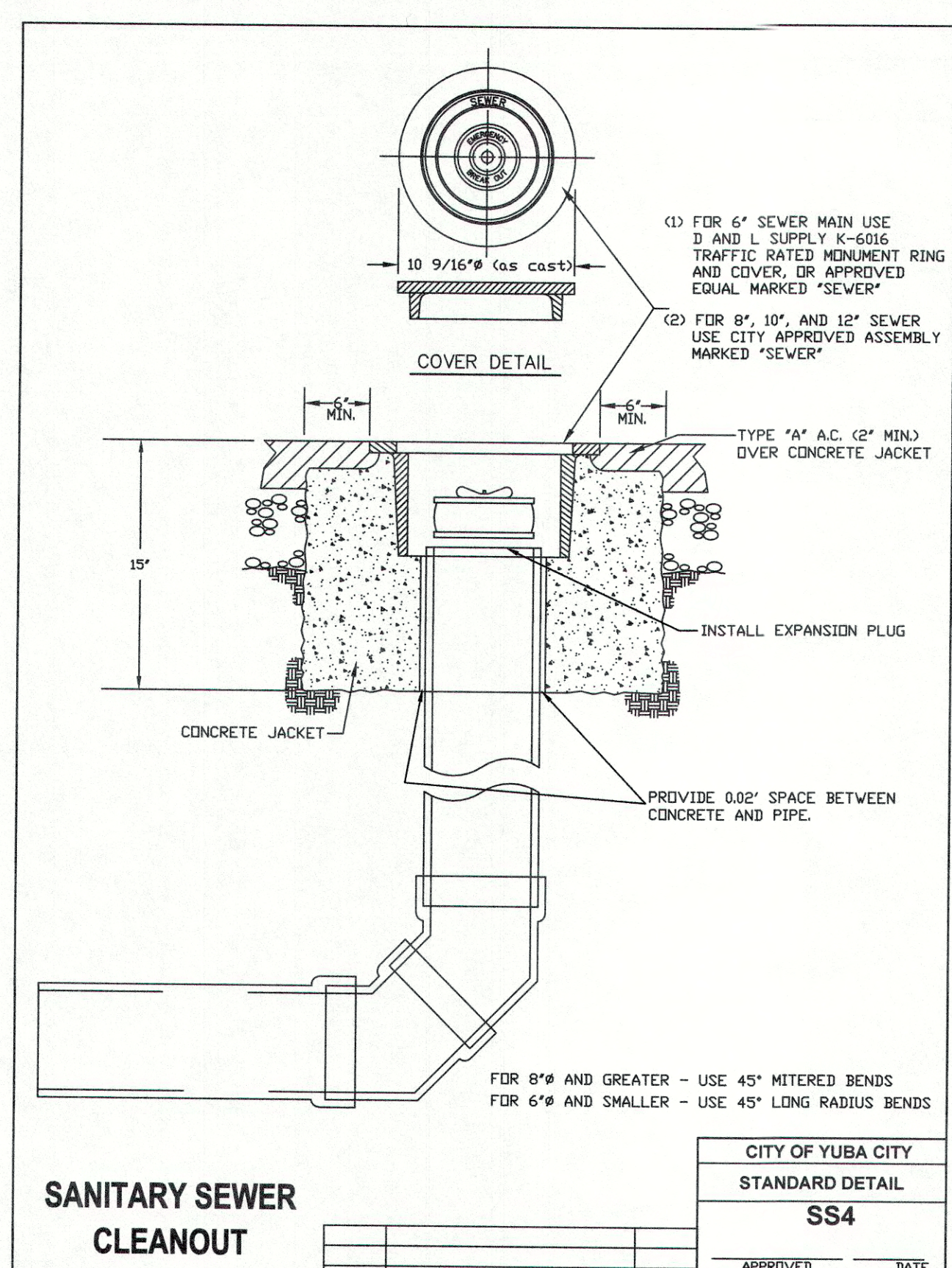
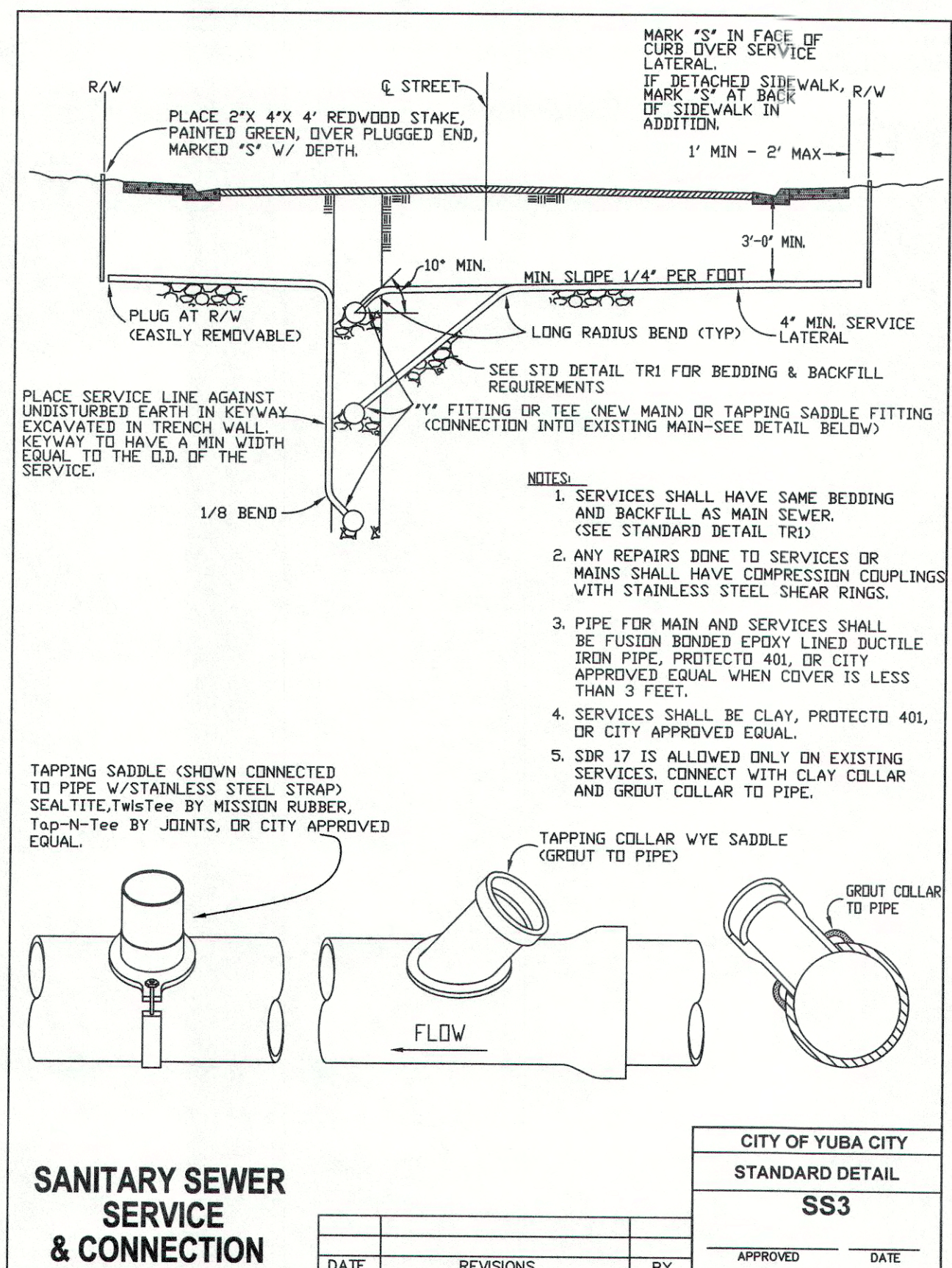
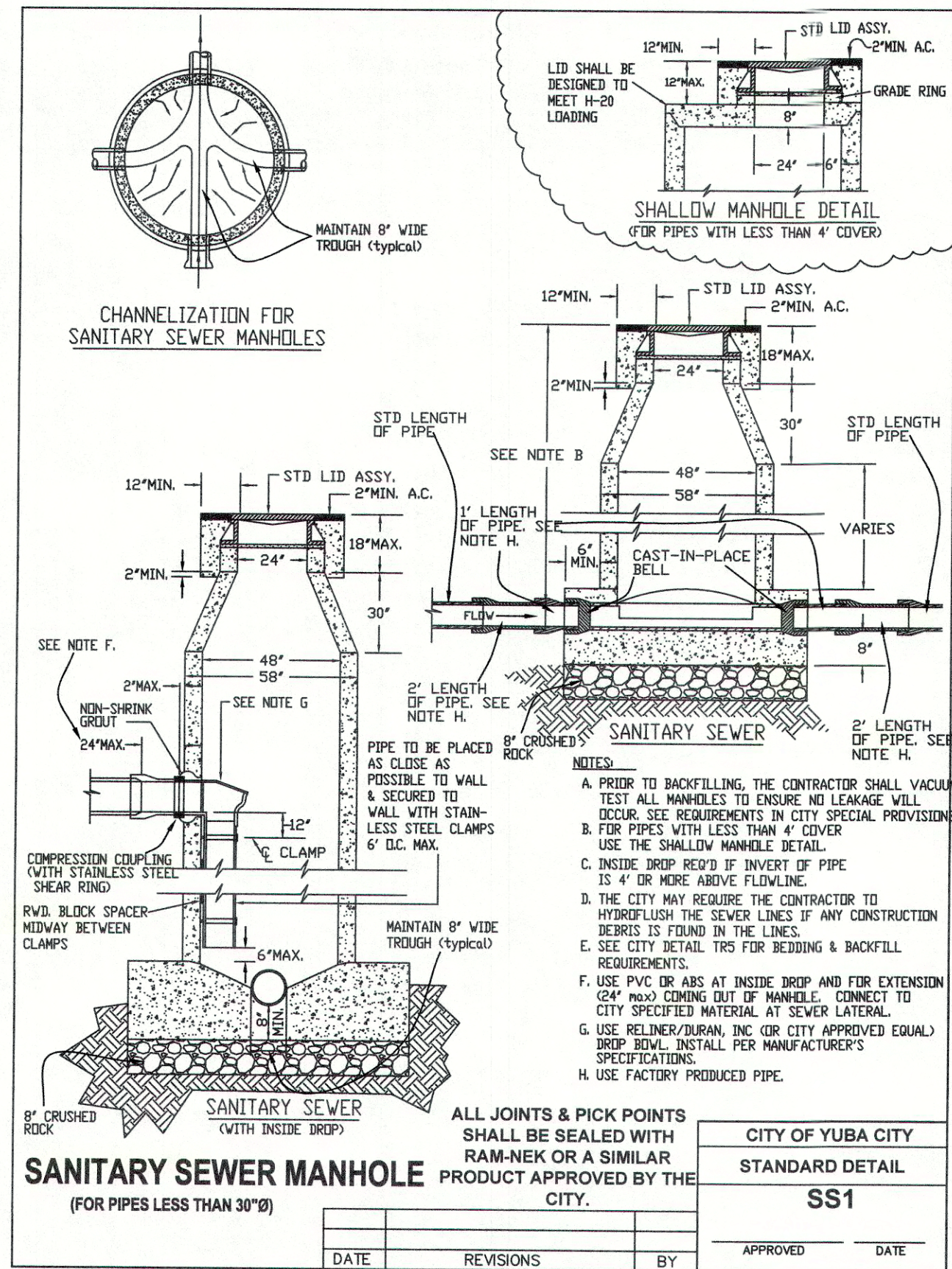


GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE PUBLIC NOTICE AND SCHEDULE TO ALL BUSINESSES IN AREA A MINIMUM OF (1) WEEK PRIOR TO START OF WORK.
2. CONTRACTOR SHALL CONDUCT MAIN INSPECTION AFTER LINING OPERATION AND RECONNECT ALL SERVICE LATERALS.
3. CONTRACTOR SHALL PREPARE AND IMPLEMENT A BYPASS PLAN DESIGNED TO MAINTAIN EXISTING SEWAGE FLOWS TO ALL ACTIVE EFFECTED SERVICES DURING THE SHUT DOWN OF EXISTING SEWER MAINS.
4. ALL DAMAGE TO EXISTING PROPERTY THAT OCCURS DURING THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION AT THE EXPENSE OF THE CONTRACTOR.



| | | | |
|---|--|------------------------------|--------------------|
| CITY OF YUBA CITY | | | |
| 2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT - WASHINGTON | | | |
| | SUBMITTED BY: NICK MENZES | DESIGN BY: NM | DRAWING NO. |
| | 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM | 5450-D |
| | | CHECKED BY: KB | SHEET <u>7</u> |
| | | DATE OF PLANS: 03-19-2019 | OF <u>8</u> SHEETS |



CITY OF YUBA CITY

2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT - DETAILS

| | | | |
|--|--|------------------------------|--------------------------------------|
| | SUBMITTED BY: NICK MENEZES | DESIGN BY: NM | DRAWING NO. |
| | 1201 CIVIC CENTER BLVD. YUBA CITY, CA 95993 (530) 822-3288 | DRAWN BY: NM | 5450-D |
| | CHECKED BY: KB | DATE OF PLANS: 03-13-2019 | SHEET <u>8</u> OF <u>8</u> SHEETS |





**CITY OF YUBA CITY
DEPARTMENT OF PUBLIC WORKS
1201 CIVIC CENTER BOULEVARD
YUBA CITY, CALIFORNIA 95993**

**NOTICE TO CONTRACTORS
SPECIAL PROVISIONS
PROPOSAL AND CONTRACT**


FOR

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

**FOR USE WITH STANDARD SPECIFICATIONS AND STANDARD PLANS DATED
2010 OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION, GENERAL
PREVAILING WAGE RATES AND LABOR SURCHARGE, AND EQUIPMENT
RENTAL RATES OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION**

CONTRACT NO. 19-03

The special provisions contained herein have been prepared by or under the direction of the following Registered Person:



Kevin Bradford
RCE 61985, Exp. 9/30/2019



SPECIAL NOTICE

The bidder's attention is directed to the section entitled "Subcontracting" in Section 4 of the Special Provisions regarding the requirement that proposed subcontractors be listed in the bidder's proposal. Subcontractors performing work in excess of one-half of one percent of the total bid or \$10,000, whichever is greater, shall be listed.

CONTRACT SPECIFICATIONS

TABLE OF CONTENTS

NOTICE TO CONTRACTORS

SPECIAL PROVISIONS

- 1. DEFINITIONS**
 - 1.1 General

- 2. PROPOSAL AND CONTRACT REQUIREMENTS**
 - 2.1 Examination of Plans, Specifications, and Site of Work
 - 2.2 Proposal Form
 - 2.3 Delivery of Proposal
 - 2.4 Withdrawal of Proposal
 - 2.5 Competency of Bidder
 - 2.6 Rejection of Proposals
 - 2.7 Bidder Guaranty
 - 2.8 Award of Contract
 - 2.9 Execution of Contract
 - 2.10 Contract Bonds
 - 2.11 Guaranty of Work

- 3. CONTROL OF WORK**
 - 3.1 General
 - 3.2 Lines, Grades, and Surveying
 - 3.3 Intent of Plans and Specifications
 - 3.4 Environmental Control
 - 3.5 Final Inspection

- 4. LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC**
 - 4.1 Laws to be Observed
 - 4.2 Prevailing Wages
 - 4.3 Permits and Licenses
 - 4.4 Indemnity
 - 4.5 Insurance
 - 4.6 No Personal Liability
 - 4.7 Responsibility of City
 - 4.8 Domestic Materials
 - 4.9 Apprenticeship Requirements
 - 4.10 Subcontracting
 - 4.11 Differing Site Conditions
 - 4.12 Working Hour Restrictions
 - 4.13 Examination and Audit

- 5. WATER AND DUST CONTROL**
 - 5.1 Water
 - 5.2 Dust Control

SPECIAL PROVISIONS (continued)

6. PROGRESS OF THE WORK, LIQUIDATED DAMAGES, AND CONTRACT TIME

- 6.1 Prosecution of Work
- 6.2 Liquidated Damages
- 6.3 Time for Completion
- 6.4 Extension of Contract Time
- 6.5 Right-of-Way Delays
- 6.6 Force Account Payment
- 6.7 Pre-construction Conference

7. PAYMENT

- 7.1 General
- 7.2 Progress Payments
- 7.3 Final Payment
- 7.4 Resolution of Claims

8. QUANTITIES AND MATERIALS

- 8.1 Quantities
- 8.2 Materials
- 8.3 Quality Control
- 8.4 Testing Methods and Frequency

9. SAFETY PRECAUTIONS

- 9.1 Preservation of Property
- 9.2 Obstructions
- 9.3 Interruption of Service
- 9.4 Safety Devices
- 9.5 Maintaining Traffic

10. DESCRIPTION OF THE WORK

11. PIPE BURSTING

- 11.1 General
- 11.2 Pipe Bursting
- 11.3 Qualifications
- 11.4 Submittals
- 11.5 Delivery, Storage, and Handling
- 11.6 Methods for Installation of New Pipe
- 11.7 Tests
- 11.8 Equipment
- 11.9 Sewer Service Connection
- 11.10 Preparation
- 11.11 Construction Methods
- 11.12 Field Testing
- 11.13 Pipe Joining
- 11.14 Measurement and Payment

SPECIAL PROVISIONS (continued)

12. TRENCHING OPERATIONS

- 12.1 Legal Requirements
- 12.2 General
- 12.3 Trench Width
- 12.4 Cutting of Pavement
- 12.5 Bracing and Shoring
- 12.6 Maximum Length of Trench Open
- 12.7 Dewatering
- 12.8 Bedding
- 12.9 Initial Backfill
- 12.10 Restoration of Surfacing
- 12.11 Pavement Leveling
- 12.12 Payment

13. SEWER MAIN CONSTRUCTION

- 13.1 General
- 13.2 Materials
- 13.3 Installation of Sanitary Sewer
- 13.4 Initial Backfill
- 13.5 Completing Backfill
- 13.6 Manholes
- 13.7 Testing and Cleaning of Sewer Lines
- 13.8 Crossing Over a Water Main
- 13.9 Sewer Services
- 13.10 Measurement and Payment

14. PAVEMENT MARKERS AND MARKINGS

- 14.1 Temporary Pavement Delineation
- 14.2 Pavement Delineation Layout
- 14.3 Thermoplastic Traffic Stripes and Traffic Markings
- 14.4 Pavement Markers

15. EARTHWORK & PAVING

- 15.1 Tree Removal
- 15.2 Clearing and Grubbing
- 15.3 Concrete Removal
- 15.4 Earthwork
- 15.5 Restrictions on Purchases of Mined Materials
- 15.6 Aggregate Base
- 15.7 Prime Coat
- 15.8 Paint Binder
- 15.9 Pavement Repair
- 15.10 Asphalt Concrete
- 15.11 Temporary Pavement Delineation
- 15.12 Adjusting Manholes and Valves to Grade
- 15.13 Survey Monument Wells
- 15.14 Finishing Roadway

SPECIAL PROVISIONS (continued)

15.15 Roadway Signs

16. SEWER REHABILITATION – CURED IN PLACE PIPE

- 16.1 General
- 16.2 Referenced Documents
- 16.3 Quality Assurance/Qualification Requirements
- 16.4 Submittals
- 16.5 Materials
- 16.6 Structural Requirements
- 16.7 Testing Requirements
- 16.8 Pre-Installation Requirements
- 16.9 Installation Requirements
- 16.10 Re-establishing Existing Service Connections
- 16.11 Inspection Requirements
- 16.12 Cleanup
- 16.13 Payment

PROPOSAL TO THE DEPARTMENT OF PUBLIC WORKS, CITY OF YUBA CITY

BIDDER'S BOND

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

PUBLIC CONTRACT CODE SECTION STATEMENTS

NON-COLLUSION AFFIDAVIT

LABOR CODE SECTION 1861 CERTIFICATION

TITLE 49 CERTIFICATION

PROPOSAL CERTIFICATION LIST OF SUBCONTRACTORS

CONTRACT AGREEMENT

SAMPLE PERFORMANCE BOND

SAMPLE PAYMENT BOND

**CITY OF YUBA CITY
STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS**

NOTICE TO CONTRACTORS

Sealed proposals will be received at the City Clerk's Office, City of Yuba City, located at City Hall, 1201 Civic Center Boulevard, Yuba City, California, 95993, **until 10:00 A.M. on October 18, 2019**, at which time they will be publicly opened and read aloud, for construction in accordance with the specifications to which special reference is made as follows:

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

No bid will be considered unless it is made on the bid form purchased from and furnished by the Public Works Department. Each bid must be accompanied by cash, cashier's check, certified check, or a bidder's bond executed by an admitted surety insurer made payable to the City of Yuba City for an amount equal to at least ten percent (10%) of the total bid amount, such guaranty to be forfeited should the bidder to whom the contract is awarded fail to enter into the contract.

General Work Description:

This project includes the installation of 8" VCP, 8" Pipe Bursting, 8" Cured In Place Pipe liner, and associated trench/landscape restoration, sewer lateral service reconnections, and other items as specified in the project plans.

Bids are required for the entire work described herein. The Contractor shall possess a Class A license.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code Section 12990.

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

The total quantity of materials estimated for this contract can be observed in the table below:

| Bid Item | Item Description | Unit of Measure | Estimated Quantity |
|---------------------------|--|------------------------|---------------------------|
| 1 | Traffic Control (Includes Caltrans Double Encroachment Permit) | LS | 1 |
| 2 | Mobilization/Demobilization | LS | 1 |
| 3 | 8" Cured In Place Pipe | LF | 1315 |
| 4 | 8" VCP Sanitary Sewer | LS | 1 |
| 5 | 4" Sewer Lateral Reconnection | EA | 48 |
| 6 | 8" Pipe Burst SDR-17 Sanitary Sewer Pipe | LF | 174 |
| 7 | Type "A" Trench Restoration (Includes all necessary saw cutting, shoring, removal, & disposal) | LF | 235 |
| 8 | Landscape Restoration (Includes all necessary trenching, shoring, removal, and disposal) | LS | 1 |
| 9 | Pipeline CCTV | LS | 1 |
| TOTAL AMOUNT BID = | | | |

Plans, specifications, and proposal forms for bidding this project can be obtained at the office of the Public Works Director, City of Yuba City, 1201 Civic Center Boulevard, Yuba City, California, 95993, for a non-refundable deposit of \$25 per set. If a contractor elects to submit a bid, the proposal form shall be obtained from the City. An additional non-refundable deposit of \$5.00 for shipping and handling is required for those requesting delivery by U.S. mail. Deposit shall be in the form of a cashier's check, personal check, or business check.

The successful bidder, at bidder's own expense, shall furnish a faithful performance bond and a payment bond each in an amount of one hundred percent (100%) of the total bid, respectively, and in the form prescribed for use by the City of Yuba City. The bonds shall be provided to the City at the time of execution of contract.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at the Labor Compliance Office at the offices of the State of California, Department of Transportation, District Director of Transportation, for the district in which the work is situated and at the office of the Yuba City Public Works Department.

In its discretion, the City Council of Yuba City or its designee may reject any and all bids presented, may accept an item or group of items of any bid, may modify or cancel in whole or in part the notice inviting bids, and may determine to re-advertise for bids. Similarly, the City Council or its designee reserves the right to waive informalities and minor irregularities in any bids received.

If two or more bids received are for the same total amount or unit price, quality and service being equal, the City Council or its designee may accept the one it chooses or accept the lowest bid made after negotiation with tie bidders.

The officer or employee conducting the bidding procedure shall present the bid tabulation to the City Council or its designee for consideration and award if deemed appropriate.

Bids will be required to set forth the price of the items bid upon, the total sales and use taxes that will be due on the purchase or use of the items bid upon, and a total figure for the price plus tax. Any difference between the taxes shown on the bid as the total figure and that actually due shall be the responsibility of the bidder.

No charge for delivery, shipping, parcel post, packing, insurance, license fees, permits, or for any other purpose will be paid by the City of Yuba City unless expressly included and itemized in the bid.

In connection with any discount offered, time will be computed from the date of delivery of supplies and/or equipment acceptable to the City or from the date correct invoices are received in the office of the officer or employee conducting the bidding process if the latter date is later than the date of delivery. Payment will be deemed to be made, for the purpose of earning the discount, on the date of the mailing of the City's warrant.

Labor surcharge and equipment rental rates to be used on this contract shall be those in effect when the work is accomplished.

Pursuant to Section 22300, Public Contracts Code, the Contractor may elect to receive one hundred percent (100%) of payments due under the contract from time to time without retention of any portion of the payment by the public agency in accordance with the provisions of Section 22300 of the Public Contracts Code. Such securities, if deposited by the Contractor, shall be valued by the public agency's finance director (treasurer), whose decision on valuation of the securities shall be final.

Unit prices shall be shown on bids submitted as well as a total price for each item bid upon.

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

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

Please direct questions to the Department of Public Works, (530) 822-4640, attention **Nick Menezes**.

PATRICIA BUCKLAND, CITY CLERK
CITY COUNCIL OF YUBA CITY

SECTION 1 **DEFINITIONS**

1.1 General – The work embodied herein shall be done in accordance with the appropriate provisions of the Specifications entitled “State of California, Department of Transportation, Standard Specifications for Construction of Local Streets and Roads,” dated 2015, insofar as the same may apply and in accordance with the following special provisions.

Whenever in said Standard Specifications and these Special Provisions the following terms are used, they shall be understood to mean and to refer to the following:

“Department” or “Department of Transportation” – The Department of Public Works of the City of Yuba City.

“Engineer” or “Director” – The City Engineer or the Director of Public Works of the City of Yuba City or their authorized agents.

“Laboratory” – That laboratory designated by the Engineer.

“State” – The City of Yuba City.

Other terms appearing in the Standard Specifications and these Special Provisions shall have the intent and meaning specified in Section 1, Definition of Terms of the Standard Specifications.

In case of conflict between Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

SECTION 2 **PROPOSAL AND CONTRACT REQUIREMENTS**

2.1 Examination of Plans, Specifications, and Site of Work – The bidder is required to examine carefully the site of the proposed work, plans, special provisions, standard specifications, and contract forms for the work contemplated, and it will be assumed that the bidder investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the Special Provisions and the contract. It is mutually agreed that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination.

2.2 Proposal Form – All proposal forms shall be directly purchased from the City of Yuba City and shall be made upon the proposal forms included in these Special Provisions. All proposals must give the prices proposed, with unit prices prevailing, and must be signed by the bidder with his address. Copies of proposal forms obtained from a source other than the City will not be allowed.

No contractor or subcontractor may be listed on a bid proposal for a public works project 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).

2.3 Delivery of Proposal – Said bid or proposal shall be delivered to the City Clerk’s Office, City of Yuba City, in accordance with the Notice inviting sealed proposals.

2.4 Withdrawal of Proposal – No bidder may withdraw his proposal for a period of sixty (60) days after the date set for the opening thereof.

2.5 Competency of Bidder – The City may require any bidder to furnish a statement of financial responsibility, technical ability and experience. No bid will be accepted from a Contractor who is not licensed under Chapter 9, Division 3, California Business and Professions Code.

2.6 Rejection of Proposals – Proposals may be rejected if they show any alterations of form, additions not called for, conditional or alternative bids, incomplete bids, erasures, or irregularities of any kind.

The City reserves the right to waive any informality or irregularity in any bid or bidding. The right is reserved to reject any and all proposals.

2.7 Bidder Guaranty – All bids shall be presented under sealed cover and shall be accompanied by cashier’s check, certified check, or bidder’s bond, made payable to the City of Yuba City, for an amount equal to at least ten percent (10%) of said bid, and no bids shall be considered unless such cashier’s check, certified check, or bidder’s bond is enclosed herewith.

2.8 Award of Contract – All bids will be compared on the basis of the Engineer’s Estimate of quantities of work to be done.

The contract, if awarded, will be to the lowest responsible, responsive bidder.

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

2.9 Execution of Contract – The contract shall be executed by the successful bidder and returned, together with the contract bonds and certificates of insurance, within fifteen (15) days after the award of contract.

2.10 Contract Bonds – Contractor shall provide, at the time of the execution of the agreement or contract for work and at his own expense, an admitted surety bond in an amount equal to at least one hundred percent (100%) of the contract price as security for the faithful

performance of said agreement. Contractor shall also provide, at the time of the execution of the agreement or contract for the work, and at his own expense, a separate admitted surety bond in an amount equal to at least one hundred percent (100%) of the contract price as security for the payment of all persons performing labor and furnishing materials in connection with said agreement. Each bond shall be in the form included in these contract documents. Sureties on each of said bonds shall be satisfactory to the City Attorney.

2.11 Guaranty of Work – Notwithstanding the acceptance of said work and improvements and inspection thereof by the City, Contractor guarantees all of said work and shall perform or cause to be performed repairs, additions, or corrective work caused by the deficiency or omission of Contractor for one (1) year after the work has been completed and accepted by the City. The Faithful Performance Bond herein provided shall cover the guarantee set forth in this paragraph.

SECTION 3 **CONTROL OF THE WORK**

3.1 General – Attention is directed to the provisions of Section 5 of the Standard Specifications and the following provisions.

3.2 Lines, Grades, and Surveying – The Contractor shall be responsible for hiring a licensed land surveyor or registered civil engineer to perform all construction staking and surveying that Contractor deems necessary to perform the required work.

Construction staking surveying shall be considered included in the price or prices bid for various related items of work and no additional compensation will be allowed therefor. The City will provide the project CAD file and alignment data to the Contractor's surveyor, if desired, to assist with laying out the work.

3.3 Intent of Plans and Specifications – These Special Provisions, the Plans, the Standard Specifications, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be cooperative, to describe and to provide for a complete work. Plans shall govern over Standard Specifications, and Special Provisions shall govern over both Plans and Standard Specifications.

3.4 Environmental Control – Attention is directed to Sections 13 and 14 of the Standard Specifications. The Contractor shall comply with all environmental control rules, regulations, ordinances, and statutes that apply to the project and any work performed pursuant to the contract.

Contractor shall haul away and dispose of all removed waste materials at a proper disposal site.

Unless otherwise designated, all trees, landscaping, and shrubbery shall be protected.

Contractor will be required to provide the City a spill countermeasure plan prior to beginning construction.

3.5 Final Inspection – The Contractor shall notify the Engineer in writing of the completion of the work, and the Engineer will promptly inspect the work. The Engineer will develop a final punch list, and the Contractor will be notified in writing of any defects or deficiencies to be remedied. When notified that this work has been completed, the Engineer will again inspect the work and when satisfied that all work has been done in accordance with the contract drawings and these Special Provisions, he will recommend to the City Council that they formally accept the contract as complete. The completion date, for purposes of computing “Time for Completion” and liquidated damages, if any, will be considered to be the date of Contractor’s first written completion notice, provided that, in the Engineer’s judgment, the work is substantially complete and operational at that time.

SECTION 4 LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

4.1 Laws to be Observed – The Contractor shall keep himself fully informed of all existing state and national laws and all municipal ordinances and regulations of the City of Yuba City which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.

4.2 Prevailing Wages – It shall be mandatory upon the Contractor to whom the contract is awarded, and upon any subcontractor under him, to pay not less than the specified rates as listed in the “Notice to Contractors” to all laborers, workmen, and mechanics employed by them in the execution of the contract. The Contractor shall provide the City with a certified copy of all payroll records in accordance with Section 1776 of the Labor Code. The Contractor and all subcontractors shall furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

4.3 Permits and Licenses – The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. There will be no charge for the permits from the City.

All contractors, including subcontractors, shall have a City business license in accordance with Section 3-4.05 of the Yuba City Municipal Code.

4.4 Indemnity – The City of Yuba City and all officers and employees thereof connected with the work, including but not limited to the Director and the Engineer, shall not be answerable or accountable in any manner for any loss or damage that may happen to the work or any part thereof; for any loss or damage to any of the materials or other things used or employed in performing the work; for injury to or death of any person, either workmen or the public; or for damage to property from any cause which might have been prevented by the Contractor, or his workmen, or anyone employed by him.

The Contractor shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to workmen and the public, or damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance.

The Contractor shall indemnify and save harmless the City of Yuba City and all officers and employees thereof connected with the work, including but not limited to the Director and the Engineer, from all claims, suits or actions of every name, kind and description, brought forth, or on account of, injuries to or death of any person, including but not limited to workmen and the public, or damage to property resulting from the performance of a contract, except as otherwise provided by statute. The duty of the Contractor to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

With respect to third party claims against the Contractor, the Contractor waives any and all rights to any type of express or implied indemnity against the City, its officers or employees.

It is the intent of the parties that the Contractor will indemnify and hold harmless the City, its officers and employees from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault or negligence on the part of the City, the Contractor, the subcontractor or employee of any of these, other than the active negligence of the City, its officers and employees.

4.5 Insurance – The Contractor shall procure and maintain for the duration of the contract insurance against all claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.

- a. Minimum Scope of Insurance – Coverage shall be at least as broad as:
 - 1) Insurance Services Offices Commercial General Liability coverage (occurrence Form CG 00 01) including products and completed operations.
 - 2) Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code I (any auto).

3) Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

b. Minimum Limits of Insurance – The Contractor shall maintain limits no less than:

1) General Liability: \$2,000,000 per occurrence for bodily injury, personal injury, and property damage. The aggregate limit shall be \$2,000,000 and shall apply separately to the Contractor's work under this contract.

2) Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.

3) Workers Compensation: Statutory limits.

4) Employers' Liability: \$1,000,000 each accident, \$1,000,000 policy limit bodily injury by disease, \$1,000,000 each employee bodily injury by disease.

If the contractor maintains higher limits than the minimums shown above, the City shall be entitled to coverage for the higher limits maintained by the contractor.

c. Deductibles and Self-Insurance Retention – Any deductibles or self-insurance retention must be declared to and approved by the City. At the option of the City, either the insurer shall reduce or eliminate such deductibles or self-insurance retention as respects the City, its officers, officials, employees and volunteers, or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration and defense expenses.

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

1) The City, its officers, officials, employees, and volunteers are to be covered as insureds on the CGL and automobile liability policies with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, 11 85 or both CG 20 10 and CG 23 37 forms if later revisions are used).

2) For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its

officers, officials, employees or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

3) Each insurance policy required by this clause shall provide that coverage shall not be canceled, except after 30 days prior written notice has been provided to the City or 10 days prior written notice for non-payment of premium.

e. Acceptability of Insurer – Insurance is to be placed with insurers with a current A.M. Best rating of no less than A:VII unless otherwise acceptable to the City. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

f. Verification of Coverage – Contractor shall furnish the City with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The Entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

g. Subcontractors – Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein.

h. Waiver of Subrogation – Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

If the Contractor fails to maintain any insurance as required by this section, the City of Yuba City may take out such insurance to cover any damages for which the City of Yuba City might be held liable on account of the operations under this contract, and deduct and retain the amount of the premiums for such insurance from any sums due the Contractor under the contract. Nothing herein contained shall be construed as limiting in any way the extent to which the Contractor may be held responsible for payment of damages resulting from his operations, or those of any subcontractor under him. Maintenance of proper insurance coverage is a material element of the contract and failure to maintain or renew coverage or to provide evidence of renewal may be treated by the City as a material breach of contract.

4.6 No Personal Liability – Neither the Mayor, the Council, the Engineer, nor any other officer or authorized assistant or agent shall be personally responsible for any liability arising under the contract.

4.7 Responsibility of City – The City shall not be held responsible for the care or protection of any materials or parts of the work prior to final acceptance, except as expressly provided in these Special Provisions.

4.8 Domestic Materials – Only such materials shall be used in the performance of this contract as conform to the requirements of Chapter 4 of Division 5 of Title 1 of Government Code of the State of California except as otherwise provided in certain treaties and general trade agreements of the United States.

4.9 Apprenticeship Requirements – Attention is directed to the provisions in Sections 1777.5, 1777.6 and 1777.7 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him.

Section 1777.5, as amended in 1989, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will fix the ratio of apprentices to journeymen that will be used in the performance of the contract to be not less than one to five hours except:

- a. When employment in the area of coverage by the joint apprenticeship committee has exceed an average of fifteen percent (15%) in the ninety (90) days prior to the request for certificate; or
- b. When the number of apprentices in training in the area exceeds a ratio of one to five (1:5); or
- c. When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally; or
- d. When the contractor provides evidence that he employs registered apprentices on all of his contracts on an annual average of not less than one apprentice to eight journeymen; or
- e. When a joint apprenticeship committee submits an application to DAS for an alternative ratio based on a 1:5 daily worker count if the hourly ratio is not feasible for that particular craft or trade.

In addition to the above exceptions, contracts of specialty contractors not bidding through a general contractor and involving less than twenty (20) working days or Thirty Thousand Dollars (\$30,000) are exempt from the provisions of Section 1777.5. This is the same

exemption that applies to contracts of general contractors. However, a subcontractor bidding through a general contractor must comply with Section 1777.5 no matter how small the subcontract if the contract between the general contractor and the awarding body is covered by Section 1777.5.

Effective January 1, 1990, the Contractor must promptly provide certain contract award information to the joint apprenticeship committee of the apprenticeable craft or trade in the area of the site of the public work. This contract award information must include an estimate of the journeymen hours required, the number of apprentices to be employed, and the approximate date of apprentice employment.

The Contractor is required to make contributions to local funds established for the administration of apprenticeship programs or to the California Apprenticeship Council if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other Contractors on the public works site are making such contributions.

Noncompliance by the Contractor and subcontractor under him with the requirements of Sections 1777.5 and 1777.6 shall result in denial of right to bid on contracts and civil penalties as more particularly set forth in Section 1777.7.

Information relative to apprenticeship standards, wage schedules and other requirements may be obtained from the Director of Industrial Relations, ex-officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

4.10 Subcontracting – Attention is directed to the provisions in Section 5-1.13, “Subcontracting” of the Standard Specifications. The “Subletting and Subcontracting Fair Practices Act” (Public Contract Code Section 4100 through and including 4114, inclusive) shall apply to the work the subject of this invitation. Said Act requires subcontractors, if used for such work, to be listed and identified in the prime contractor’s proposal. It further prohibits the substitution of subcontractors, except as therein specifically authorized (Section 4107 and 4107.5); said Act provides that if the prime contractor fails to specify a subcontractor or specifies more than one subcontractor for the same portion of the work to be performed, in excess of one-half of one percent of the prime contractor’s total bid, under those circumstances, it shall be presumed that the prime contractor agrees that he is fully qualified to perform the work himself and that he shall perform the work himself. Each bidder shall, with respect to the work the subject of this invitation, list in his proposal:

- a. The name and location of the place of business of each subcontractor who will perform work or labor or render services to the prime contractor, specially 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 of one percent of the prime contractor’s total bid.

b. The portion of the work which will be done by each such subcontractor. One subcontractor shall be listed for each such portion.

4.11 Differing Site Conditions

a. During the progress of the work, the Contractor shall immediately, and before the following conditions are disturbed, notify the Engineer, in writing, of any:

1) Material that the contractor believes may be 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;

2) Subsurface or latent physical conditions at the site differing from those indicated;

3) Unknown physical conditions at the site differing from and generally recognized as inherent in work of the character provided for in the contract.

b. Upon written notification, the Engineer will promptly investigate the conditions, and if the Engineer finds that the conditions do materially differ or do involve hazardous waste and cause a decrease or increase in the Contractor's cost of or time required for performance of any part of the work, an adjustment, excluding loss of anticipated profits, will be made and the contract modified in writing accordingly.

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

4.12 Working Hour Restrictions – Eight (8) hours of labor is a legal day's work. Any worker's time of service is restricted to eight (8) hours during any calendar day and forty (40) hours during a calendar week, unless overtime compensation is paid at not less than one and one-half times the basic rate of pay. The Contractor shall pay a penalty of Twenty-five Dollars (\$25) for each day a worker is employed in violation of these provisions.

4.13 Examination and Audit – Notwithstanding any other provision of law, every contract involving the expenditure of public funds in excess of Ten Thousand Dollars (\$10,000) entered into by any State agency, board, commission, or department, or by any other public entity, including a City, County, or District, shall be subject to the examination and audit of the State Auditor, at the request of the public entity or as part of any audit of the public entity, for a

period of three (3) years after final payment under the contract. Contractor shall also be subject to examination and audit for the same time period.

SECTION 5 **WATER AND DUST CONTROL**

5.1 Water – Water, if obtained from a City fire hydrant, shall be metered and paid for at the rates set forth in Section 6-6.15 of the Yuba City Municipal Code. A service charge and deposit will be required for each meter installation required for said metering. The Contractor shall not leave any hose attached to a fire hydrant except when actually drawing water therefrom and shall keep hydrants clear for possible use by the Fire Department.

5.2 Dust Control – Dust control measures shall be taken in conformance to Section 14-9.03 of the Standard Specifications. Contractor shall water the construction site at sufficient intervals to preclude the nuisance of dust caused by the Contractor's operations and/or wind and traffic, at no additional compensation.

SECTION 6 **PROGRESS OF THE WORK, LIQUIDATED DAMAGES, AND CONTRACT TIME**

6.1 Prosecution of Work – The City will issue a Notice to Proceed to the Contractor after the contracts have been fully executed. The Contractor shall diligently prosecute the work to completion before the expiration of the number of working days provided herein.

6.2 Liquidated Damages – Should the Contractor fail to complete all work under the contract within the time provided therefor, he shall pay to the City the sum of five hundred dollars (**\$500**) for each calendar day delay in finishing the work beyond such contract period, all in accordance with Section 8-1.10 of the Standard Specifications. The City may deduct such payment from the amounts due the Contractor under the contract.

6.3 Time for Completion – All work under this contract shall be completed within a maximum of **Thirty (30) working days** from the date stated in the Notice to Proceed as the date to start work.

6.4 Extension of Contract Time

a. If the Contractor finds it impossible, for reasons beyond his control, to complete the work within the contract time as specified or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the contract time, as extended, make a written request to the Engineer for an extension of time, setting forth therein the complete facts which he believes will justify the granting of such request.

The Contractor's pleas that insufficient time was originally specified shall not constitute a valid reason for extension of contract time. If the Engineer determines that the prosecution of the work was delayed or hampered by conditions beyond the control and without the fault of the Contractor, he may extend the time for completion in such amount as conditions may justify. Such extended time for completion shall then be in full force and effect the same as though it were the original time for completion.

Suspension of work by the Engineer, or extension of the contract time, shall not constitute grounds for any claims by the Contractor for damages or extra compensation, but the period of such suspensions or extensions shall be taken into consideration in determining the time for completion, as herein provided. When final acceptance has been duly made by the Engineer, as prescribed in Section 3.4, the daily time charge will cease.

b. Any dispute hereunder shall be considered pursuant to the Standard Specifications, and the Contractor shall give immediate notice to the Engineer, along with all pertinent facts relative to such dispute.

6.5 Right-of-Way Delays – The City has scheduled relocation of public utilities to provide for little or no delay to the contractor. It is anticipated that utility companies may be engaged in relocation work immediately prior to Contractor's work on the project. Some coordination of scheduling between the Contractor and the utility company may be necessary to minimize or eliminate delays to the Contractor. If the Contractor is unavoidably delayed because of the City's failure to clear right-of-way, no contract time will be charged during such delay period. No direct compensation will be made for such delay.

6.6 Force Account Payment –

The added markup of Labor, Materials, and Equipment Rental as listed in Sections 9-1.04B, "Labor," 9-1.04C, "Materials," and 9-1.04D, "Equipment Rental," are amended as follows:

To the total of the direct costs there will be added a markup of 15 percent to the cost of labor, 12 percent to the cost of materials and 12 percent to the equipment rental.

6.7 Pre-construction Conference – Prior to the issuance of the Notice to Proceed, a pre-construction conference will be held at the office of the Director of Public Works for the purpose of discussing with the Contractor the scope of work, contract drawings, specifications, existing conditions, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution and the satisfactory completion of the project as required. The Contractor shall provide the following items at the pre-construction conference:

- Schedule
- Jobsite Photographs

The Contractor's representatives at this conference shall include all major superintendents for the work and may include major subcontractors.

SECTION 7 **PAYMENT**

7.1 General – Payment will be made on the basis of the unit prices bid for the various items of work and the quantities of such items completed, and measured in accordance with these Special Provisions.

The prices bid for the various items of work, as listed on the bid schedule, shall be full compensation for furnishing all labor, tools, equipment, materials, and services required by the Plans, these Special Provisions, and the Standard Specifications, to provide a complete work serviceable in all respects. Unless otherwise noted on the plans or specified in these Special Provisions, no additional compensation will be made for incidental work identified in the Plans, these Special Provisions, or the Standard Specifications. Compensation for such incidental work shall be considered included in the price or prices bid, for various related items of work, in the bid schedule.

7.2 Progress Payments – The City will make monthly progress payments to the Contractor for the work under the contract. Such progress payments are not intended to imply acceptance of the work completed or to be accurate as to the quantities of work indicated, but to provide the Contractor with operating capital reasonably consistent with the amount of work completed and materials supplied.

The amounts of such progress payments will be based on the Engineer's Estimate of the quantities or portions of the work completed at the time of preparation of such estimate.

Upon Contractor's submittal of documentation of the amounts paid for acceptable materials furnished at the site, but not yet installed, the cost of such materials will be compensated in the progress payments, to a maximum of fifty percent (50%) of the associated bid price.

A retention of five percent (5%) of the total value of the work completed to date will be made from the amount due on each progress payment for partial security for fulfillment of the contract. At the Contractor's request and at his expense, he may offer to substitute securities within the meaning of Section 22300 of the Public Contract Code in an amount equivalent to the amount withheld, to wit, bank or savings and loan certificates of deposit. This option is available to the Contractor as provided by Section 22300 of the Public Contract Code and must be initiated by him by request and at his sole cost and expense, and upon such request, City shall permit the substitution of securities equivalent to the amount withheld to ensure satisfactory completion and fulfillment of the contract. Contractor shall remain the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon

during the period of retention. Such securities shall be released to Contractor upon satisfactory completion of the contract, to wit, thirty-five (35) days from and after the Notice of Completion.

The securities deposited by Contractor as substitution for funds withheld shall be deposited with City pursuant to the provisions of Section 22300 of the Public Contract Code and shall be ultimately released at the conclusion and satisfactory completion of the contract as herein provided for.

7.3 Final Payment – The Engineer will, after completion of the work, make a final estimate of the amount of work done thereunder, and the value of such work, and the City will pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final pay estimate and payment. The final payment will not be due and payable until the expiration of thirty-five (35) days from the date of recordation of the notice of acceptance of completion in the Office of the County Recorder of Sutter County.

It is mutually agreed between the parties to the contract that no payments made under the contract shall be conclusive evidence of the performance of the contract, either wholly or in part, against any claim of the City, and no payment shall be construed to be acceptance of any defective work or improper material.

7.4 Resolution of Claims – This section is intended to comply with Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of Division 2 of the Public Contract Code and shall apply to all claims by the Contractor against the City in any amount arising out of or relating to the contract.

Claims filed by the Contractor shall be in writing and shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. Claims must be filed 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. Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et. seq., the undersigned, (name) _____ title _____ of (company) _____, hereby certifies that the claim for the additional compensation and time, if any, made herein for the work on this contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the contract between parties.

Dated _____ /s/ _____

Subscribed and sworn before me this _____ day of _____

Notary Public
My Commission Expires _____

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

The Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated claim investigator or auditor shall have access to those records and any other records as may be required by the Engineer to determine the facts or contentions involved in the claims. Failure to permit access to such records shall be sufficient cause for denying the claims.

For claims of less than Fifty Thousand Dollars (\$50,000), the Engineer shall 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 the City may have. The Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within fifteen (15) days after receipt of 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 over Fifty Thousand Dollars (\$50,000), the Engineer shall 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 the City may have. The Engineer's written response to the claim, as further documented, shall 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 Contractor in producing the additional information or requested documentation, whichever is greater. If the Contractor disputes the Engineer's written response, or if the Engineer fails to respond within the time prescribed, the Contractor may notify the Engineer, in writing, either within fifteen (15) days of receipt of Engineer's response or within fifteen (15) days of the Engineer's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon such written demand, City shall 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 Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Divisions 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 Contractor initially submits the written claim pursuant the section until the time the claim is denied, including any period of time utilized by the meet and confer conference.

As provided by Public Contract Code Section 20104.4, the following procedures are established for all civil actions filed to resolve claims subject to this section:

a. Within sixty (60) days, but no earlier than thirty (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 election within fifteen (15) days by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) days of the submittal, and shall be concluded within fifteen (15) days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the Court.

b. 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 such Code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subparagraph consistent with the rules pertaining to judicial arbitration. Arbitrators shall, when possible, be experienced in construction law. 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 appealing in arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under such chapter, also pay the attorneys' fees on appeal of the other party.

SECTION 8

QUANTITIES AND MATERIALS

8.1 Quantities – The estimate of the quantities of work to be done and materials to be furnished are approximate only, being given as a basis for the comparison of bids, and the City does not express or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work or to omit portions of the work that may be deemed necessary or expedient by the Engineer.

8.2 Materials – All materials required to complete the work under the contract shall be furnished by the Contractor, except such as is mentioned in these special provisions to be furnished by the City.

8.3 Quality Control – Contractor shall provide material submittals for all materials to be used on this contract. Material submittals shall be delivered to the Engineer a minimum of eight (8) working days prior to their scheduled use, and shall be approved by the Engineer prior to use.

Full compensation for providing material submittals and Certificates of Compliance shall be considered as included in the prices paid for the various contract items of work, and no separate payment will be made therefor.

8.4 Testing Methods and Frequency – The Contractor shall hire a geotechnical firm to perform all testing at City’s direction within the limits of work. Testing procedures and frequency to be used by the geotechnical firm shall be in accordance with the City’s testing procedures and as directed by the Engineer. All costs incurred will be paid by the Contractor. Minimum compaction testing requirements are as follows:

a. Roadway Subgrade and Aggregate Base – Compaction for roadway subgrade and aggregate base shall be tested using nuclear density testing gauges in accordance with ASTM D-1557, D-2922, and D-3017. In cases of highly variable subgrade materials, compaction tests shall be taken in accordance with California Test 216 with a maximum density determination at each location, if necessary. Compaction test frequency for roadway subgrade and aggregate base shall be one test location per each 5,000 square feet of pavement surface per lift of material. Random test locations shall be determined using either ASTM D-3665 or California Test 375.

b. Asphalt Concrete – Compaction for asphalt concrete shall be in accordance with California Test 375. Compaction test frequency for asphalt concrete shall be one test location per each 2,500 square feet of pavement surface area with a minimum of 3 tests per street segment or cul-de-sac.

c. Trench Backfill – Compaction for trench backfill shall be tested using nuclear density testing gauges in accordance with ASTM D-1557, D-2922, and D-3017. Compaction test frequency for trench backfill shall be one test per 24 inches of compacted material per 100 linear feet of trench.

Full compensation for testing materials shall be considered as included in the prices paid for the various contract items of work, and no separate payment will be made therefor.

SECTION 9

SAFETY PRECAUTIONS

9.1 Preservation of Property – Due care shall be exercised to avoid injury to existing improvements, utility facilities, adjacent property, and roadside trees and shrubbery that are not to be removed or relocated. Concrete surfaces including curbs and sidewalks that are not to be removed shall not be defaced or damaged in any manner, including markings with paint, asphalt overspray, etc. Contractor is to video or photograph job site to document existing conditions prior to start of work. Photographs and video shall be dated and labeled for location. One copy of the video or photographs shall be provided to the City.

Trees and shrubbery that are not to be removed, and pole lines, fences, signs, markers and monuments, buildings and structures, conduits, pipe lines under or above ground, sewer and water lines, all facilities and any other improvements or facilities within or adjacent to the work shall be protected from injury or damage, and if ordered by the Engineer, the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by the Contractor's operations, they shall be replaced or restored at the Contractor's expense, to a condition as good as when the Contractor entered upon the work, or as good as required by the Specifications accompanying the contract, if any such objects are a part of the work being performed under the contract. Damaged sanitary sewer services and storm drain laterals shall be repaired at Contractor's expense, as shown on the detail sheet on the plans. The Engineer may make or cause to be made such temporary or permanent repairs as are necessary to restore to service any damaged facility. The cost of such repairs shall be borne by the Contractor and may be deducted from any monies due or to become due to the Contractor under the contract.

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

9.2 Obstructions – The location of underground utilities shown on the plans represent the best information available to the City but should be considered as being approximate only. Utility lines may exist that are not as shown on the plans. The exact locations of underground facilities and improvements within the construction area shall be ascertained by the Contractor before using equipment that may damage such facilities or interfere with their service. Contractor will be held liable to the owners of such facilities for any damage or interference with service resulting from his operations.

9.3 Interruption of Service – No valves or other controls on existing utility systems shall be operated for any purpose by the Contractor without prior approval of the Engineer and/or the utility company.

9.4 Safety Devices – Sufficient and adequate signs, lights, barricades and cones shall be furnished, placed, and maintained throughout the construction project as may be deemed necessary by the Engineer to adequately protect the public from injury or unnecessary inconvenience due to the construction operations. Cones shall have two white reflective bands and all barricades shall be equipped with safety lighting. When traffic is to be interrupted or detoured, flagmen, adequately equipped and instructed, shall be provided by the Contractor as deemed necessary by the Engineer. Payment to the Contractor for all costs incurred by him in conforming to this section and "Maintaining Traffic" below shall be considered as included in payment for other items of work and no additional special payment will be made therefor.

9.5 Maintaining Traffic – Attention is directed to Section 7-1.04 of the Standard Specifications. The Contractor will be required to furnish the City a work schedule sufficiently

detailed so that the City may ascertain therefrom what effect the Contractor's proposed construction program will have on traffic through the construction area.

The Contractor shall conduct his operation so as to offer the least possible obstruction and inconvenience to the public, and he shall have under construction no greater amount of work than he can prosecute properly with due regard to the rights of the public. Temporary approaches at private driveways shall be provided as needed and when ordered by the Engineer, and shall be kept in good condition.

Temporary altered or alternate accessible pedestrian route of travel shall be provided around any sidewalk closure at all times. Altered and alternate routes of travel shall comply with Sections 6D.01, 6D.02, and 6D.05 of the California Manual on Uniform Traffic Control Devices and shall be kept in good usable condition.

Temporary altered or alternate pedestrian routes of travel shall be accompanied by temporary accessible pedestrian channelizing devices or barricades. If pedestrian barricades are to be used, they shall be located such that a disabled pedestrian shall not have to backtrack more than one block in order to reach an identified alternate route of travel. Accessible pedestrian channelizing devices and barricades shall comply with Sections 6F.63, 6F.68, and 6F.71 of the California Manual on Uniform Traffic Control Devices.

Spillage resulting from hauling operation along or across a public traveled way shall be removed immediately at the Contractor's expense.

Attention is directed to the following special traffic control provisions:

- a. Streets – One traffic lane in each direction, at least eleven feet (11') wide, shall be maintained at all times.
- b. Minor Streets – Remaining streets within the construction area may be closed as construction necessitates subject to the conditions in subparagraph c. below.
- c. General Traffic Control Requirements:
 - 1) Contractor shall provide all necessary detour signs, warning signs, safety devices, and flagmen, as determined by the Public Works Director.
 - 2) Contractor shall provide adequate notice to City and to affected property owners of closures twenty-four (24) hours prior to closure.
 - 3) Contractor shall assure that adequate ingress and egress is provided to all commercial establishments adjacent to the work at all times.
 - 4) Contractor shall assure that residents of residential properties adjacent to the work are afforded reasonable and safe access to their property, and

that overnight parking of their vehicles on such property is not restricted except when suitable on-street parking is available.

5) Trenches which have been backfilled but not fully restored and which are to be utilized by public traffic shall be temporarily patched with cold mix asphalt prior to traffic usage unless otherwise approved by the Engineer. This requirement is in addition to those set forth in Section 12 of these Special Provisions.

SECTION 10 **DESCRIPTION OF THE WORK**

This project includes the installation of 8" VCP, 8" Pipe Bursting, 8" Cured In Place Pipe liner, and associated trench/landscape restoration, sewer lateral service reconnections, and other items as specified in the project plans.

SECTION 11 **PIPE BURSTING**

11.1 General – 8" SDR 17 HDPE Pipe Bursting shall conform to:

- This special provision specification Section 11, "Pipe Bursting"
- Special provisions specification Section 13, "Sewer Main Construction"

11.2 Pipe Bursting – Pipe bursting is a system by which the pneumatic burster unit splits the existing pipe while simultaneously installing a new polyethylene pipe of the same size or larger size pipe where the old pipe existed, then reconnect existing sewer service house/business connections, television inspection of the polyethylene pipe and complete the contract documents. Only pneumatically operated equipment with a pipe bursting head attached to the polyethylene pipe will be allowed for use. The pipe bursting head must attach to the HDPE via bolts and allow the pneumatic tool to fit into the front of the bursting head. The bursting head must be able to be detached in the maintenance hole and the pneumatic tool must have the ability to go into reverse and exit through the newly installed HDPE and out of the entry pit. The pneumatic tool must be used in conjunction with a constant tension 8 ton hydrostatic winch.

11.3 Qualifications – The Contractor shall be certified by the particular pipe bursting system manufacturer that such a company is fully trained user of the pipe bursting system. Polyethylene pipe jointing shall be performed by personnel trained in the use of butt-fusion equipment and recommended methods for new pipe connections.

11.4 Submittals – Submit the following contractor's drawings:

- a. Shop drawings, catalog data, and manufacture's technical data showing complete information on material composition, physical properties, and dimensions of new pipe and fittings. Include manufacturer's recommendations for handling, storage, and repair of pipe fittings damaged.
- b. Method of construction and restoration of existing sewer service connections. This shall include: 1. Detail drawings and written descriptions of the entire construction procedure to install pipe, bypass sewage flow and reconnection of sewer service connections.
- c. Certificate of workmen training for installing pipe.
- d. Television inspection reports and DVDs made before and after new pipe installation.
- e. Traffic Control Plan
- f. Sewer bypass plan
- g. Project Schedule showing critical path

11.5 Delivery, Storage, and Handling – Contractor shall transport, handle, and store pipe and fittings as recommended by manufacturer.

If new pipe and fittings become damaged before or during installation, it shall be repaired by the manufacturer or replaced as required by the engineer at the contractor's expense, before proceeding further.

Deliver, store and handle other materials as required to prevent damage.

11.6 Methods for Installation of New Pipe – The method approved for rehabilitation of existing sanitary sewer by pipe bursting and installation of new polyethylene pipe is Trenchless Sewer and Pipe Replacement by Trenchless Co. or an approved equal.

Materials Polyethylene Plastic Pipe shall be high density polyethylene pipe and meet the applicable requirement of ASTM F714 Polyethylene (PE) Plastic Pipe (SDR – PR). Based on outside diameter, ASTM D3035:

- a. Sizes of the insertions to be used shall be such to renew the sewer to its original or greater than flow capacity.
- b. All pipe shall be made of virgin material. No rework except that obtained from the manufacturer's own production of the same formulation should be used.

c. The pipe shall be homogenous throughout and shall be free of visible cracks, holes, foreign material, blisters, or other deleterious faults.

d. Dimension Ratios: The minimum wall thickness of the polyethylene pipe shall meet the following: Depth of Cover (feet) Minimum SDR of Pipe (0' to 16.0') use SDR 17, (> 16.1') use SDR 17.

e. Material color shall be white, black or whatever is specified with interior of pipe having a light reflective color to allow easier/better viewing for television inspection.

11.7 Tests – Tests for compliance with this specification shall be made as specific herein and in accordance with the applicable ASTM specification. A certificate with this specification shall be furnished, upon request, by the manufacturer for all material furnished under this specification. Polyethylene plastic pipe and fittings may be rejected to meet any requirements of this specification. All pipes and connections shall pass tests in accordance to City of Yuba City Specifications and as directed by the Engineer.

11.8 Equipment -

a. Pipe Bursting Tool – The pipe bursting tool shall be designed and manufactured to bore its way through existing pipe material by fragmenting the pipe and compressing the old pipe sections into the surrounding soil as it progresses. The bursting unit shall be pneumatic and shall generate sufficient force to burst and compact the existing pipe line. See manufacturer's specifications for what size tool should be used in what diameter of pipe, as well as parameters of what size tool for percentage of upsize allowed. The pipe bursting tool shall be pulled through the sewer by a winch located at the upstream maintenance hole. The bursting unit shall pull the polyethylene pipe with it as it moves forward. The bursting head shall have the ability to be taken out of the maintenance hole, without the need to excavate an exit pit. The pipe bursting tool shall be pneumatic, and must have the ability to go into reverse by turning the external whip hose. The bursting action of the tool shall increase the external dimensions sufficiently, causing breakage of the pipe at the same time expanding the surrounding ground. This action shall not only break the pipe but also create the void into which the burster can be winched and enables forward progress to be made. At the same time the polyethylene pipe, directly attached to the bursting head, on the front of the pneumatic tool, shall also move forward. The burster shall have its own forward momentum while being assisted by winching. A hydraulic winch shall give the burster friction by which it can be moved forward. To form a complete operating system, the burster must be matched to a constant tension hydraulic winching system.

b. Winch - A winch shall be attached to the front of the bursting unit. The winch shall provide a constant tension to the burster so that it may operate in an efficient manner. The winch shall ensure directional stability in keeping the unit on line. The winch shall be hydraulically operated providing a constant tension throughout the

operation. The winch shall be of the constant tension type but shall be fitted with a direct reading load gauge to measure the winching load. The winch must automatically maintain a constant tension. The constant tension winch shall supply sufficient cable in one continuous length so that the pull may be continuous between approved winching points. The winch, cable, and cable drum must be provided with safety cage supports so that it may be operated safely without injury to person or property. The contractor shall provide a system of guide pulleys and bracing at each maintenance hole to minimize cable contact with the existing sewer between maintenance holes. The supports to the trench shoring in the insertion pit shall remain completely separate from the winch boom support system and shall be so designed that neither the pipe nor the winch cable shall be in contact with them.

11.9 Sewer Service Connection – All sewer service connections shall be identified and located prior to the pipe insertion to expedite reconnection. Upon commencement, pipe insertion shall be continuous and without interruption from one maintenance hole to another, except as approved by the engineer and/or his/her representative. Upon completion, the services shall be reconnected so as to minimize any inconvenience to the customers.

Sewer Service connections shall be connected to the new pipe by various methods. The saddles should be made of a material compatible with that of the pipe.

a. Electrofusion saddles as manufactured by Central Plastics or approved equal, shall be installed in accordance with the manufacture's recommended procedures.

b. Conventional Fusion saddles as manufactured by Central Plastics, Phillips Driscopipe, Plexco, or approved equal shall be installed in accordance with the manufacturer's recommended procedures.

c. Compression-Fit service connections of the new service laterals to the mainline. The service connection shall be specifically designed for connection to the sewer main being installed, and shall be an INSERT TEE as manufactured by Fowler Manufacturing CO. Hillsboro, Oregon, or approved equal. Install using procedures and equipment as referenced in manufacturer's written installation instructions.

11.10 Preparation -

a. By-Pass Pumping:

1. The contractor shall provide diversion for the pipe bursting/replacement process. The pumps and by-pass lines shall be of adequate capacities and sizes to handle all flows.

2. The contractor shall be responsible for continuity of sanitary sewer service to each facility connected to the section of sewer during the execution of the work.

3. If sewage backup occurs and enters buildings, the contractor shall be responsible for clean-up, repair, property damage cost, environmental fees, and claims.

b. Television Inspections: The Contractor may request City television inspections of pipelines however this does not preclude the Contractor from performing television inspections of their own. Television inspections of pipelines shall be performed by experienced personnel trained in locating breaks, obstacles, and service connections by closed circuit color television. Television inspection shall include the following:

1. DVDs shall be submitted to the City prior to bursting operation.
2. DVDs (post) to be submitted to the City before final invoice.
3. DVDs to remain property of the City; contractor to retain second copy for his/her use.
4. All flows tributary to reach of sewer being inspected are to be completely by-passed around the reach during inspection if necessary and required by the City of Yuba City.
5. Post construction DVD upon completion of reconstruction of each reach of sewer with the voice description, as appropriate with stationing of services indicated. Data and stationing to be on DVD.
6. Should any portion of the inspection DVDs be of inadequate quality or coverage, as determined by the City, the contractor will have the portion re-inspected and recorded (via, DVD) at no additional expense to the City.

11.11 Construction Methods – Equipment used to perform the work shall be located away from buildings so as not to create noise impact. Provide a silent engine compartment with the winch to reduce machine noise as required to meet local requirements.

The contractor shall install all pulleys, rollers, bumpers, alignment control and to protect the pipe from damage during installation. Lubrication may be used as recommended by the manufacturer. Under no circumstances will the pipe be stressed beyond its elastic limit. Winch line is to be centered in the pipe to be burst with adjustable boom.

The installed pipe shall be allowed the manufacturer's recommended amount of time, but no less than four hours, for cooling and relaxation due to tensile stressing prior to any

reconnection of service lines, sealing of the annulus or backfilling of the insertion pit. Sufficient excess length of new pipe, but not less than four inches, shall be allowed to protrude into the maintenance hole to provide for occurrence. Restraint of pipe ends shall be achieved by means of Central Plastics Electrofusion couplings or approved equal. The Electrofusion couplings shall be slipped over pipe ends against the maintenance hole wall and fused in place. Installation of Electrofusion couplings shall be done in accordance with the manufacturer's recommended procedures.

Following the relaxation period, the annular space may be sealed. Sealing shall be made with material approved by the engineer and/or his representative and shall extend a minimum of eight inches into the maintenance hole wall in such a manner as to form a smooth, uniform, watertight joint. The termination pipe ends in maintenance holes shall be connected by Central Plastics Electrofusion couplings or approved equal to eliminate ground water infiltration. Installations of Electrofusion couplings shall be done in accordance with the manufacturer's procedures.

11.12 Field Testing – After the existing sewer is completely replaced, internally inspect with television camera and DVD as required. The finished DVD shall be continuous over the entire length of the sewer between two maintenance holes to be free from visual defects.

Defects shall be repaired or the pipe shall be replaced at the contractor's expense.

11.13 Pipe Joining – The polyethylene pipe shall be assembled and joined at the site using the butt-fusion method to provide a leak proof joint. Threaded or solvent-cement joints and connections are not permitted. All equipment and procedures used shall be in strict compliance with the manufacturer's recommendations. Fusing shall be accomplished by personnel certified as fusion technicians by a manufacturer of polyethylene pipe and/or fusing equipment.

The butt-fused joint shall be true alignment and shall have uniform roll-back beads resulting from the use of proper temperature and pressure. The roll back beads shall be removed prior to installing the pipe. The joint shall be allowed adequate cooling time before removal of pressure. The fused joint shall be watertight and shall have tensile strength equal to that of the pipe. All joints shall be subject to acceptance by the engineer and/or his/her representative prior to insertion. All defective joints shall be cut out and replaced at no cost to the City. 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 and must be removed from the site. However, a defective area of the pipe may be cut out and the joint fused in accordance with the procedures stated above. In addition, any section of pipe having other defects such as concentrated ridges, discoloration, excessive spot roughness, pitting, variable wall thickness or any other defect of manufacturing or handling as determined by the engineer and/or his/her representative shall be discarded and not used.

Terminal section of pipe that is joined within the insertion pit shall be connected with Central Plastic Electrofusion Couplings or approved equal or connectors with tensile strength equivalent to that of the pipe being joined.

11.14 Measurement and Payment – For purposes of obtaining length of pipe for payment, the pipe shall be measured along the surface to the nearest foot to the centerline of manholes, branches or wyes.

The price bid per lineal foot of (8” SDR 17 HDPE Pipe Bursting) shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in furnishing and installing the pipe complete in place, connections to laterals and manholes as shown on the Plans or required in the Specifications.

SECTION 12 **TRENCHING OPERATIONS**

12.1 Legal Requirements – Prior to commencement of trenching or excavating operations, the Contractor on this project shall have complied with all applicable provisions of Title 8 of the California Administrative Code and all applicable requirements of the Labor Code of the State of California, including:

a. Section 6705 of the Labor Code which requires that, prior to starting excavation of any trench five feet (5’) or more in depth, the Contractor submit for the Engineer’s approval, plans for trench shoring or protection he proposes to use in performing the trenching and pipe installations in this contract; and

b. Section 6500 of the Labor Code which requires that the Contractor obtain a permit for trenching operations from the State Division of Occupational Safety and Health prior to any trench work in trenches or excavations over five feet (5’) deep.

This section shall also apply to any person doing work in accordance with any permit issued by the City.

12.2 General – Trenching operations shall include cutting of pavement, trench excavation, disposal of excess materials, removal of obstructions, bracing and shoring, bedding of pipe, backfilling, compacting, and placing of temporary and permanent street pavement restoration.

a. Trenching operations shall proceed ahead of the pipeline laying operations to the full width and depth of the trench on a daily basis to allow for adjustments if an obstruction of any kind is in conflict with the design line and grades for the pipeline. The maximum distance shall be twice the standard full pipe length for the pipe material being installed.

12.3 Trench Width – The maximum clear width of the trench, measured at the horizontal diameter of the pipe and at one foot (1') above the top of the pipe, shall not be more than the outside diameter of the pipe, plus one foot (1').

If such trench width is exceeded for any reason, the Contractor shall provide, at his own expense, improved bedding conditions, as approved by the Engineer, to meet the load requirements of the changed conditions.

12.4 Cutting of Pavement – When the trench is in an existing paved area, the pavement shall be sawed on neat lines parallel and equidistant from the trench centerline. Pavement between the lines shall be broken and removed immediately ahead of the trenching operations.

12.5 Bracing and Shoring – To ensure the safety of workmen and to protect and facilitate the work, sufficient bracing and shoring shall be installed in all excavations. The bracing and shoring shall comply with rules, orders, and regulations of the California Division of Industrial Safety. Failure to comply with any of the above mentioned rules, orders, and regulations shall be sufficient cause for, but shall not place any responsibility upon, the Engineer to immediately suspend the work. The Contractor shall be responsible for the adequacy of all shoring and bracing and compliance with law, and failure of the Engineer to suspend the work or notify the Contractor of the inadequacy of the shoring or bracing or non-compliance with law shall not relieve the Contractor of this responsibility.

Insofar as possible, sheeting shall not extend below the top of the pipe barrel. All sheeting, timbering, lagging and bracing shall, unless otherwise required by the Engineer, be removed during backfilling, and in such a manner as to prevent any movement of the ground or damage to the piping or to the other structures. When the Engineer requires that sheet piling, lagging and bracing be left in place, such materials shall be cut off where designated and the upper part withdrawn. If steel sheet piling is utilized, it may be withdrawn, with compacting of backfill to proceed as piling is removed.

12.6 Maximum Length of Trench Open – At end of each working day, there shall be no more than three hundred feet (300') of open trench in unimproved areas or fifty feet (50') in paved areas, excluding manhole excavations, unless otherwise authorized by the Engineer. The maximum length of trench open for cast-in-place concrete pipe, if allowed, shall be as specified in Section 14 of these Special Provisions. Contractor shall provide protective barrier approved by the Engineer around open trench when left unattended.

At the end of each working day, the trench shall either be backfilled and compacted or properly shored, braced, and covered with steel plate bridging conforming to these Special Provisions in order to protect surrounding structures and utilities and to allow safe vehicle and pedestrian travel.

Steel plate bridging, if used, shall be steel plate designed for HS20-44 truck loading per the CalTrans Bridge Design Specifications Manual. The permittee shall maintain on

the steel plate a non-skid surface having a minimum coefficient of friction equivalent to 0.35 as determined by California Test Method 342.

Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of two (2) dowels pre-drilled into the corners of the plate and drilled two inches (2") into the pavement. Subsequent plates are butted to each other. Fine graded asphalt concrete shall be compacted to form ramps, maximum slope eight and one-half percent (8.5%) with a minimum twelve inch (12") taper to cover all edges of the steel plates. When steel plates are removed, the dowel holes in the pavement shall be backfilled with either graded fines of asphalt concrete mix, concrete slurry or an equivalent slurry satisfactory to the City's representative.

The Contractor shall be responsible for maintenance of the steel plates, shoring, and asphalt concrete ramps.

Unless specifically noted in the provisions of the permit, steel plate bridging should not exceed four (4) consecutive working days in any given week. Backfilling of excavations shall be covered with a minimum three inch (3") temporary layer of cold asphalt concrete, compacted in place using a vibrating roller or vibroplate.

The following table shows the required minimal thickness of steel plate bridging required for a given trench width:

| <u>Trench Width</u> | <u>Minimum Plate Thickness</u> |
|---------------------|--------------------------------|
| 1.0' | 1/2" |
| 1.5' | 3/4" |
| 2.0' | 7/8" |
| 3.0' | 1" |
| 4.0' | 1 - 1/4" |

Note: For spans greater than 4 feet, a structural design shall be prepared by a registered civil engineer and approved by the City.

12.7 Dewatering – Contractor shall be responsible for the control, removal, and disposal of any groundwater that may be encountered in the course of excavating and backfilling trenches or placing pipe. Whenever water or over-saturated soil conditions exist which may interfere with proper installation, trenches shall be dewatered before placement of any pipe or bedding material. Unless otherwise approved in writing by the Engineer, groundwater and/or water from trench dewatering shall be free of sediment and other construction materials before entering the City storm drain system. A dewatering plan, including a water de-sedimentation plan, shall be in compliance with California Water Quality Control Board regulations and guidelines and approved by the Engineer prior to discharge of water to the City storm drain system or Gilsizer Drainage District facilities. If dewatering of excavations is necessary during non-working hours the Contractor shall provide necessary pumps, equipment and manpower to maintain compliance of control and disposal of groundwater in an appropriate manner. The

Contractor is responsible for all extra work or changed conditions from inadequate dewatering techniques which cause the trench bottom to fail to provide proper support for the pipe, or lead to trench side wall collapse.

If dewatering well points are installed for dewatering purposes, Contractor shall submit a removal plan to the Engineer for approval. Removal of well points shall include the backfilling of voids with a flowable grout, unless otherwise approved by the Engineer.

12.8 Bedding – Unless otherwise indicated on the drawings or in the Special Provisions, the pipe shall be placed on a firm, prepared bed of three-quarter inch ($\frac{3}{4}$ " maximum crushed rock. The $\frac{3}{4}$ " maximum crushed rock shall have at least one fractured face and shall be in accordance with ASTM D 448 and meet the following gradation:

| <u>Sieve Size</u> | <u>Percent Passing</u> |
|-------------------|------------------------|
| 3/4" | 90 to 100 |
| 3/8" | 20 to 55 |
| No. 4 | 0 to 10 |
| No. 8 | 0 to 5 |

Bedding shall extend at least four inches (4") below the pipe barrel or as indicated on the plans. The pipe shall be bedded uniformly throughout its length to a bearing width of at least sixty percent (60%) of the pipe's internal diameter. Bell holes shall be excavated in the bedding to provide approximately 1" clearance between the bell and the bedding. Pipe bells shall not rest directly on the bedding.

12.9 Initial Backfill – See Section 13 of these Special Provisions for specific backfill requirements for storm drain construction, sewer main construction, and water main construction, respectively.

12.10 Restoration of Surfacing

a. Restoration of surfacing shall conform to the requirements of the Plans, these Special Provisions, and applicable portions of the Standard Specifications. Permanent asphalt paving material shall be Type B, $\frac{1}{2}$ " maximum gradation, with PG 64-10 penetration type asphalt.

b. Where Type A or C trench restoration is required, the trench shall be temporarily patched prior to opening for traffic using either a cold mix asphalt or other material approved by the Engineer. This surfacing shall be maintained in good condition until replaced with permanent paving. Not less than thirty (30) calendar days after placement of temporary paving, it shall be removed, the trench edges neatly trimmed, and the permanent paving shall be placed.

c. Other types of trench restoration shall be temporarily patched with cold mix asphalt prior to opening to traffic and completed within fourteen (14) calendar days

of initial trench opening, or within twenty-one (21) calendar days if located more than three feet (3') from a traveled way.

d. If CDF is used, Type A, B, and C trenches require a minimum of seven (7) days without traffic loads prior to permanent paving. After seven (7) days and prior to permanent paving, the trench shall be temporarily patched with a minimum of one inch (1") cold mix asphalt and compacted in place using a vibrating roller or vibroplate.

e. Nothing herein shall be considered to modify the provisions of Section 6.03, Time for Completion.

f. Where landscape surface restoration is specified, contractor shall return surface to original or better condition utilizing in-kind material where possible.

12.11 Pavement Leveling – This item provides for a leveling course of Type B asphalt concrete, one-half inch (1/2") maximum grading, in any area of the existing pavement outside of trench areas which may settle due to construction equipment loading. The leveling material shall be placed in lifts not to exceed two inches (2") and begin in the deeper portion of the settlement and taper to existing surface. Prior to placing of the A.C. mix, the area to be leveled shall be thoroughly cleaned and a tack coat of SS-1 emulsified asphalt shall be placed at a rate of 0.05 to 0.1 gallons per square yard. After placing the mix, it shall be leveled using rakes or lutes as required then thoroughly compacted using a 5-ton steel wheel roller.

12.12 Payment – Full compensation for trench excavation and backfill as herein specified including all equipment, labor, materials, dewatering, special traffic considerations and safety measures required shall be included in the price bid per lineal foot of the respective sizes, grades, and types of pipes and conduits listed in the Proposal and no additional compensation will be allowed therefor; except that when a separate bid item is provided for shoring, the lump sum price bid therefor shall be full compensation for furnishing, installing, and maintaining adequate sheeting, shoring, and bracing or equivalent method for protection of life or limb which conform to applicable safety orders; and except that when a separate bid item is provided for CDF, the price per cubic yard shall be full compensation for furnishing, installing, and protecting the Controlled Density Fill in lieu of backfill with sand or native material and placing Class 2 aggregate base.

Compensation for pavement restoration will be made at the unit price bid therefor in the schedule, and shall be computed to the neat lines of the trench as established on the plans or in the Specifications. If no bid item is provided for trench restoration, the cost shall be considered included in the price bid for related items of work. Payment for trench restoration of service laterals shall be included in the cost of the line item for installation of the service lateral.

The price paid per square foot of Pavement Leveling shall be full compensation for all work including labor, materials, and equipment to perform the pavement leveling. Section 9-1.06 of the Standard Specifications shall not apply to this item. If no bid item is provided for payment leveling, the cost shall be considered included in the price bid for related items of work.

Areas to be paid for under this item will be those as designated by the Engineer and will only include areas of settlement caused by construction equipment loadings outside of the trench areas required to perform the other items of work covered under this contract. This item will not include pavement damage caused by excess excavation or trench failures. In the event that street surfacing is damaged outside the neat lines of the trench due to the Contractor's operations or failure to adequately maintain temporary patches, the Contractor shall remove and replace such damaged surface at his own expense. Such work shall be in conformance with associated trench restoration requirements herein specified.

Price paid per LF of Landscape Trench and Restoration shall be compensation for all work including labor, materials, and equipment to return landscaping to original or better condition prior to construction activities.

SECTION 13 **SEWER MAIN CONSTRUCTION**

13.1 General – Furnishing and installing sanitary sewer facilities and appurtenances shall be in accordance with the Plans, these Special Provisions and the Standard Specifications.

13.2 Materials – Sewer pipe material shall be as shown on the Plans.

Vitrified Clay Pipe (VCP) and fittings shall be extra strength unglazed, bell and spigot pipe and shall conform to ASTM designation C-700. The pipe joints shall be of the mechanical compression type, conforming to ASTM designation C-425.

HDPE Pipe shall conform to AWWA C906, SDR11, Ductile Iron Pipe (DIP) size and NSF 61 Standard. Polyethylene pipe shall be manufactured in accordance with ASTM F714, Polyethylene (PE) Plastic Pipe (SDR-PR) based on Controlled Outside Diameter and shall be so marked. Each production lot of pipe shall be tested for (from material or pipe) melt index, density, % carbon, dimensions and either quick burst or ring tensile strength (equipment permitting). Normal pipe sizes only are indicated on the drawings and bid form. Outside diameter of pipe is generally 1 to 2 inches greater than the nominal pipe diameter.

Materials used for the manufacturer of polyethylene pipe and fittings shall be PE3408 high density polyethylene meeting cell classification 345464C per ASTM D3350; and meeting Type III, Class B or Class C, Category 5, Grade P34 per ASTM D1248; and shall be listed in the name of the pipe and fitting Manufacturer in PPI TR-4, Recommended Hydrostatic Strengths and Design Stresses for Thermoplastic Pipe and Fittings Compounds, with a standard grade rating of 1600 psi at 73DF. The Manufacturer shall certify that the materials used to manufacture pipe and fittings meet these requirements.

All molded fitting and fabricated fittings shall be fully pressure rated to match the pipe SDR pressure rating to which they are made. All fittings shall be molded or fabricated by the manufacturer. No Contractor fabricated fitting shall be used unless approved by the Engineer.

The Contractor shall adhere to pipe manufacturer's most current data regarding tensile limitations for trenchless application. The Contractor shall adhere to the manufacturer's recommendations and shall not exceed the maximum valves recommended by the manufacturer. A copy of manufacturer's recommendations on the maximum pulling force and tensile limitations shall be provided to the Engineer prior to commencing work.

13.3 Installation of Sanitary Sewer – The pipe shall be laid in a trench excavated to the lines and grades established by the Engineer. The bottom of the trench shall be graded and prepared to provide a firm and uniform bearing throughout the entire length of the pipe.

Bedding of the pipe shall be in accordance with Section 13 “Trenching Operations” of these Special Provisions.

For Pipe Bursting installation, see section 11 of these provisions.

13.4 Initial Backfill – The trench shall be backfilled to a point twelve inches (12”) above the top of the pipe using three-quarter inch (3/4”) maximum crushed rock. The initial backfill shall be placed so as not to disturb or damage the pipe, and shall be brought up evenly on both sides. It shall be placed in layers not exceeding four inches (4”) in depth and hand tamped to the spring line of the pipe or placed to a depth sufficient to keep the pipe from floating. If C.D.F. is used for the balance of the backfill, the bedding and initial backfill shall be compacted prior to placement of C.D.F.

13.5 Completing Backfill – Trench backfill material placed above the initial backfill shall be as designated on the Plans and as specified herein. If not so designated on the Plans, backfill material may be one of the following:

a. Class 2 Aggregate Base – If crushed rock is used for the initial backfill, filter fabric shall be installed to provide a barrier between the Class 2 aggregate base backfill and the crushed rock. If sand is used for the initial backfill, no filter fabric is required.

The Class 2 aggregate base shall be compacted as shown on the plans. The method of compaction shall be suitable for the backfill material used and the trench condition, and shall be approved by the Engineer.

b. Sand – After the initial backfill is in place, filter fabric shall be installed to provide a barrier between the sand backfill and the initial backfill.

The sand shall be ninety-five percent (95%) compacted and the method of compaction shall be suitable for the backfill material used, the trench condition, and shall be approved by the Engineer. Jetting of the sand is not allowed.

c. Controlled Density Fill (C.D.F.) –Controlled Density Fill shall be a mixture of Portland Cement (not to exceed 25 pounds per yard), fly ash, aggregates, water and admixtures proportioned to provide a non-segregating, self-consolidating, free-flowing, and excavatable material which will result in a hardened, dense, non-setting fill. The unconfined compressive strength shall not exceed 200 psi. Laboratory trial batches or field trials data must be submitted to confirm strength and weight.

C.D.F. shall be used in lieu of completing backfill with sand or Class 2 aggregate base if directed by Engineer or shown on the Plans.

C.D.F. shall be proportioned to be flowable, non-segregating, and excavatable by hand or machine. Desired consistency shall be achieved in the 5-10 inch slump range. The C.D.F. shall be brought up uniformly to the elevation shown on the Plans.

Contractor shall provide steel plates to span utility trenches and prevent traffic contact with C.D.F. for at least seven (7) days after placement.

C.D.F. patching, mixing, and placing may be started if weather conditions are favorable, when the temperatures is at 34°F and rising. At the time of placement, C.D.F. must have a temperature of at least 40°F. Mixing and placing shall stop when the temperature is 38°F or less and falling. Each filling stage shall be as continuous an operation as is practicable. C.D.F. shall not be placed on frozen ground.

There shall be a seven (7) day waiting period prior to subjecting the trench backfill to traffic loads. This time period can be reduced if, in the opinion of the Engineer, the C.D.F. is adequately firm and stable.

The Contractor shall be responsible for maintenance and repair of any failures of the trench for one (1) year from the completion of the work.

13.6 Manholes – Manholes for sanitary sewers shall be constructed of pre-cast reinforced concrete sections or shall be poured in place reinforced concrete or shall be a combination of both materials. In no case will pre-cast manhole bases be allowed. Manholes shall conform to the details shown on the plans.

Pre-cast concrete tapered sections, rings, and manhole body sections shall conform to Section 71 of the Standard Specifications except as herein provided. All joints on the inside of structures shall be neatly struck and pointed. The bottoms of manholes, as shown on the plans, shall be neatly shaped.

No pipe shall project more than 0.17 feet into a manhole and in no case shall the bell of a pipe be built into the wall of a manhole or structure. All work shall be cured for a period of ten (10) days after being placed and shall be protected from injury.

Cast-in-place reinforced portions of manholes shall be constructed of Class A concrete as specified in Section 90 of the Standard Specifications. Bar reinforcing steel shall be furnished and installed in accordance with Section 52 of the Standard Specifications.

Cast iron frames and covers as specified on the plans shall be furnished and installed by the Contractor in accordance with the applicable portions of Section 55 of the Standard Specifications.

Payment for manholes shall include full compensation for all labor, tools, materials, and equipment, pre-cast concrete sections, all cast-in-place concrete, cast iron frame and cover, structure excavation, and backfill and raising to grade following completion of paving in accordance with these Special Provisions.

13.7 Testing and Cleaning of Sewer Line – The sanitary sewers shall be tested between manholes or between manholes and cleanouts by one of the following methods. Tests for final acceptance shall be made after the line has been backfilled and subgrade compaction requirement has been obtained in the street section.

Water Pressure Test – Sewer lines shall be tested after installation by means of an internal hydrostatic head developed by plugging the lower end of the line at a manhole and filling the line with water. The line shall be tested in sections such that the head of any part will not be less than three feet (3') above the top of the pipe. Loss of water, under the above conditions specified, shall not exceed one hundred (100) gallons per inch diameter of pipe per thousand feet (1000') of pipe per day. Should the loss exceed this figure, the Contractor shall make such repairs as necessary to reduce the loss to the acceptable figure.

Force Main Water Pressure Test – Tests shall be made in conformance with the applicable provisions of AWWA Standard C-600. Test pressures shall be 100 PSI.

Gravity Sewer Air Test – The sewer shall be effectively plugged and an air compressor shall be used to obtain a pressure of 4 psi in the section of line being tested. The pressure in the pipe shall be allowed to fall from 3.5 to 2.5 psi and the time interval shall be recorded in minutes. If the time interval is less than that calculated in the following formula, the Contractor shall make the necessary corrections to reduce the leakage to required limits.

Time Interval (Minutes) = Main Line Pipe Diameter (Inches)

The maximum reach to be tested shall be the reach between two consecutive manholes.

The Contractor shall supply the compressor, plugs, and necessary piping.

Before the sewer lines are accepted, they shall be cleaned and/or flushed, and all foreign matter shall be removed to the satisfaction of the Engineer. Suitable traps shall be placed in the manholes during cleaning to intercept large material. Such material shall be removed from the line.

After pressure testing has been completed, all gravity sewer mains shall be cleaned and televised before permanent paving is applied. Televising of the sewer mains shall be done in conformance with the standard of the industry. At a minimum, the display shall be in color, a written log shall be maintained, text shall appear on the display to indicate location of run, a narrative shall be given indicating location and any deficiencies, and the invert of the pipe shall always be positioned on the bottom of the display. Any deficiencies in the construction shall be corrected and the line shall be televised again.

13.8 Crossing Over A Water Main – If a sewer service or main is crossing over a water main, the sanitary sewer pipe shall be either ceramic epoxy lined or fusion-bonded epoxy lined and coated ductile iron pipe. The eighteen foot (18') pipe length shall be centered (plus or minus 1') over the water main crossing, and the water main pipe length shall be centered under the sewer main or service. If sewer services are constructed over the water main, then sewer service and main shall be ductile iron pipe.

13.9 Sewer Services – Services shall be placed on a firm, prepared bed of crushed rock. Bedding shall extend at least four inches (4") below the pipe barrel or as indicated in the plans. The trench shall be backfilled to a point twelve inches (12") above the top of the pipe using crushed rock. The initial backfill shall be carefully placed so as not to disturb or damage the pipe, and shall be brought up evenly on both sides. The final backfill shall meet the requirements of City Standard Detail 501. Backfill and trench restoration shall be included in the cost of the line item for "Sewer Service."

13.10 Measurement and Payment – For purposes of obtaining length of pipe for payment, the pipe shall be measured along the surface to the nearest foot to the centerline of manholes, branches, wyes, or pipeline couplings or connection points.

The price paid per lineal foot of sewer pipe or force main shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all the work involved in furnishing and installing the pipe complete in place including connections to manholes, wyes as shown on the Plans or required in the Specifications.

SECTION 14

PAVEMENT MARKERS AND MARKINGS

14.1 Temporary Pavement Delineation – Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with the provisions in Section 12-3, “Traffic-Handling Equipment and Devices,” of the Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as to reduce the minimum standards specified in the Manual of Traffic Controls published by the Department or as relieving the Contractor from his responsibility as provided in Section 7-1.09, “Public Safety,” of the Standard Specifications.

Whenever the work causes obliteration of, or revision to, pavement delineation, temporary or permanent pavement delineation shall be in place and conflicting pavement delineation removed, prior to opening the traveled way to public traffic. Lane line pavement delineation shall be provided at all times for traveled ways open to public traffic.

All work necessary to establish the alignment of temporary pavement delineation, including any required lines and marks, shall be performed by the Contractor. Surfaces on which temporary pavement delineation is to be applied shall be cleaned of all dirt and loose material and shall be dry when the pavement delineation is applied. Temporary pavement delineation shall not be applied over existing or other temporary pavement delineation.

Temporary pavement delineation for lane lines shall consist of temporary reflective raised pavement markers placed at longitudinal intervals of not more than twenty-four feet (24’). Temporary reflective raised pavement markers shall be the same color as the lane line the markers replace.

Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer’s instructions. Temporary reflective raised pavement markers shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place temporary reflective raised pavement markers in areas where removal of the markers will be required.

In lieu of temporary reflective raised pavement markers, four inch (4”) reflectorized traffic tape may be used as directed by the Engineer.

Removable type traffic tape shall be applied in accordance with the manufacturer’s installation instructions and shall be rolled slowly with a rubber tired vehicle or roller to ensure complete contact with the pavement surface. Traffic tape shall be applied straight on tangent alignment and on a true arc on curved alignment. Traffic tape shall not be applied when the air or pavement temperature is less than 50°F unless the installation procedures to be used are approved by the Engineer prior to beginning installation of the tape.

a. Payment – Full compensation for furnishing, placing, maintaining, and removing temporary delineation including temporary reflective raised pavement markers, cones, delineators, channelizers, four inch (4”) traffic stripe, and providing equivalent patterns of the permanent traffic lines when required; shall be considered as included in the contract prices paid for the items of work that obliterated the pavement delineation and no separate payment will be made therefor.

14.2 Pavement Delineation Layout – Contractor is responsible for re-establishing the existing pavement delineation, including traffic stripes, traffic markers, and markings, after the asphalt concrete has been placed, unless modified by the Engineer. Contractor is to use his forces to accurately locate the positions of all traffic stripes, traffic markers, and markings prior to their removal due to construction activities so that the new pavement delineation can be replaced in the same location.

Full compensation for laying out the new pavement delineation, including thermoplastic traffic stripes, thermoplastic pavement markings, and pavement markers shall be considered as included in unit price bid under “Striping Repair” in the appropriate bid schedule.

14.3 Thermoplastic Traffic Stripes and Traffic Markings – Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, “Traffic Stripes and Pavement Markings,” of the Standard Specifications and these Special Provisions.

The contract prices paid per lump sum item “Striping Repair” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in painting traffic strips (regardless of the number, widths, and patterns of individual strips involved in each traffic stripe) and pavement markings including establishing alignment for stripes and layout work, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

14.4 Pavement Markers – Pavement markers shall conform to the provisions in Section 85, “Pavement Markers,” of the Standard Specifications and these Special Provisions. Non-reflective pavement markers shall be ceramic.

At the option of the Contractor, a hot melt bitumen adhesive may be used to cement the markers to the pavement, instead of the Rapid Set Type or Standard Set Type adhesive specified in said Section 85-1.06 of the Standard Specifications. The bitumen adhesive material, if used, shall conform to the following:

| <u>Specification</u> | <u>ASTM Test Method</u> | <u>Requirement</u> |
|----------------------|-------------------------|--------------------|
| Flash Point, COC °F | D 92 | 550 Min. |

| | | |
|---|--------|----------------|
| Softening Point, °F | D 36 | 200 Mm. |
| Brookfield, Viscosity, 400° F. | D 2196 | 7,500 cP, Max. |
| Penetration, 100g, 5 sec., 77°F. | D5 | 10-20 dmm |
| Filler Content, % by weight (insoluble in 1,1,1 Trichloroethane) | D 2371 | 50 - 75 |

Filler material shall be calcium carbonate and shall conform to the following fitness:

| <u>Sieve Size</u> | <u>Percent Passing</u> |
|-------------------|------------------------|
| No. 100 | 100 |
| No. 200 | 95 |
| No. 325 | 75 |

Bitumen adhesive shall be indirectly heated in an applicator with continuous agitation. The adhesive shall be applied at a temperature between 400°F and 425°F. Markers shall be placed immediately after application of the adhesive.

Placement of markers using bitumen adhesive shall conform to the requirements for placing markers in said Section 85-1.06 of the Standard Specifications, except as follows:

- a. Markers shall not be placed when the pavement or temperature is 50°F. or less.
- b. Blast cleaning of clean, new asphalt concrete surfaces will not be required.
- c. Blast cleaning of clean, new seal coat surfaces will not be required.

The contract prices paid per lump sum item “Striping Repair” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all the work involved in placing pavement markings (regardless of the number, widths, and patterns of individual strips involved in each traffic stripe) including establishing alignment for stripes and layout work, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

SECTION 15 **EARTHWORK & PAVING**

15.1 Tree Removal – Tree removal shall be done in compliance with Section 16, “Clearing and Grubbing,” of the Standard Specifications. Payment will be made at the unit price bid therefor in the bid schedule; except when no bid item is provided for tree removal, the cost therefor shall be included in the price bid for clearing and grubbing.

15.2 Clearing and Grubbing – Clearing and grubbing shall conform to the provisions of Section 16 of the Standard Specifications.

Clearing shall consist of the satisfactory removal and disposal of all debris and rubbish within the bounds of the contract right-of-ways, including all objects, bushes, and material called for on the plans or necessary for the prosecution of the work for which a separate bid item is not provided.

Grubbing shall consist of the removal of stumps, tree roots and other objectionable material within the limits directed. Depressions made by grubbing shall be filled, compacted and graded to conform to the original ground surface.

15.3 Concrete Removal – Concrete removal shall be done in accordance with Section 15-3 of the Standard Specifications as shown on the plans and as directed by the Engineer. Concrete removal shall be to neat saw cut lines, as directed by the Engineer.

Concrete removed shall be disposed of by the Contractor.

Measurement for payment shall be made by the Engineer before or during removal operations.

15.4 Earthwork – The earthwork involved shall conform to the provisions for “Roadway Excavation” of Section 19 of the Standard Specifications except as modified by these Special Provisions.

a. Excavation – Excavation shall consist of all excavation on the project involved in the grading and construction of roadways, curb and gutters, sidewalks and driveways. Surplus excavated material shall be disposed of by the Contractor.

b. Compaction – The relative compaction of original ground areas below the grading plane to a point six inches (6”) below the grading plane, and embankment areas, under base and surfacing and concrete work plus two feet (2’) each side thereof, shall be compacted to a relative compaction of ninety percent (90%) of California Test 216.

If subsidence occurs as a result of compacting original ground, the Contractor shall borrow selected earth material from excavation and shall compact the same to the elevation of the grading plane in accordance with these Special Provisions.

Full compensation for excavating and placing such selected earth material will be considered as included as part of work involved in compacting original ground.

c. Testing Compaction – Testing shall be done in accordance with Section 8.4 of these Special Provisions as determined by the Engineer. For testing purposes, moving averages will be based on separate areas consisting of contiguous construction areas.

d. Payment – Payment for the labor, materials, tools, equipment, and incidentals required for doing all the work involved in excavating, loading, hauling, depositing, spreading, and compacting subgrade material and other earthwork, including furnishing and applying water and disposing of surplus materials shall be considered as included in the unit price bid for “Roadway Excavation” in the schedule.

15.5 Restrictions on Purchases of Mined Materials – Per Section 20676 of the Public Contract Code, any construction aggregate (sand, gravel, crushed rock, road base, etc.) shall be purchased from an operation listed on the 3098 List. The 3098 List can be viewed at the Department of Conservation’s Office of Mine Reclamation (OMR) website:

www.conservation.ca.gov/OMR/ab_3098_list/index.htm

To confirm whether or not a specific operator is on or off the list at any time, contact the Office of Mine Reclamation at (916) 323-9198.

15.6 Aggregate Base – Shall be Class 2 – ¾” maximum grading and shall conform to Aggregate Base Section 26 of the Standard Specifications, except as modified herein.

The surface of the finished aggregate base at any point shall not vary more than 0.05 foot above or below the grade established by the Engineer.

Aggregate base shall not be placed on the prepared subgrade until the Engineer has given his approval of the prepared subgrade.

The aggregate base shall be ninety-five percent (95%) compacted and the method of compaction shall be suitable for the backfill material used, and shall be approved by the Engineer

Measurement for payment of aggregate base shall be from back of curb to back of curb. The contract price per ton shall include full compensation for furnishing all labor, tools, materials, and equipment involved in constructing aggregate base complete in place as shown on the plans and directed by the Engineer.

15.7 Prime Coat – Prime coat shall be liquid asphalt Type SC-70 conforming to Section 93 of the Standard Specifications and shall be applied in accordance with Section 39-4.02 of the Standard Specifications. Full compensation for furnishing and applying prime

coat shall be considered as included in the contract price paid per ton for the asphalt concrete, and no separate payment will be made therefor.

15.8 Paint Binder – A paint binder (asphaltic emulsion) shall be furnished and applied in conformance with Section 39-1.09C of the Standard Specifications, except that full compensation for furnishing and applying paint binder (asphaltic emulsion) and sanding (if directed by the Engineer) shall be considered as included in the price paid for asphalt concrete and no additional compensation will be allowed therefor.

15.9 Pavement Repair – Pavement repair shall include removing pavement failures as marked on the street by the Engineer, compacting the base material, and placing asphalt concrete. Individual pavement repairs will be not less than two feet (2') wide and not less than eight (8) square feet in area. All street cuts around defective areas will be done with a saw, cut to full depth of the pavement. At the Contractor's option, defective areas may be removed by grinding to the full depth of the pavement without saw cutting the perimeter of the defective area.

The existing material shall be removed to a minimum depth of four inches (4"), but in no case less than the depth of the existing pavement. The existing base material shall be compacted to a density of ninety-five percent (95%). If there is no base material, pave section with four inches (4") of asphalt concrete. If the existing pavement is thicker than four inches (4"), Class 2 aggregate base shall be used to fill the excavation to a depth of four inches (4"). At the contractor's option, if the existing pavement is thicker than four inches (4"), the section may be paved full depth with asphalt concrete.

If, in the opinion of the Engineer, the existing subgrade material is unsuitable, the subgrade material shall be removed to a depth as directed by the Engineer, replaced with Class 2 aggregate base, and compacted to a relative density of ninety-five percent (95%). The removal and replacement of subgrade material will be paid as force account work.

The edges of the existing pavement shall be tacked with SS-1 emulsified asphalt immediately prior to paving. Asphalt concrete shall be type "B" and conform to Section 39 of the Standard Specifications.

The Contractor shall be responsible for disposing of all excavated materials.

The contract unit price per square foot for "Pavement Repair" shall include full compensation for furnishing all labor (including flagmen), materials, tools, and equipment and doing all work involved in the removal and replacement of failed pavement areas in accordance with this section.

15.10 Asphalt Concrete – Asphalt concrete shall be Type A, ¾" maximum, medium grading. Asphalt concrete shall conform to the provisions of Section 39, "Asphalt Concrete," of the Standard Specifications and to these Special Provisions. Asphalt binder to be mixed with

aggregate shall be steam-refined paving asphalt in conformance with the provisions in Section 92, "Asphalts," specification grade PG 64-10, or as determined by the Engineer.

Before placing asphalt concrete on the prepared base course, it is the Contractor's responsibility to ascertain that the base course is accurately brought to the required grade. Asphalt concrete shall be placed and compacted to ninety-five percent (95%) relative compaction at not less than the required thickness shown on the plans.

The casting of loose materials upon the freshly placed mat behind the paving machine and ahead of the breakdown roller is specifically prohibited. Whenever new paving is joined to existing paving, the paving surface at the joint shall be sealed with asphalt emulsion four inches (4") each side of joint after final compaction of asphalt concrete. Sealant shall be sanded as necessary to prevent traffic pickup.

Certificates of compliance shall be submitted for all materials in asphalt concrete.

Aggregate shall conform to the $\frac{3}{4}$ " or $\frac{1}{2}$ " inch maximum, medium grading specified in Section 39-02, "Aggregate," of the Standard Specifications. Contractor may use $\frac{1}{2}$ " maximum asphalt concrete for tapers at the beginning and end of work.

The amount of asphalt binder to be mixed with the aggregate shall be between four percent (4%) and seven percent (7%) by weight of the dry aggregate, as determined by the Engineer. The fifth through the eighth paragraphs in Section 39-3.03, "Proportioning," of the Standard Specifications shall not apply.

In addition to the requirements in Section 39-5.01, "Spreading Equipment," of the Standard Specifications, asphalt paving equipment shall be equipped with automatic screed controls and a sensing device or devices when paving. When placing the initial mat of asphalt concrete on existing pavement or prepared aggregate base, the end of the screed nearest the centerline shall be controlled by a sensor, activated by a ski device not less than thirty feet (30') long. The end of the screed farthest from the centerline shall be controlled by a sensor that responds to the grade of the existing surface and will reproduce final grade in the new mat within 0.01 foot (3 mm) tolerance. The end of the screed farthest from the previously placed mat shall be controlled in the same manner as when placing the initial mat.

Should automatic screed controls fail to operate properly and all remedial attempts to correct the equipment by the Contractor have been applied during any day's work, the Contractor may use manual controls of spreading equipment for the remainder of the day. However, the equipment shall be corrected or replaced with alternative automatically controlled equipment conforming to the requirements in this section before starting another day's work.

Type of pavers that meet minimum requirements for this project are Cedar Rapids 451/551 Series, CAT Rubber Tire AT-1000B, CAT Track AT-1050B, or comparable.

The top of the surface layer of asphalt concrete that does not meet all specified surface tolerances shall be brought within tolerance by abrasive grinding. Areas that have been ground shall receive a fog seal coat. Deviations in excess of 0.3 inch which cannot be brought into specified surface tolerances by abrasive grinding shall be corrected by either removal and replacement or placing an overlay of asphalt concrete. The corrective method for each area shall be selected by the Contractor and shall be approved by the Engineer prior to beginning the corrective work. Any replacement or overlay pavement not meeting specified tolerances shall be corrected by the methods specified above. All corrective work shall be at the Contractor's expense.

When abrasive grinding is used to bring the top surface of the uppermost layer of asphalt concrete surfacing within specified surface tolerances, additional abrasive grinding shall be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from and parallel to the nearest lane line or pavement edge and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement centerline within any ground area. All ground areas shall be neat rectangular areas of uniform surface appearance.

Abrasive grinding shall conform to the requirements in the first paragraph and the last four paragraphs in Section 42-2.02, "Construction," of the Standard Specifications, except that the grinding residue shall be disposed of outside the public right-of-way.

String line or other suitable methods of alignment may be required to ensure straight longitudinal joints.

Asphalt concrete shall not be placed until roadways are determined by the Engineer to be ready for paving.

At locations as directed by the Engineer, the Contractor shall place a tack coat and skin patch using 3/8" asphalt concrete. Areas to be leveled shall be feathered to match existing surface. The maximum spread rate is 175 tons per lane mile or 40 square yards per ton and shall not be exceeded unless determined by the Engineer. Asphalt concrete may be placed by motor grader, float tractor, or any other means to obtain a level, uniform surface.

At each location requiring a leveling of 3/8" asphalt concrete, a paving machine shall be used and pavement reinforcing fabric and/or surface course of asphalt concrete shall be placed within forty-eight (48) hours of the placement of the leveling course.

Public and private roads adjacent to pulverized or reconstructed areas may require additional attention to safely conform to existing grade. Asphalt concrete may be placed by float tractor or any other means to obtain a level, uniform surface.

After rolling of asphalt concrete and before leaving the construction site, the Contractor shall place temporary pavement delineation per Section 11.11, "Temporary Pavement Delineation," of these Special Provisions. Any pavement markings obliterated during work, that

the Engineer deems necessary, shall receive temporary markings before reopening the travel way to public traffic. Compensation for temporary pavement delineation shall be considered as included in the cost for asphalt concrete and no additional compensation will be allowed therefor.

a. Payment – In lieu of paying for mineral aggregate and asphaltic binder as separate contract items, as specified in Section 39 of the Standard Specifications, asphalt concrete will be paid for by the contract price per ton complete in place, which shall include full compensation for furnishing mineral aggregate and asphaltic binder. Asphaltic binder shall be penetration type and shall conform to Section 92 of the Standard Specifications except as herein modified. The exact penetration range shall be selected by the Engineer. Unless otherwise directed, PG 64-10 penetration type asphalt shall be used.

Payment for this item shall also include saw cutting existing pavement and prime coat, if required.

15.11 Temporary Pavement Delineation – Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with the provisions in Section 12-3, “Traffic-Handling Equipment and Devices,” of the Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as to reduce the minimum standards specified in the Manual of Traffic Controls published by the Department or as relieving the Contractor from his responsibility as provided in Section 7-1.09, “Public Safety,” of the Standard Specifications.

Whenever the work causes obliteration of, or revision to, pavement delineation, temporary or permanent pavement delineation shall be in place and conflicting pavement delineation removed, prior to opening the traveled way to public traffic. Lane line pavement delineation shall be provided at all times for traveled ways open to public traffic.

All work necessary to establish the alignment of temporary pavement delineation, including any required lines and marks, shall be performed by the Contractor. Surfaces on which temporary pavement delineation is to be applied shall be cleaned of all dirt and loose material and shall be dry when the pavement delineation is applied. Temporary pavement delineation shall not be applied over existing or other temporary pavement delineation.

Temporary pavement delineation for lane lines shall consist of temporary reflective raised pavement markers placed at longitudinal intervals of not more than twenty-four feet (24’). Temporary reflective raised pavement markers shall be the same color as the lane line the markers replace.

Temporary reflective raised pavement markers shall be placed in accordance with the manufacturer’s instructions. Temporary reflective raised pavement markers shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy

adhesive shall not be used to place temporary reflective raised pavement markers in areas where removal of the markers will be required.

In lieu of temporary reflective raised pavement markers, four inch (4") reflectorized traffic tape may be used as directed by the Engineer.

Removable type traffic tape shall be applied in accordance with the manufacturer's installation instructions and shall be rolled slowly with a rubber tired vehicle or roller to ensure complete contact with the pavement surface. Traffic tape shall be applied straight on tangent alignment and on a true arc on curved alignment. Traffic tape shall not be applied when the air or pavement temperature is less than 50°F unless the installation procedures to be used are approved by the Engineer prior to beginning installation of the tape.

a. Payment – Full compensation for furnishing, placing, maintaining, and removing temporary delineation including temporary reflective raised pavement markers, cones, delineators, channelizers, four inch (4") traffic stripe, and providing equivalent patterns of the permanent traffic lines when required; shall be considered as included in the contract prices paid for the items of work that obliterated the pavement delineation and no separate payment will be made therefor.

15.12 Adjusting Manholes and Valves to Grade – Existing manholes shall be adjusted to grade with materials similar in quality to those in the original structure in accordance with the provisions of Section 15-2.05A, 15-2.06 and 15.2-07 of the Standard Specifications and these Special Provisions.

Manholes and valve boxes shall be lowered prior to milling operations and raised to finish grade per the plans and specifications.

After the manhole frame has been removed, the top of the structure shall be carefully trimmed to provide a suitable foundation for the new material. Existing frames and covers are to be used.

Class "B" concrete shall be used for backfilling and shall be struck off to a depth of two inches (2") below the adjacent surfacing. Type "B" asphalt concrete shall be placed over the concrete backfill smooth with the adjacent pavement.

Adjusting manholes and valves to grade within the publicly used travel lanes shall be completed, including placing paving material around and to the level of the frame and cover, by the end of the same day on which work started. If permanent pavement backfill cannot be completed by the end of the work day, the Contractor shall place temporary paving material to the finished grade level of the frame and cover. The Contractor shall maintain the temporary paving smooth and level with the frame and cover until such time as the permanent paving is placed.

15.13 Survey Monument Wells – Survey monument wells shall be constructed at locations indicated on the plans and as directed by the Engineer.

The concrete used in the construction of the monument well assembly shall be of Class “B” and shall conform to the applicable provisions of Section 90 of the Standard Specifications.

The price paid for each monument well shall include full compensation for furnishing all labor, materials, tools and equipment and doing all the work including structure excavation and backfill involved in the construction of the monument well in place.

15.14 Finishing Roadway – Finishing roadway shall conform to Section 22 of the Standard Specifications and these Special Provisions.

Finishing roadway shall include replacing or relocating all roadway signs, mailboxes, sprinklers, and related facilities removed to facilitate the work, cleaning the roadway surface and adjacent areas of all excess construction materials and debris, and shaping and grading excavated and filled areas adjacent to the work.

Excavated and filled areas adjacent to the work and contiguous to private property and landscape areas shall be of loose select material to a depth of six inches (6”), smoothly graded and sloped as directed by the Engineer.

Payment for finishing roadway shall be considered included in the prices bid for other related items of work and no additional compensation will be made therefor, except where specific bid items are provided on the bid schedule the specified items will be compensation at the price bid therefor.

15.15 Roadway Signs – Roadside signs shall be installed at the locations shown on the plans or where directed by the Engineer, and shall conform to the provisions in Section 56-2, “Roadside Signs,” of the Standard Specifications, these Special Provisions, and Standard Detail No. 109.

Roadside signs shall conform to State Specifications which may be obtained from the Transportation Laboratory, P.O. Box 19128, Sacramento, CA, 95819, (916) 739-2400. Full compensation for furnishing and installing sign panels and metal posts shall be considered as included in the contract price paid for the roadside signs and no separate payment will be made therefor.

SECTION 16

SEWER REHABILITATION – CURED IN PLACE PIPE

16.1 General – It is the intent of this Section to provide for the reconstruction of existing sanitary sewer pipelines by the installation of a resin-impregnated flexible tube, which is

tightly formed to the original conduit. The resin shall be cured using either hot water under hydrostatic pressure or steam pressure within the tube. The resulting Cured-In-Place Pipe (CIPP) shall be continuous and tight fitting.

16.2 Referenced Documents – The following standards from the American Society for Testing and Materials are hereby made a part of these Special Provisions by reference and shall be the latest edition and revision thereof. In case of conflicting requirements between these Special Provisions and referenced documents, the Special Provisions shall govern.

- a. ASTM F1216 – Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
- b. ASTM F1743 – Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP)
- c. ASTM D5813 – Cured-in-Place Thermosetting Resin Sewer Pipe
- d. ASTM D790 – Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials
- e. ASTM D2990 – Test Methods for Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics

16.3 Quality Assurance/Qualification Requirements – All CIPP products submitted for approval must provide third party test results supporting the structural performance (short-term and long-term) of the product and such data shall be satisfactory to the City. No product will be approved without independent third party testing verification. Both the CIPP manufacturing and installation processes shall operate under a quality management system which is third-party certified to ISO 9000 or other recognized organization standards. The CIPP manufacturer and installer shall meet the minimum qualification requirements:

- a. The CIPP manufacturer shall have successfully supplied CIPP on a minimum of five wastewater collection system projects of a similar size and scope of work, said work having been performed in the United States and documented to the satisfaction of the City prior to award.
- b. The CIPP installer must have at least five years active experience in the successful installation of the material being supplied on wastewater collection system projects, said project having been performed in the United States and documented to the satisfaction of the City prior to award. The project manager for the CIPP installer must have a minimum of two years of CIPP installation experience with said experience having been on-site during the installation of the CIPP product.

16.4 Submittals – After opening bids, the Engineer will notify the apparent low bidder and the apparent next low bidder to submit the following information, which shall be submitted

within three business days of the bid opening (these items may be submitted with the bid if Bidder so desires):

- a. The CIPP manufacturer's documentation demonstrating compliance with Section 10.3 of these Special Provisions.
- b. The CIPP installer's documentation demonstrating compliance with Section 10.3 of these Special Provisions.
- c. The CIPP manufacturer's certification that the material proposed for the project meet or exceed the requirements of these Special Provisions.

After the project has been awarded and a Notice to Proceed has been issued, the Contractor shall submit for review and approval the following shop drawings and product data:

- a. A detailed plan outlining Contractor's proposed sequence of construction and estimated schedule for accomplishing the various phases of the work. The Contractor shall indicate Contractor's best estimate of the required time (in hours or days) required for the performance of each phase of the work and describe any coordination, access, and timing issues. The plan shall include a description of how the Contractor proposes to prevent debris from entering into the existing sewer system.
- b. Submittals on all lining materials and resins, including details of all component materials, construction details, complete manufacturer's recommendations for storage procedures and temperature control, handling and inserting the liner, curing details, service connection methods, and trimming and finishing.
- c. A bypass pumping and/or diversion plan for each location for review by the Engineer at least 10 working days prior to commencing the work. The plan shall include sufficient detail to assure that the work can be accomplished without sewage spill. The plan shall include an emergency response plan to be followed in the event of failure of the proposed bypass pumping/diversion system. The Contractor's plan shall be satisfactory to the Engineer before the Contractor will be allowed to commence bypass pumping/diversion. The Contractor shall notify the Engineer at least 24 hours prior to commencing the bypass pumping/diversion operations.
- d. Engineering calculations supporting the proposed liner thicknesses. The calculations shall demonstrate that the liner has been properly undersized to avoid the creation of wrinkles or folds.
- e. Two complete sets of videotapes from each of the television inspections performed (pre- and post-rehabilitation).

f. All measurements made by the Contractor to verify length and diameter of pipe prior to ordering of material.

16.5 Materials

a. Tube – The sewn tube shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216, Section 5.1 or ASTM F1743, Section 5.2.1 or ASTM D 5813, Sections 5 and 6. The tube shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe, and stretch to fit irregular pipe sections. The tube may also contain felt layers reinforced with glass or carbon fibers.

1) The wet out tube shall have a relatively uniform thickness that when compressed at installation pressures will equal or exceed the calculated minimum design CIPP wall thickness.

2) The tube shall be manufactured to a size that when installed will tightly fit the internal circumference and length of the original pipe without creating any wrinkles or folds. Allowance should be made for circumferential stretching during installation.

3) The outside layer of the tube shall be coated with an impermeable, flexible membrane that will contain the resin and allow the resin impregnation (wet out) procedure to be monitored.

4) The tube shall contain no intermediate or encapsulated elastomeric layers. No material shall be included in the tube that may cause delamination in the CIPP. No dry or unsaturated layers shall be evident.

5) The wall color of the interior pipe surface of CIPP after installation shall be a relatively light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made.

6) Seams in the tube shall be stronger than the non-seamed felt material.

7) The tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 ft. Such markings shall include the manufacturer's name or identifying symbol. All tubes shall be manufactured in the United States.

b. Resin – The resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when cured within the tube will create a composite that satisfies the requirements of ASTM F1216, ASTM D5813 and ASTM F1743, the physical properties herein, and those which are to be utilized in the submitted

and approved design of the CIPP for this project. The resin shall produce a CIPP that will comply with the structural requirements of these Special Provisions.

16.6 Structural Requirements

a. The CIPP shall be designed per ASTM F1216, Appendix X.1. The CIPP design shall be performed by the Contractor and shall assume no bonding to the original pipe wall.

b. The Contractor shall have performed long-term testing for flexural creep of the CIPP pipe material being installed. Such testing results shall be used to determine the long-term, time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (tube and resin) and general workmanship of the installation and curing as defined within the relevant ASTM standard. A percentage of the instantaneous flexural modulus value, as measured by ASTM D790 testing, shall be used in design calculations for external buckling. The percentage, or the long-term creep retention value utilized, shall be verified by this testing. Retention values exceeding 50% of the short-term test results shall not be applied unless substantiated by qualified third party test data to the City’s satisfaction. The materials utilized for this project shall be of a quality equal to or better than the materials used in the long-term test with respect to the initial flexural modulus used in the CIPP design.

c. The layers of the cured CIPP shall be uniformly bonded. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers. If the layers separate during field sample testing, new samples shall be obtained from the installed pipe. Any reoccurrence may cause rejection of the work.

d. The CIPP shall conform to the structural properties, as listed below.

Minimum CIPP Physical Properties

| Property | ASTM Test Method | Polyester System | Enhanced Polyester System | Vinyl Ester & Epoxy Systems |
|-------------------------------|------------------|------------------|---------------------------|-----------------------------|
| Flexural Modulus (short term) | D790 | 250,000 psi | 400,000 psi | 300,000 psi |
| Flexural Modulus (long term) | D790 | 125,000 psi | 200,000 psi | 150,000 psi |
| Flexural Strength | D790 | 4,500 psi | 4,500 psi | 5,000 psi |
| Tensile Strength | D638 | 3,000 psi | 3,000 psi | 4,000 psi |

e. The required structural CIPP wall thickness shall be based, as a minimum, on the physical properties in Section 10.6.d of these Special Provisions, or greater if substantiated by independent lab testing, and in accordance with the design equations in Appendix X1 – Design Considerations of ASTM F1216, and the design parameters provided in the following table:

| | |
|--|-----------------------------|
| Design Condition | Fully deteriorated |
| Design Safety Factor (typically used value) | 2.0 |
| Retention Factor for Long-Term Flexural Modulus (as determined by Long-Term tests) | 50% max |
| Ovality | 5.0% |
| Enhancement Factor, K | 7.0 |
| Groundwater Depth (above invert of existing pipe) | 0.0 feet |
| Soil Depth (above crown of existing pipe) | See Plans |
| Soil Modulus | 500 psi |
| Soil Density | 120 lbs per ft ³ |
| Live Load | H20 (Highway) |

f. Any layers of the tube that are not saturated with resin prior to insertion into the existing pipe shall not be included in the structural CIPP wall thickness computation.

16.7 Testing Requirements

a. Chemical Resistance – The CIPP shall meet the chemical resistance requirements of ASTM F1216, Appendix X2. CIPP samples for testing shall be of tube and resin systems similar to that proposed for actual construction. It is required that CIPP samples with and without plastic coating meet these chemical-testing requirements.

b. Hydraulic Capacity – Overall, the hydraulic cross-section shall be maintained as much as possible. The CIPP shall have a minimum of the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using a commonly accepted roughness coefficient for the existing pipe material taking into consideration its age and condition.

c. CIPP Field Samples – When requested by the City, the Contractor shall submit test results from field installations of the same resin system and tube materials as proposed for the actual installation. These test results must verify that the CIPP physical properties specified in Section 10.5 of these Special Provisions have been achieved. Samples for this project shall be made and tested as described in Section 10.11 of these Special Provisions.

16.8 Pre-Installation Requirements

a. Bypassing Sewage – The Contractor shall provide bypass pumping and/or diversion as necessary for acceptable completion of the CIPP installation. Bypass pumping shall consist of furnishing, installing, and maintaining all power, primary and standby pumps, appurtenances and bypass piping required to maintain existing flows and services. The pump(s) and bypass line(s) shall be of adequate capacity to accommodate the sewage flow. Bypass pumping shall be done in such a manner as not to damage private or public property, or create a nuisance or public menace. The pumped sewage shall be in an enclosed hose or pipe that is adequately protected from traffic, and shall be redirected into the sanitary sewer system. Dumping or free flow of sewage on private property, gutters, streets, sidewalks, or into storm sewers is prohibited. The Contractor shall take all necessary precautions including constant monitoring of bypass pumping to insure that no private residences or properties are subjected to a sewage backup or spill. The Contractor shall be liable for all cleanup, damages, and resultant fines in the event of a spill. After the CIPP installation is completed, flow shall be restored to normal. The Contractor shall submit a detailed bypass plan to the City for review and acceptance in accordance with Section 10.4 of these Special Provisions.

b. Cleaning of Existing Sewer Lines – The Contractor shall remove all internal debris out of the sewer line that will interfere with the installation of CIPP. In no case will the Contractor be allowed to wash debris into the downstream collection system. All debris removed from the sewers during the cleaning operation shall become the property of the Contractor and shall be appropriately disposed of offsite. The Contractor may contact the City's Wastewater Treatment Facility at 530-822-7695 to determine if debris may be disposed of at the City's Wastewater Treatment Facility located at 302 Burns Drive, Yuba City, CA 95991. Any hazardous waste material encountered during this project will be considered as a changed condition.

c. Inspection of Existing Sewer Lines – The Contractor shall be responsible for inspecting, confirming the inside diameter, and determining the condition of pipeline section to be rehabilitated. Inspection of pipelines shall be performed by experienced personnel trained in locating breaks, obstacles and service connections using close circuit television (CCTV) inspection techniques. Contractor shall not rely solely on the pre-bid videos provided by the City under Section 2.1 of these Special Provisions. The pipeline interior shall be carefully inspected to determine the location of any conditions that may prevent proper installation of CIPP. Any such conditions shall be noted and corrected. A video and suitable written log for each pipeline section shall be produced and transmitted to the City for its use.

d. Line Obstructions – It shall be the responsibility of the Contractor to clear the line of obstructions such as solids and roots that will prevent the insertion of CIPP. If pre-installation inspection reveals an obstruction such as a protruding service connection, dropped joint, or a collapse that will prevent the installation process, that was not evident

on the pre-bid video and it cannot be removed by conventional sewer cleaning equipment, then the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Engineer prior to the commencement of the work and shall be considered as an extra work item.

e. Public Notification – A public notification program shall be implemented requiring that, at a minimum, the Contractor be responsible for contacting each home or business connected to the sanitary sewer and informing them of the work to be conducted, and when the sewer will be off-line. The Contractor shall also provide the following:

1) Written notice to be delivered to each home or business the day prior to the beginning of work being conducted on the section, and a local telephone number of the Contractor they can call to discuss the project or any potential problems.

2) Personal contact with any home or business, which cannot be reconnected within the time stated in the written notice.

f. Existing Sewer Lateral Identification - The Contractor shall be responsible for confirming the locations of all existing sewer lateral connections prior to installing the CIPP.

16.9 Installation Requirements

a. CIPP installation shall be in accordance with ASTM F1216, Section 7, or ASTM F1743, Section 6, with the following modifications:

1) Resin Impregnation - The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the potential loss of resin during installation through cracks and irregularities in the original pipe wall, as applicable.

2) Tube Insertion – The wet out tube shall be positioned in the pipeline using either inversion or a pull-in method as defined within relevant ASTM standards previously stipulated. If pulled into place, a power winch or its equivalent should be utilized and care should be exercised not to damage the tube as a result of pull-in friction. The tube should be pulled-in or inverted through an existing manhole or approved access point and fully extend to the next designated manhole or termination point.

3) Temperature gauges shall be placed between the tube and the host pipe's invert position to monitor the temperatures during the cure cycle.

4) Curing shall be accomplished by utilizing hot water under hydrostatic pressure or steam pressure in accordance with the manufacturer's recommended cure schedule. A cool-down process shall be conducted that complies with the resin manufacturer's specification.

16.10 Re-establishing Existing Service Connections – It is the intent of these specifications that existing service connections be re-opened without excavation, utilizing a remotely controlled cutting device, monitored by a CCTV. The Contractor shall certify a minimum of two complete functional cutters plus key spare components are on the job site before each installation or are in the immediate area of the jobsite and can be quickly obtained. Existing service connections requiring re-establishment are shown on the Plans. Service connections shall be re-established by cutting a hole matching the service connection diameter and grouting the area where the service connection enters the lined pipe to produce a water tight seal, as approved by the Engineer. The Contractor shall provide a nearly full-diameter hole, free from burrs or projections and with a smooth and crack-free edge. The hole shall be 95 percent minimum and 100 percent maximum of the original service connection diameter. The invert of the service connection shall match the bottom of the reinstated service opening. No additional payment will be made for excavations for the purpose of re-establishing connections and the Contractor shall be responsible for all costs and liability associated with such excavation and restoration work.

16.11 Inspection Requirements – CIPP samples shall be prepared for each installation designated by the City or approximately 20% of the project's installations. CIPP physical properties shall be tested in accordance with ASTM F1216 or ASTM F1743, Section 8, using either method proposed. The flexural properties must meet or exceed the values listed in the Section 10.6 of these Special Provisions, Table 1 of ASTM F1216 or the values submitted to the City by the Contractor for this project's CIPP wall design, whichever is greater.

Wall thickness of samples shall be determined as described in paragraph 8.1.6 of ASTM F1743. The minimum wall thickness at any point shall not be less than 87½% of the submitted minimum design wall thickness as calculated in Section 10.6 of these Special Provisions.

Visual inspection of the CIPP shall be in accordance with ASTM F1743, Section 8.6.

16.12 Cleanup – Upon acceptance of the installation work and testing, the Contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work.

16.13 Payment – The price per linear foot paid for Cured In Place Pipe shall include full compensation for furnishing all labor, materials, and equipment necessary to comply with these Special Provisions including all permitting, quality assurance requirements, pre-installation activities, inspection, and cleanup activities, except that separate payment for Re-establishing

Existing Service Connections will be paid at the prices bid therefor. Measurement for payment of Cured In Place Pipe shall be from centerline of manhole to centerline of manhole or actual termination of lining if no manhole exists.

**PROPOSAL TO THE DEPARTMENT OF PUBLIC WORKS
CITY OF YUBA CITY**

NAME OF BIDDER: _____

TITLE: _____

SIGNATURE OF BIDDER: _____

COMPANY NAME: _____

CONTRACTOR LICENSE NO. _____ CLASSIFICATION _____

BUSINESS ADDRESS: _____

TELEPHONE NO.: AREA CODE () _____

PLACE OF RESIDENCE: _____

The work to be done and referred to herein is in Yuba City, State of California, and shall be constructed in accordance with the Special Provisions (including the payment of not less than the minimum wage rates set forth therein) and the contract annexed hereto and also in accordance with the Standard Plans dated May 2010, the Standard Specifications dated May 2010, the wage rates of the General Prevailing Wage Rates of the Department of Transportation, and the equipment rental rate and labor surcharge portions of the publication entitled "Labor Surcharges and Equipment Rental Rates."

The work to be done in accordance with the Special Provisions entitled:

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

Bids are submitted for the entire work. The amount of the bid, for comparison purposes, will be the total of all items. The total of unit basis items will be determined by extension of the item price on the basis of the estimated quantity set forth for the item.

The bidder shall set for each item of work, in clearly legible figures, an item price and a total for the item in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Total" column shall be the extension of the item price bid on the basis of the estimated quantity for the item.

In case of discrepancy between the item price and the total set forth for the item, the item price shall prevail; provided, however, if the amount set forth as an item price is ambiguous, unintelligible or uncertain for any cause or is omitted, or in the case of unit basis items is the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

1. As to lump sum items, the amount set forth in the "Total" column shall be the item price.
2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the item price.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and to furnish the two bonds in the sums to be determined as aforesaid with surety satisfaction to the City of Yuba City, within fifteen (15) days, not including Sundays and legal holidays, after the bidder has received notice from the Director of Public Works that the contract has been awarded, the City of Yuba City may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of such security accompanying this proposal shall operate and the same shall be the property of the City of Yuba City.

The undersigned, as bidder, declares that he/she has received Addendum Nos. _____, _____, _____, _____, _____, _____.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein, that this proposal is made without collusion with any other person, firm, or corporation, and in submitting this proposal the undersigned bidder agrees that if it is determined that he is the successful bidder, he will execute the attached non-collusion affidavit, that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to, and he proposes and agrees, if this proposal is accepted, that he will contract with the City of Yuba City in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefor the following item prices, to wit:

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

| Bid Item | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Total Price |
|---------------------------|--|------------------------|---------------------------|-------------------|--------------------|
| 1 | Traffic Control (Includes Caltrans Double Encroachment Permit) | LS | 1 | | |
| 2 | Mobilization/Demobilization | LS | 1 | | |
| 3 | 8" Cured In Place Pipe | LF | 1315 | | |
| 4 | 8" VCP Sanitary Sewer | LS | 1 | | |
| 5 | 4" Sewer Lateral Reconnection | EA | 48 | | |
| 6 | 8" Pipe Burst SDR-17 Sanitary Sewer Pipe | LF | 174 | | |
| 7 | Type "A" Trench Restoration (Includes all necessary saw cutting, shoring, removal, & disposal) | LF | 235 | | |
| 8 | Landscape Restoration (Includes all necessary trenching, shoring, removal, and disposal) | LS | 1 | | |
| 9 | Pipeline CCTV | LS | 1 | | |
| TOTAL AMOUNT BID = | | | | | |

**CITY OF YUBA CITY
DEPARTMENT OF PUBLIC WORKS**

SAMPLE BIDDER'S BOND

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

We, _____, as Principal, and _____, as Surety, are bound unto the City of Yuba City, Department of Public Works, hereafter referred to as "Obligee," in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitting a bid to the Obligee for **2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT** for which bids are to be opened at Yuba City, California, on _____.

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the Notice to Contractors, Special Provisions, Proposals, and Contract for this work, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials is provided by law, then this obligation shall be null and void; otherwise, it shall remain in full force.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by Obligee in such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: _____, 2019

By: _____

By: _____

THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL.

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____, proposed subcontractor _____, hereby certifies that he has ___ has not ___, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7(b)(1)], and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes _____ No _____

If the answer is yes, explain the circumstances in the following space:

PUBLIC CONTRACT CODE SECTION 10232 STATEMENT

In accordance with Public Contract Code Section 10232, the Contractor hereby states, under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two (2) year period because of the Contractor’s failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In accordance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares, under penalty of perjury under the laws of the State of California, that the bidder has ___ has not ___ been convicted within the preceding three (3) years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any State or Federal Antitrust Law in connection with the bidding upon, award of or performance of any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term “bidder” is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after “has” or “has not” in one of the blank spaces provided.

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER
AND SUBMITTED WITH BID**

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

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;
- Does not have a proposed debarment pending; and
- Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Note: Providing false information may result in criminal prosecution or administrative sanctions.

The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

Following is the name and location of the mill, shop, or office of each subcontractor who will perform work or labor or render services to the above-signed bidder. Failure of the bidder to specify a subcontractor for any portion of the work to be performed under the contract constitutes an agreement by the bidder to perform that portion of the work himself.

| NAME AND ADDRESS OF SUBCONTRACTOR | LABOR OR SERVICES TO BE PERFORMED AND VALUE THEREOF | SUBCONTRACTOR LICENSE # | CLASS |
|--------------------------------------|---|----------------------------|-------|
| (1) _____ _____ | _____ \$ _____ | _____ | _____ |
| (2) _____ _____ | _____ \$ _____ | _____ | _____ |
| (3) _____ _____ | _____ \$ _____ | _____ | _____ |
| (4) _____ _____ | _____ \$ _____ | _____ | _____ |
| (5) _____ _____ | _____ \$ _____ | _____ | _____ |
| (6) _____ _____ | _____ \$ _____ | _____ | _____ |
| (7) _____ _____ | _____ \$ _____ | _____ | _____ |
| (8) _____ _____ | _____ \$ _____ | _____ | _____ |

IF ADDITIONAL SPACE IS REQUIRED, PLEASE CONTINUE ON BACK OF THIS PAGE.

THIS LIST MUST BE SUBMITTED WITH BID PROPOSAL.

**CITY OF YUBA CITY
DEPARTMENT OF PUBLIC WORKS**

CONTRACT AGREEMENT

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

THIS AGREEMENT, made and concluded this ____ day of _____ 2019, between the City of Yuba City, party of the first part, and _____, Contractor, party of the second part.

ARTICLE I. – WITNESSETH, that for and in consideration of the payments and agreements hereinafter mentioned to be made and performed by the said party of the first part under the conditions expressed in the two bonds bearing even date with these presents and hereunto annexed, the said party of the second part agrees with the said party of the first part, at his own proper cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the specifications to be furnished by said party of the first part, necessary to construct and complete in a good, workmanlike and substantial manner and to the satisfaction of the Department of Public Works, construction on various roads, all in accordance with the Special Provisions hereto annexed and also in accordance with the Standard Specifications of the State of California Department of Transportation dated May 2010, the Standard Plans dated May 2010, the “Labor Surcharge” and “Equipment Rental Rates” in effect on the date the work is accomplished, and the “General Prevailing Wage Rates” of the State of California Department of Transportation, which said Special Provisions, Standard Plans, Standard Specifications are hereby specially referred to and by such reference made a part hereof.

The Special Provisions and the project plans for the work to be done are entitled:

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

Which are hereby made part of this contract.

ARTICLE II. – The said Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this Agreement; also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by the City of Yuba City and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work and for well and faithfully

completing the work, and the whole thereof, in the manner and according to the plans and specifications and the requirements of the Engineer under them, to wit.

ARTICLE III. – The said party of the first part hereby promises and agrees with the said Contractor to employ, and does hereby employ, the said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices hereinafter set forth, and hereby contracts to pay the same at the time, in the manner and upon the conditions above set forth; and the said parties for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of the covenants herein contained.

ARTICLE IV. – By my signature hereunder, as Contractor, I certify that I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this contract.

ARTICLE V. – It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid or proposal of said Contractor, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said proposal conflicting herewith.

ARTICLE VI. – The City of Yuba City hereby employs Contractor to provide material and to do the work according to the terms and conditions herein contained and referred to for the following prices to be paid at the time, in the manner and upon the conditions hereinafter set forth.

ARTICLE VII. – The improvement contemplated in the performance of this contract is an improvement over which the City of Yuba City shall exercise general supervision.

ARTICLE VIII. – The statement of prevailing wages appearing in the General Prevailing Wage Rates is hereby specifically referred to and by this reference is made a part of this contract. It is further expressly agreed, by and between the terms of this instrument and the bid or proposal of said Contractor, that this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said proposal conflicting herewith.

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
 CONTRACT NO. 19-03**

| Bid Item | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Total Price |
|---------------------------|--|------------------------|---------------------------|-------------------|--------------------|
| 1 | Traffic Control (Includes Caltrans Double Encroachment Permit) | LS | 1 | | |
| 2 | Mobilization/Demobilization | LS | 1 | | |
| 3 | 8" Cured In Place Pipe | LF | 1315 | | |
| 4 | 8" VCP Sanitary Sewer | LS | 1 | | |
| 5 | 4" Sewer Lateral Reconnection | EA | 48 | | |
| 6 | 8" Pipe Burst SDR-17 Sanitary Sewer Pipe | LF | 174 | | |
| 7 | Type "A" Trench Restoration (Includes all necessary saw cutting, shoring, removal, & disposal) | LF | 235 | | |
| 8 | Landscape Restoration (Includes all necessary trenching, shoring, removal, and disposal) | LS | 1 | | |
| 9 | Pipeline CCTV | LS | 1 | | |
| TOTAL AMOUNT BID = | | | | | |

Approved as to form:

 City Attorney
 City of Yuba City

CITY OF YUBA CITY

 Michael Rock
 City Manager

 Date

CONTRACTOR

 Company Name

 By and Title (signature)

Date

By and Title (printed)

Address

Telephone Number

**CITY OF YUBA CITY
DEPARTMENT OF PUBLIC WORKS
FAITHFUL PERFORMANCE BOND**

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

KNOW ALL MEN BY THESE PRESENTS: that, WHEREAS, the City Council of the City of Yuba City, CA ("Obligee or City"), Sutter County, State of California, has awarded to _____, hereinafter designated as the "Principal," a Contract, the terms and provisions of which Contract are incorporated herein by reference, for constructing the **City of Yuba City 2019 Wastewater Collection Improvements Project No. 19-03**. and

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract;

NOW, THEREFORE, we the Principal, and _____, as Surety, are held and firmly bound unto the City of Yuba City, CA, Sutter County, CA, in the penal sum of: _____ \$(_____) lawful money of the United States, being one hundred percent (100%) of the Contract amount, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT, if the above bounden Contractor, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Agency, its directors, officers, employees and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the said Contract, the above obligation in above-stated amount shall hold good for a period of one (1) year after the recording of the notice of completion, during which time if the Contractor, its heirs, executors, administrators, successors or assigns shall fail to make full, complete, and satisfactory repair and replacements or totally protect the Agency from loss or damage made evident during the period of one (1) year from the date of recording of the notice of completion, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the above obligation in the above-stated amount shall remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.


The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall, in any way, affect its obligations on this bond and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract or to the work or to the specifications. The Surety

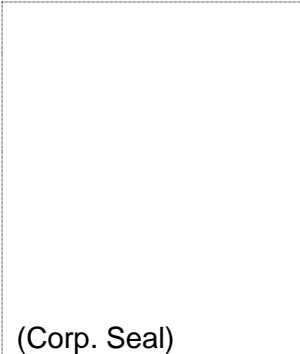
hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

In the event suit is brought upon this bond by the Agency and judgment is recovered, the Surety shall pay all costs incurred by the Agency in such suit, including, but not limited to, administrative and consultant costs, and reasonable attorneys' fees to be fixed by the Court.

The address or addresses at which the principal and surety(ies) may be served with notices, papers and other documents under the California Bond and Undertaking Law (Code of Civil Procedure section 995.010 et seq.) is the following:

IN WITNESS THEREOF, the above bounded parties have executed this instrument under their several seals this _____ day of _____, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

 Principal: _____
Signature: _____
Name & Title: _____
Address: _____
(Corp. Seal)

 Surety: _____
Signature: _____
Name & Title: _____
Address: _____
(Corp. Seal)

Attorney in Fact: _____

Surety shall submit the following documents along with this Faithful Performance Bond:

1. Verification that Surety is admitted to transact surety business in the State of California;
and
2. Copy of Surety's Certificate of Authority, issued by the Insurance Commissioner of the State of California, along with a statement that said Certificate has not been surrendered, revoked, cancelled, annulled or suspended.

Approved as to legal form: _____, City Attorney

(NOTE: The date of this bond must not be prior to date of Contract. If Contractor is a partnership, all partners should execute bond.)

****END OF SECTION****

**CITY OF YUBA CITY
DEPARTMENT OF PUBLIC WORKS
PAYMENT BOND
(Section 9550, Civil Code)**

**2019 WASTEWATER COLLECTION IMPROVEMENTS PROJECT
CONTRACT NO. 19-03**

KNOW ALL MEN BY THESE PRESENTS:

That we, _____ as Principal, and _____
_____, organized and existing under the laws of
the State(s) _____, and authorized to execute bonds and undertaking
as sole surety, as Surety, are held and firmly bound unto the City of Yuba, any and all persons
named in California Civil Code Section 9100 as Claimants, whose claim has not been paid by
the Contractor, in the aggregate total of _____
\$(_____) (being 100% of the Contract amount) for payment whereof, well
and truly to be made, said Principal and Surety bond themselves, their heirs, administrators,
successors and assigns, jointly and severally, firmly by these presents. In case suit is brought
upon this bond, the Surety will pay reasonable attorney's fees to the City of Yuba in an amount
to be fixed by the court.

The condition of the foregoing obligation is such that, whereas the Principal has entered
into a Contract dated _____, 2019, with the City of Yuba City, CA
("Owner") to do the following work, to wit: **City of Yuba City 2019 Wastewater Collection
Improvements Project No. 19-03.**

NOW, THEREFORE, if the Principal or its/his/her subcontractors fail to pay i) any of the
persons named in Section 9100 of the Civil Code of the State of California; ii) amounts due
under the Unemployment Insurance Code with respect to work or labor performed under the
Contract, or for any amounts required to be deducted, withheld and paid over to the
Employment Development Department from the wages of employees of the Principal or
its/his/her subcontractor pursuant to Section 13020 of the Unemployment Insurance Code of the
State of California, with respect to such work and labor; or iii) for any other work, materials,
services, provisions, provender, or other supplies, or for the use of implements of machinery
used in, upon, or about the performance of work to be done; then the Surety will pay for the
same, in the amount not exceeding the sum specified in this bond, and also, in case suit is
brought upon this bond, a reasonable attorney's fee, to be fixed by the court.

This bond shall inure to the benefit of any person named in Section 9100 of the Civil
Code of the State of California so as to give a right of action to them or their assignees in suit
brought upon this bond. Moreover, if the Owner or any entity or person entitled to file stop
payment notices is required to engage the services of an attorney in connection with the
enforcement of this bond, the Contractor and Surety shall be liable for the reasonable attorney's
fees incurred, with or without suit, in addition to the above sum.

This bond is executed and filed to comply with the provisions of the act of Legislature of
the State of California as designated in Civil Code Section 9550 to 9566, inclusive, and all
amendments thereto. The Surety, for value received, hereby stipulates and agrees to waive the
benefits of California Civil Code Sections 2819 and 2845. The Surety hereby waives notice of
any change, alteration or addition to the Contract or to related subcontracts, purchase orders
and other obligations, including but not limited to changes of time. The Surety consents to all

terms of the Contract, including provisions on changes to the Contract Documents. No extension of time, Change Order, alteration, modification, deletion, or addition to the Contract Documents, or of the work required thereunder, shall release or exonerate Surety on this Payment Bond or in any way affect the obligations of Surety on this Payment Bond.

Any proceeding, legal or equitable, under this Payment Bond shall be instituted in any court of competent jurisdiction in Sutter County, California.

IN WITNESS THEREOF, the parties have executed this instrument under their several seals this _____ day of _____, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

| | | |
|--------------|---------------|-------|
| (Corp. Seal) | Principal: | _____ |
| | Signature: | _____ |
| | Name & Title: | |
| | Address: | |

| | | |
|--------------|---------------|-------|
| (Corp. Seal) | Surety: | _____ |
| | Signature: | _____ |
| | Name & Title: | |
| | Address: | |

Attorney in Fact: _____

Surety shall submit the following documents along with this Labor and Material Bond:

1. Verification that Surety is admitted to transact surety business in the State of California; and
2. Copy of Surety's Certificate of Authority, issued by the Insurance Commissioner of the State of California, along with a statement that said Certificate has not been surrendered, revoked, cancelled, annulled or suspended.

Approved: _____, City Attorney

(NOTE: The date of this bond must not be prior to date of Contract. If Contractor is a partnership, all partners should execute bond.)

****END OF SECTION****

ATTACHMENT 2



LOCATION MAP

