

COUNTY OF SAN MATEO

STATE OF CALIFORNIA

CONTRACT DOCUMENTS
AND
SPECIFICATIONS
FOR

RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END

TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY

COUNTY PROJECT NO. RW935
PROJECT FILE NO. E5044000

APPROVED: April 15, 2022



ANN MADER STILLMAN
(R.C.E. No. 47882)
Interim Director of Public Works



Department of Public Works
San Mateo County
555 County Center, 5th Floor
Redwood City, California 94063-1665

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Signature Sheet

**COUNTY OF SAN MATEO
STATE OF CALIFORNIA**

NOTICE TO CONTRACTORS

NOTICE IS HEREBY GIVEN, that

Sealed bids will be received **either by mail** to the office of the County Executive/Clerk of the Board of Supervisors, **or hand-delivered within one (1) hour prior to the bid opening to the main public entrance** of the Hall of Justice and Records, 400 County Center, Redwood City, California, 94063 until the hour of

1:00 p.m., Wednesday, May 18, 2022

which **all bids (mailed in or hand-delivered)** will then be transmitted to the **main public entrance** of the Hall of Justice and Records **at 400 County Center, Redwood City**, where the bids will be publicly opened and read aloud for the following project in accordance with the specifications therefore and to which special reference is made as follows:

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END**

**TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

**COUNTY PROJECT NO. RW935
PROJECT FILE NO. E5044000**

Bids are required for the entire work described herein.

Bidders are further advised of the following:

- 1. Contractor should be placed on a Plan Holders List for bidding. To be placed on the Plan Holders List, the Contractor shall either:**
 - a. Purchase Plans and Specifications, including forms of proposal and contract, from the County of San Mateo Department of Public Works. When purchasing by phone (650-363-4100) or email (jschabowski@smcgov.org), please send check payable to “County of San Mateo” to 555 County Center, 5th Floor, Redwood City, CA 94063; OR**
 - b. Complete and sign the following Plan Holder’s Affidavit by using the link below and you will receive a separate link for downloading an electronic copy of the Plans and Specifications:**

<https://www.smcgov.org/publicworks/affidavit-form-reconstruction-encina-avenue-middlefield-road-end>

The Contractor is advised that the table should be received by the County no later than three (3) working days prior to the bid opening date.

- c. If Plans and specifications are obtained through a source other than those outlined in 1a and 1b above, complete and sign the following Plan Holder’s Affidavit and return to the County by either PDF via email to jschabowski@smcgov.org or by fax at (650) 361-8220. **The Contractor is advised that the table should be received by the County no later than three (3) working days prior to the bid opening date.**

Plan Holder’s Affidavit	
Project Title	Reconstruction of Encina Avenue from Middlefield Road to End
Project No.	RW935
Project Engineer:	John Schabowski
Project Manager:	Wency Ng
Bid Open Date and Time:	1:00 p.m., Wednesday, May 18, 2022
Company Name:	_____
Mailing Address:	_____
Phone Number:	Fax Number: _____
E-mail Address:	_____
(Name and Title of Authorized Representative of Bidder)	
(Signature of Authorized Representative of Bidder)	

- 2. The Plan Holders List will be posted to the County of San Mateo’s Public Works website two (2) working days prior to the bid open date.
- 3. Questions regarding the Contract Documents concerning items such as discrepancies, conflicts, omissions, doubts as to meanings, or regarding

scope of bid items shall be referred to the Engineer. Inquiries must be received in writing via email, to jschabowski@smcgov.org, not less than five (5) working days prior to bid opening. Inquiries will be answered in writing via email response if written clarification is warranted, in the opinion of the Engineer, then inquiries and responses will be posted to the Project's page on the County of San Mateo's Public Works website. It will be the Contractor's sole responsibility to ensure that they receive responses, *if any*. The County will not be responsible for oral clarifications.

4. It will be the Contractor's sole responsibility to ensure that they have received addendums, *if any*, which will be posted to the County of San Mateo's Public Works website on the same day issued. Said addendums will also be sent to all current plan holders and made available during purchase of Plans and Specifications.
5. The Contractor's attention is directed in particular that proposals in which the prices obviously are unbalanced may be rejected.

The Department of Public Works website will be updated as needed and can be accessed under the Department's tab found on the County of San Mateo website (<http://publicworks.smcgov.org>).

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ENGINEER'S ESTIMATE**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END****TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY****COUNTY PROJECT NO. RW935
PROJECT FILE NO. E5044000**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description
1	10	1	LS	Develop and Apply Water
2	11	1	LS	Mobilization
3	12	1	LS	Maintaining Traffic
4	13	1	LS	Water Pollution Control
5	14	1	LS	Construction Waste Management
6	15-1	20	EA	Pothole and Protect Existing Utilities
7	15-2	1	EA	Adjust Water Valve Box to Grade (Cal Water)
8	15-3	200	LF	Remove and Dispose Existing Abandoned Asbestos Cement Water Pipe or Sewer Lateral
9	15-4	1	EA	Remove and Reset Mailboxes
10	15-5	3	EA	Adjust Gas Valve to Grade (PG&E)
11	17	1	LS	Clearing and Grubbing
12	19-1	660	CY	Roadway Excavation (Road Work)
13	22	1	LS	Finishing Roadway
14	26	400	CY	Aggregate Base (Class 2)

Engineer's Estimate - Continued on Next Page

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END
(Engineer's Estimate – Continued from Previous Page)**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description
15	27 (S)	3,150	SY	Cement Treatment
16	27-1	17	TON	Sand Cover
17	39-1	675	TON	Asphalt Concrete (Type A HMA, 1/2" Maximum)
18	39-3	115	SY	Deep Lift Areas (0.50' Deep Asphalt Concrete)
19	39-4	350	SY	Place Asphalt Concrete (Miscellaneous Areas)
20	39-5	975	LF	Header Boards
21	39-7	175	SY	Plane Asphalt Concrete Pavement (Full Width)
22	51-1	80	CY	Class 3 Concrete
23	51-2 (S)	4	EA	Drainage Junction Box (Class 2 Concrete)
24	51-2 (S)	8	EA	Drainage Inlet (Class 2 Concrete)
25	56-1	9	EA	Remove and Reset Existing Roadside Signs
26	56-2	1	EA	Install Object Markers
27	64-1	115	LF	Install 12" HDPE Storm Drain Pipe
28	68-1	1,140	SF	Subsurface Drain Gallery 1
29	68-1	485	SF	Subsurface Drain Gallery 2
30	68-1	365	SF	Subsurface Drain Gallery 3
31	68-1	215	SF	Subsurface Drain Gallery 4

Engineer's Estimate - Continued on Next Page

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END
(Engineer's Estimate – Continued from Previous Page)**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description
32	81 (S)	5	EA	Pavement Marker (Blue Reflective, Fire Hydrant Markers)
33	81 (S)	18	EA	Pavement Marker (Type D Two-Way, Yellow, Retroreflective)
34	84-1 (S)	100	SF	Thermoplastic Pavement Markings
35	90 (S)	70	TON	Portland Cement
36	94-1	5	TON	Asphaltic Emulsion
37	100 (S)	1	LS	Construction Staking
38	101	725	LF	Root Control
39	103	2,000	LF	Pipe Burst Existing 6" VCP and Install 6" HDPE in Street
40	103	120	LF	Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement
41	103-10	51	EA	Reconnect Sanitary Sewer Laterals (Pipe Bursting Method)
42	104-4	170	LF	Install 6" PVC by Open Trench Method

Engineer's Estimate - Continued on Next Page

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END
(Engineer's Estimate – Continued from Previous Page)**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description
43	104-5	6	EA	Reconnect Sanitary Sewer Laterals (Open-Trench Method)
44	104-9	1	LS	Abandon Existing Sanitary Sewer Main
45	104-9	1	EA	Abandon and Remove Existing Sanitary Sewer Manhole
46	105	20	LF	Sag Repair
47	106-4	1	EA	Adjust Sanitary Sewer Manhole to Grade
48	106-5	6	EA	Remove and Replace Existing Sanitary Sewer Manhole
49	106-6	3	EA	New Sanitary Sewer Manhole Construction
50	107	1	LS	Trench Safety, Trenching and Trench Backfill
51	108	1	LS	Restoration of Paved Surfaces and Improvements
52	109	200	LF	Sanitary Sewer Lateral Replacement (Beyond 5 feet)
53	112	8	EA	Drainage Inlet Filter

Engineer's Estimate of Costs: \$ 2,000,000.00

(S) Specialty Items - As defined in Section 8-1.01, "Subcontracting," of the Standard Specifications.
(Note: Gaps in section numbering, above, indicate the Section is blank or does not apply)

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the County of San Mateo does not, expressly or by implication, agree that the actual amount of work will correspond herewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit any portion of the work, as may be deemed necessary or expedient by the Engineer.

Payment to the Contractor for materials furnished and work completed shall be made by the County in accordance with Section 9 of the "Special Provisions" portion of these Contract Documents. Pursuant to Section 22300 of the Public Contract Code, Contractor may, upon his request and at Contractor's expense, substitute equivalent securities for any moneys retained from such payment for the fulfillment of the Contract.

When applicable, both Contractor and Subcontractor hereby agrees to pay not less than prevailing rates of wages and be responsible for compliance with all the provisions of the California Labor Code, Article 2- Wages, Chapter 1, Part 7, Division 2, Section 1770 et seq and Section 1810 et seq. A copy of the prevailing wage scale established by the Department of Industrial Relations is on file in the office of the Director of Public Works, and available at www.dir.ca.gov/DLSR or by phone at 415-703-4774. California Labor Code Section 1776(a) requires each contractor and subcontractor keep accurate payroll records of trades workers on all public works projects and to submit copies of certified payroll records upon request.

Additionally, pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015:

- (1) No contractor or subcontractor 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) 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.**

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

Wage rates for overtime shall be paid at not less than one and one-half (1-1/2) times the above rates. Wage rates for Sundays and holidays shall be paid at not less than two (2) times the above rates.

The holidays upon which such rates shall be paid shall be all holidays recognized in the collective bargaining agreement applicable to the particular craft, classification, or type of worker employed on the Project.

It is the policy of the County that Contractors on public projects employ their workers and craftsmen from the local labor market whenever possible. "Local Labor Market" is defined as the labor market within the geographical confines of the County of San Mateo, State of California. Consistent with this policy, the Contractor is requested to employ craftsmen and other workers from the local labor market whenever possible to do so.

Each bidder shall submit with the bid, Certificates of Compliance and Intent on a form provided in the "Proposal" section of these Contract Documents, a certificate that bidder is in compliance with the provisions of the Equal Employment Opportunity Requirement of Executive Order 11246, Title VII of the Civil Rights Act of 1964, the California Fair Employment and Housing Act and any other federal, State and local laws and regulations relating to equal employment opportunity. With the execution of said certificates, bidder also agrees that bidder will maintain or develop and implement, during the course of the work concerned, a program of hiring and employment, conducted without regard to race, religion, color, national origin, ancestry, sexual orientation, or sex of the applicants. With this certification, bidder shall submit any and all information that may be required by the County in connection with the particular project.

Each bidder is hereby notified of Section 9204 and Section 20104 et seq. of the Public Contract Code as those Sections (attached hereto as Appendix E) relate to resolution of construction claims, and to Section 3186 of the Civil Code, as amended January 1, 1999 with regard to stop notices and public entity's rights to retain monies in order to provide for that entity's reasonable cost of litigation. The bidder is further notified that all provisions of Section 9204 and Section 20104 et seq. of the Public Contract Code and Section 3186 of the Civil Code, as outlined above shall be considered as incorporated into and become an integral

part of these specifications.

Questions relating to equal employment should be directed to the San Mateo County Department of Public Works, Equal Employment Opportunity Program, 555 County Center, 5th Floor, Redwood City, CA 94063-1665, telephone (650) 363-4100.

Plans and Specifications and forms of Proposal and Contract may be seen and obtained at the office of the Director of Public Works, 555 County Center, Redwood City, California, 94063-1665. Plans and specifications may be obtained for a:

NON-REFUNDABLE FEE OF \$ 60.00 PER SET

Additional technical questions should be directed to the office of the Director of Public Works, 555 County Center, Redwood City, California, 94063-1665, telephone (650) 363-4100.

The Contractor shall possess either a Class A License or a combination of Class C licenses that are applicable for the majority of the work at the time this contract is awarded. No Contract will be awarded to a Bidder who is not licensed as required by laws of the State of California.

The County of San Mateo reserves the right to reject any or all bids and/or waive any informalities or irregularities in any bid received.

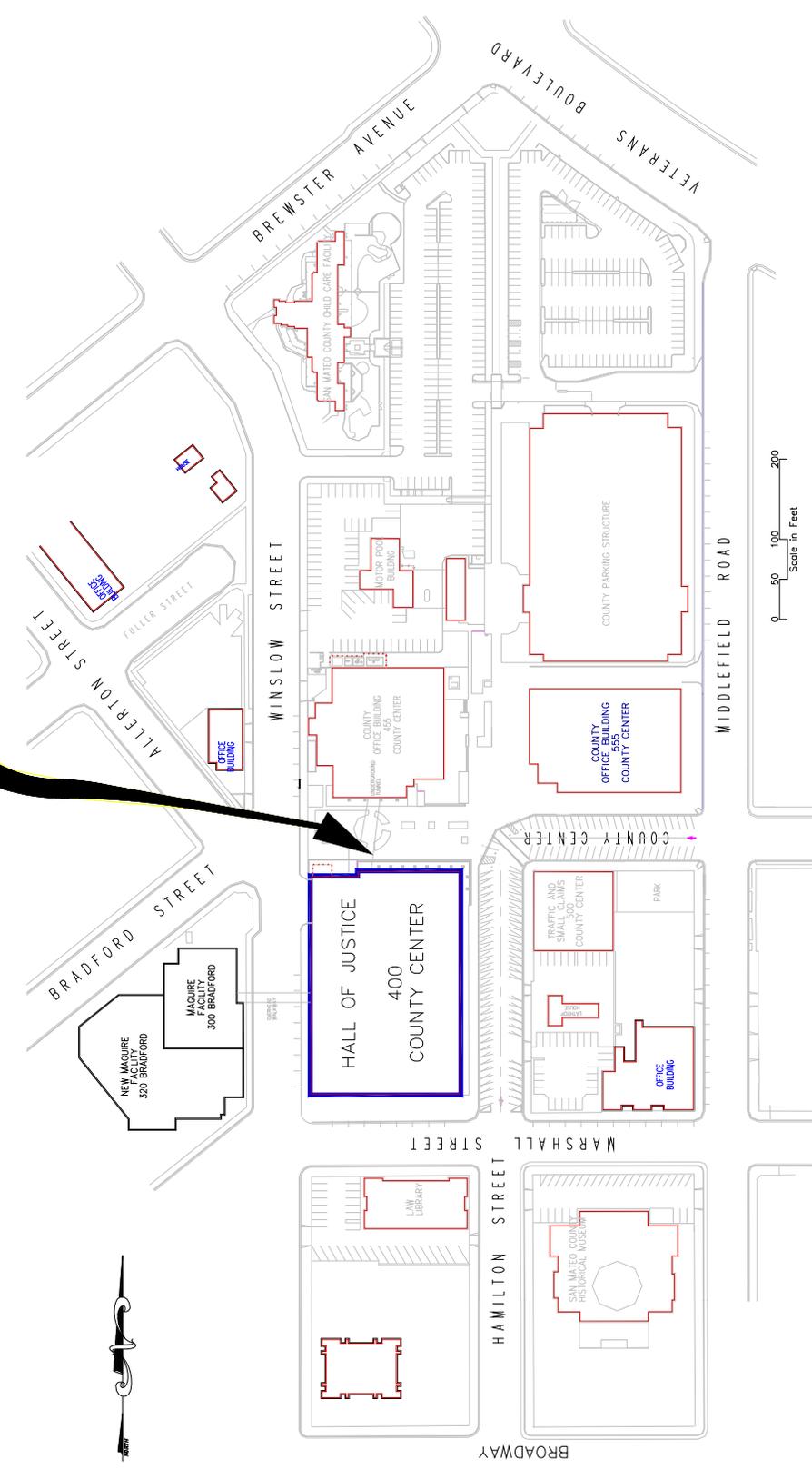
Bidders may not withdraw their bid for a period of **FORTY-FIVE (45) DAYS** after the date set from the opening thereof.

BY ORDER OF THE
BOARD OF SUPERVISORS
COUNTY OF SAN MATEO

DATE: April 19, 2022

**Michael Callagy, County Executive/
Clerk of the Board of Supervisors**

PUBLIC ENTRANCE
(SECURITY CHECK POINT)



SAN MATEO COUNTY GOVERNMENT CENTER

NOTE:

Receipt of Bids in the Office of the County Manager/Clerk of the Board of Supervisors, Hall of Justice.
Refer to project Notice to Contractors for Time, Date or alternate location.

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COUNTY OF SAN MATEO

STATE OF CALIFORNIA

**SPECIAL PROVISIONS
FOR**

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END**

**TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH
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**COUNTY PROJECT NO. RW935
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DATE: April 15, 2022

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SECTION 1.
DEFINITIONS OF TERMS TO BE USED IN THE SPECIAL PROVISIONS,
NOTICE TO CONTRACTORS, PROPOSAL, AGREEMENT OR
OTHER CONTRACT DOCUMENTS

Except as specifically stated herein, the definitions contained in the Standard Specifications of the State of California, Department of Transportation, as set forth per Section 2-1, "Plans and Specifications," of these Special Provisions and hereafter referred to as "Standard Specifications," shall be applicable with the understanding that where said definitions specifically refer to the State of California, a department or division of the State or an official, officer or employee of the State, said definition shall be interpreted to refer to the County of San Mateo, the Department of Public Works, or other appropriate department, division, official, officer or employee of the County of San Mateo.

Definition 7-1.02L, "Public Contract Code," of the Standard Specifications shall not be interpreted to include the provisions of Article 7.1 of Division 2, Part 2, Chapter 1 of the Public Contract Code.

END OF SECTION

SECTION 2.

BIDDING

The Bidder's attention is directed to all the provisions of Section 2, "Bidding," of the Standard Specifications and these Special Provisions. The County will accept a Bidder's Bond in the form issued by an admitted surety insurer in lieu of the sample forms provided herein in Appendix C of these Special Provisions. The County will not be responsible for any oral interpretations to Bidders with respect to any of the work embraced herein.

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

All proposals must be made upon the blank form contained herein.

2-1. Plans and Specifications

Subject to the exceptions stated herein, the work embraced herein shall be done in accordance with the Standard Plans and Specifications as adopted by the County of San Mateo insofar as the same may apply, and in accordance with the following Special Provisions.

As set forth in **Resolution No. 077227** of the Board of Supervisors of the County of San Mateo, adopted **February 11, 2020**, which approved and adopted the **2018** Standard Plans and Standard Specifications of the State of California, Department of Transportation, as the Standard Plans and Standard Specifications of the County of San Mateo, Department of Transportation shall be used for this project unless otherwise specified or approved by the Engineer.

In the event that a discrepancy arises between the project Plans, these Special Provisions, the Standard Plans and the Standard Specifications, the provisions of Section 5-1.02, "Contract Components," of the Standard Specifications shall apply.

END OF SECTION

**SECTION 3.
CONTRACT AWARD AND EXECUTION**

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Standard Specifications and these Special Provisions for the requirements and conditions concerning award and execution of contracts.

However, the following supersedes the second paragraph in Section 3-1.04, "Contract Award," of the Standard Specifications:

"The award of contract, if awarded, will be made to the lowest responsible bidder within **SIXTY (60) DAYS** after the opening of the proposals. If the lowest responsible bidder refuses or fails to execute the contract, the County may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the contract, the County may award the contract to the third responsible bidder. The period of time after that specified above within which the award of the contract may be made shall be subject to extension for such further period as may be agreed upon, in writing, between the County and the bidder concerned."

Bidders who wish to lodge a protest for consideration as to the bidding process or the award of a contract to the lowest responsible bidder must do so as follows:

- (1) Protests based upon alleged improprieties in a solicitation, which are apparent prior to bid opening, shall be filed **two (2) business days** prior to bid opening.
- (2) Protests other than those covered by paragraph 1, above, shall be filed no later than **ten (10) calendar days** after the bid opening.
- (3) All protests shall be delivered to:

Director of Public Works
County of San Mateo
555 County Center, 5th Floor
Redwood City, CA 94063

Untimely protests, which do not meet the deadline requirements specified above, will not be accepted or considered.

Bid protests must be submitted in writing to the addressee and address listed above. Bid protests must at a minimum include the following:

- Project Name
- Project File Number
- A complete statement describing the basis for the bid protest, which includes

- a detailed statement of all legal and factual grounds for the protest
- Documentation supporting the protestor's grounds for the protest
- The type of relief requested and the legal basis for such relief

If a valid protest is filed timely, the Department will investigate the bid protest. The protested bidder shall have **three (3) business days** to respond to the Department and to provide any information requested by the Department. The Department shall respond to the protesting party, stating its findings. The Department Director shall make a recommendation to the San Mateo County Board of Supervisors regarding the bid protest.

Bid protests are to be delivered to the following address: 555 County Center, 5th Floor Redwood City, CA 94063.

The award of the contract, if it is awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed.

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds, to the County so that it is received within ten (10) days, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address: 555 County Center, 5th Floor Redwood City, CA 94063.

END OF SECTION

SECTION 4.
SCOPE OF WORK

The work to be done consists, in general, of replacing the existing roadway structural sections by mixing cement with existing native materials, grading and compacting, placing asphalt concrete pavement, constructing a six-inch concrete band, constructing concrete valley gutters, installing pavement markings and markers, installing header boards, installing storm water retention basins, rebuilding curbs on chicanes, conforming areas adjacent to the new improvements, replacing existing 6" VCP sanitary sewer main with 6" HDPE by pipe bursting method, replacing existing 6" VCP sanitary sewer main with 6" PVC by open-trench method, reconnecting existing sewer laterals to new sewer main, replacing of existing brick manholes with new concrete manholes, plug existing inactive sewer laterals, as well as any other items and details not mentioned above, but required by the Project Plans, Standard Specifications and these Special Provisions, and the directions of the Engineer.

END OF SECTION

SECTION 5. CONTROL OF WORK

Attention is directed to the provisions of Section 5, "Control of Work," of the Standard Specifications, except as herein provided, and to Section 2-1, "Plans and Specifications," of these Special Provisions.

5-1. Differing Site Conditions

This section shall be used in lieu of Section 4-1.06, "Differing Site Conditions (23CFR 635.109)," of the Standard Specifications. Section 4-1.06 of the Standard Specifications shall not apply.

The following shall apply to digging trenches or other excavations that extend deeper than four feet (4') below the surface:

- A. The Contractor shall promptly, and before the following conditions are disturbed, notify the Engineer, in writing, of any:
- (1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, II, or 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 of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
- B. The Engineer shall promptly investigate the conditions, and if he 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 the time required for, performance of any part of the work, shall issue a change order, excluding loss of anticipated profits, under the procedures described in the contract. No contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

C. In the event that a dispute arises between the Engineer and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from 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 that pertain to the resolution of disputes and protests between the contracting parties.

D. In the event conditions materially differ from those indicated, the Contractor shall have no claim for construction delays, unless said conditions are determined by the Engineer to impact the controlling item of work.

5-2. Repair of Equipment

The work of installing, assembling, repairing or reconditioning, or other work of any nature on machinery, equipment or tools used in or upon the work shall be considered a part of the work to be performed under the contract and any laborers, workers or mechanics working on the machinery, equipment or tools, unless employed by bona fide commercial repair shops, garages, blacksmith shops or machine shops, which have been established and operating on a commercial basis for a period of at least 2 months prior to the award of the contract, shall be subject to all the requirements relating to labor set forth in these specifications and in the special provisions.

5-3. Cooperation

Attention is directed to Sections 5-1.20, "Coordination with Other Entities," and 5-1.36, "Property and Facility Preservation," of the Standard Specifications, and to these Special Provisions. The utility companies may be rearranging their facilities within the project area and it is expected that they will cooperate with the Contractor to the end that the work may be handled in an efficient manner.

The Contractor shall contact USA North811 (USA) service alert a minimum of forty-eight (48) hours in advance of any excavation or trenching work. USA may be contacted either on-line at usanorth811.org or by phone by dialing (800) 642-2444 or 811.

5-4. Permits and Licenses

Attention is directed to Section 5-1.20B, "Permits, Licenses, Agreements, and Certifications," of the Standard Specifications and these Special Provisions.

The Contractor shall have at least two employees trained in confined space entry regulations CAL/OSHA Confined Space Regulations, Title 8 CCR GISO 5156, 5157, and 5158 at the site whenever there are open trenches or underground work going on. It is understood that all fall protection, retrieval and atmospheric monitoring equipment shall be furnished and maintained by the Contractor at the Contractor's expense. This shall include but not be limited to cost associated with compliance with Confined Space Entry Regulations shall be at the expense of the Contractor.

5-5. Project Appearance

The Contractor shall maintain a neat appearance to the work. Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the unit prices paid for the various Contract items of work involved, and no additional compensation will be allowed therefore.

5-6. Preservation of Property

The Contractor's attention is directed to Section 5-1.36, "Property and Facility Preservation," of the Standard Specifications.

5-7. Air Pollution Control

Air pollution control shall conform to the provisions of Section 14-9.02, "Air Pollution Control," of the Standard Specifications.

5-8. Obstructions

Attention is directed to the provisions in Sections 5-1.36C, " Nonhighway Facilities," 15, "Existing Facilities," and 51-1.03E(9), "Utility Facilities," of the Standard Specifications.

5-9. Sound Control

Sound control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Standard Specifications.

5-10. Public Convenience

Public Convenience shall conform to the provisions in Section 7-1.03, "Public Convenience," of the Standard Specifications and to these Special

Provisions.

5-11. Disposal of Material Outside the Highway Right of Way

Disposal of Material Outside the Highway Right Of Way shall conform to the provisions of Sections 5-1.20B(4), "Contractor-Property Owner Agreement," and 14-10, "Solid Waste Disposal and Recycling," of the Standard Specifications, and Section 14, "Construction Waste Management," of these Special Provisions. The Contractor's attention is further directed to Appendix "A", "Construction Waste Management Plan," of these Special Provisions.

5-12. Sanitary Sewer Monitoring and Reporting Requirements

The Contractor's attention is directed to Appendix B for sanitary sewer monitoring and reporting requirements.

5-13. Subcontracting

Attention is directed to the provisions in Section 5-1.13, "Subcontracting," of the Standard Specifications.

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

END OF SECTION

SECTION 6.
CONTROL OF MATERIALS

Attention is directed to Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

The Contractor shall furnish all materials required to complete the work under this Contract.

6-1. Certificates of Compliance

Certificates of Compliance, conforming to the provisions in Section 6-2.03C, "Certificates of Compliance," of the Standard Specifications shall be furnished for all manufactured products, unless otherwise waived by the Engineer.

6-2. Materials Testing

Whenever the specifications require compliance with specified values for the following applicable properties, tests will be made as indicated:

Material To Be Tested	Property Being Tested	Acceptable Test Method(s)	Description
Aggregate Base	Relative Compaction	CT 216/CT 231	Determines field densities using a nuclear gage.
Cement Treated Base	Cement Content	CT 338	Determines cement content in treated material by the titration method.
Asphalt Concrete	Relative Compaction	CT 375 or ASTM D2950	Determines field densities using a nuclear gage.

Any costs to the County for testing layers which fail the compaction requirements may be deducted from any progress payment due to the Contractor when, in the opinion of the Engineer, such failure results from the Contractor's lack of diligence in pursuing compaction effort. In the event that a test fails, any testing after the first shall be at the Contractor's expense.

END OF SECTION

SECTION 7. LEGAL RELATIONS AND RESPONSIBILITY

Attention is directed to the provisions of Section 7, "Legal Relations and Responsibility to the Public," of the Standard Specifications, these Special Provisions, and to the provisions of paragraph VIII, "Insurance," of the Agreement (AG) portion of the Contract Documents for insurance requirements and the provisions related to Novel Coronavirus Disease 2019 (COVID-19) in the Proposal (PR) and Sections XV, "COVID-19" and XII, "Electronic Signature," of the Agreement (AG) portions of the Contract Documents.

7-1. Equal Employment Opportunity Program for Minority Employment

It is the intent of the Board of Supervisors of the County of San Mateo to prohibit and eliminate employment discrimination and to further the opportunities for minority persons to be gainfully employed in the performance of County construction contracts. Award of a contract to a low bidder will not be made until such bidder has complied with the provisions of Section 2.50.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code and with these guidelines.

7-1.1. Definitions

EQUAL EMPLOYMENT OPPORTUNITY PROGRAM: An Equal Employment Opportunity Program (EEOP) is a set of specific and result oriented procedures to which a Contractor commits himself in order to achieve equal employment opportunity.

COMPLIANCE OFFICER: The Compliance Officer (CO) means the County official designated by the County Executive to represent him in the administration of these guidelines and in the enforcement of the provisions of Sections 2.50.040 and 2.50.050 of Title 2, Chapter 2.50.

7-1.2. Certifications of Compliance and Intent

Every bidder will submit with his bid, as required by Section 2.50.050 of Title 2, Chapter 2.50, a Certification of Compliance with the laws prohibiting discrimination and a Certification of Intent to implement an equal employment opportunity program on the form furnished in the Proposal section of these Specifications.

7-1.3. Equal Employment Opportunity Program

In addition to furnishing the Certifications of Compliance and Intent, each bidder will submit his equal employment opportunity program with his bid proposal. The EEOP shall contain the following information:

- A. Analysis of current work force
- (1) Total number of employees;
 - (2) Numerical racial breakdown of employees by job classification;
 - (3) Information on apprentices.

These figures will provide the base by which the low bidder's EEOP will be evaluated. Factors to be considered both in the original statistics and in any plans for future employment will include the percentage of minority population in San Mateo County, the availability of minority construction workers and the present minority representation in the various construction trades.

- B. The affirmative actions the bidder has taken and will take to ensure equal employment opportunity. These shall include:

- (1) Recruiting and hiring minority persons. If non-union personnel are employed, this would involve employment advertising through sources serving the minority population. These include local minority newspapers, referral agencies, high schools, vocational schools and community groups. Specific information on these sources may be obtained from the Compliance Officer. Union employees will be recruited in accordance with applicable labor agreements. The bidder will seek to have included or will reaffirm clauses in all labor agreements prohibiting discrimination based on race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex. It is also suggested that bidders assist in admitting minority workers who are over the traditional apprenticeship entry age to the various craft training programs.
- (2) Providing adequate opportunity for the upgrading or further training of all employees to insure equal opportunity in advancement and promotion. This might include a counseling service, information and assistance with night classes, or special career-directed

program information.

- (3) Appointing an Equal Employment Opportunity Coordinator, full time or as an additional duty. This person will have the responsibility of administering an active program, informing company personnel and union representatives of company policy, and advising all subcontractors of their obligation to this program.
- (4) Establishing or maintaining an apprenticeship/training program designed to ensure hiring of additional minority employees in the journeyman and skilled classes. Each bidder is urged to support or develop and implement an Apprenticeship Program for his trade.
- (5) Selecting minority subcontractors or subcontractors who are known for their ongoing programs of apprenticeship for minorities. This includes advising minority Contractor associations of opportunities for subcontracts. Joint ventures with minority sub-contractors are encouraged.

- C. The EEOP should state any previous experience the bidder has had with similar plans and the results of that effort. Current affirmative action plans should be described in detail.

7-1.4. Equal Employment Opportunity Program Evaluation

- A. The Compliance Officer (**CO**) will review the EEOP submitted by the low bidder in order to determine whether the program submitted complies with the provisions of Section 2.50.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code, and these guidelines. If deficiencies are indicated, CO may request additional information from the bidder or suggest appropriate remedies. The CO will be available to answer questions relative to the guidelines and to advise those seeking assistance of other sources. CO will not be responsible for the service or lack of service rendered by the consultant recommended, nor will the CO develop an EEOP or serve as a recruiter for any bidder.

The low bidder may withdraw his EEOP for revision after consultation with the CO; however, the revised program must be resubmitted by a date not later than fifteen (15) calendar days after the opening of bids.

- B. All subcontractors listed in the low bidder's proposal shall be required to file completed Certificates of Compliance and Intent and their EEOP with the Bidder for submission to the County. The EEOP of each subcontractor will be evaluated by criteria established for the low bidder's EEOP.
- C. The CO, upon conclusion of the EEOP review, will report his findings and recommendation to the Director of Public Works. The CO will keep acceptable EEOP's on file for six (6) months. During this time period, if the bidder or subcontractors bid for other County contracts, they may refer to the EEOP on file and state any changes, but will not be required, unless specifically requested, to re-file their program.

7-1.5. Inclusion of EEOP and Certificates

Upon award of the Contract by the Board of Supervisors, the EEOP and certifications for the bidder and all subcontractors, which have been approved and accepted by the County, will become an integral part of the Contract and subject to the provisions thereof.

7-1.6. Compliance of Contractor

- A. The Contractor will post, in conspicuous places available to employees and applicants for employment, notices, provided by the County, stating that the Contractor is obliged to comply with the provisions of these guidelines and the provisions of Section 2.050.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code. These notices will also be sent to all unions, employee organizations and other recruiting sources providing employees to the Contractor.
- B. All announcements of job openings will include the statement, "An Equal Opportunity Employer."
- C. The Contractor will make written progress reports on a form provided by the County to illustrate the effectiveness of his EEOP at intervals established by the County.
- D. The **CO** will monitor the Contractor's EEOP until completion of the Contract and will report non-compliance of the Contractor in adhering to his EEOP to the Director of Public Works.
- E. The Contractor will permit, during Contractor's normal business

hours and at Contractor's place of business, access by the County to his records of employment, employment advertisements, application forms and other data and records pertaining to Contractor's employment practices, for the purpose of determining whether Contractor is complying with the non-discrimination and equal employment opportunity rules of the County.

7-1.7. Compliance of Subcontractor

All subcontractors listed by the bidder are subject to all the provisions of these guidelines and the provisions of Section 2.050.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code.

7-1.8. Penalties for Non-Compliance

The penalties for non-compliance are listed in Title 2, Chapter 2.50, Section 2.50.050, which states:

- a. "Every public works contract shall provide that a contractor who, within the time specified in the contract, does not submit an equal employment plan and make the certifications required in this chapter shall be in breach of the contract."
- b. "If, after an award is made, the contractor is found by the County or by a Federal or State agency empowered to make such findings to be in substantial or material violation of the Fair Employment Practices Act of the State of California, the Equal Employment Opportunity Requirement of Executive Order 11246, title VII of the Civil Rights Act of 1964, or of the provisions of this chapter or of the Board-established guidelines implementing them, he may be found to be in material breach of contract, and the County shall have the power to cancel the contract in whole or in part, or alternatively, to deduct for each working day during which the contractor is found to have been in such non-compliance, two percent (2%) of the total amount payable to the contractor."

7-1.9. Waiver of Compliance

In the event that any of the requirements of Sections 2.050.040 and 2.050.050 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code, are found to result in an undue hardship upon a low bidder, bidder may submit evidence of hardship and a petition for waiver of such requirements to the Director of Public Works for recommendation to the Board of Supervisors. Such a waiver may only be granted by the Board and, if approved, shall become an integral part of the contract.

7-1.10 Employee Benefits

All Contractors with contracts with the County of \$5,000 or more shall comply with the provisions of Title 2, Chapter 2.84, as amended, of the San Mateo County Ordinance Code with respect to the provisions on employee benefits. As set forth in the ordinance, such contractors are prohibited from discriminating in the provisions of employee benefits between an employee with a domestic partner and an employee with a spouse. A copy of the Ordinance and Compliance form is attached to the Proposal Section of these Specifications.

In the event it is determined, by the County, that any portion of the County Ordinance Code regarding employee benefits conflict with Federal or State regulations, the Federal or State regulations shall take precedence over the County Ordinance Code.

7-1.11 Non-Discrimination

No person shall be excluded from participation in, denied benefits of, or be subject to discrimination under this Agreement on the basis of their race, color, religion, national origin, age, sex, sexual orientation, pregnancy, childbirth or related conditions, medical condition, mental or physical disability or veteran's status. Contractor shall ensure full compliance with Federal, State and local laws, directives and executive orders regarding non-discrimination for all employees and Subcontractors under this Agreement.

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to be determined by the County Executive, including but not limited to:

- (1) termination of this Agreement;
- (2) disqualification of the Contractor from bidding on or being awarded a County contract for a period of up to 3 years;
- (3) liquidated damages of \$2,500 per violation;
- (4) imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Executive.

To effectuate the provisions of this paragraph, the County Executive shall have the authority to:

- (1) examine Contractor's employment records with respect to compliance with this paragraph;

- (2) set off all or any portion of the amount described in this paragraph against amounts due to Contractor under the Contract or any other Contract between Contractor and County.

Contractor shall report to the County Executive the filing by any person in any court of any complaint of discrimination or the filing by any person of any and all charges with the Equal Employment Opportunity Commission, the Fair Employment and Housing Commission or any other entity charged with the investigation of allegations within thirty (30) days of such filing, provided that within such thirty (30) days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include the name of the complainant, a copy of such complaint and a description of the circumstance. Contractor shall provide County with a copy of its response to the Complaint when filed.

In the event it is determined, by the County, that any portion of these requirements regarding non-discrimination conflict with Federal or State regulations, the Federal or State regulations shall take precedence over County requirements.

7-2. Prevailing Wages

Attention is directed to Section 7-1.02K(2), "Wages," of the Standard Specifications.

In accordance with the provisions of Section 1770 of the California Labor Code, the Board of Supervisors of the County of San Mateo has ascertained the prevailing rate of wages applicable to the work to be done, which prevailing wage rates have been established as indicated in the Notice to Bidders and are incorporated herein by reference.

The Contractor's attention is further directed to the following requirements of State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015:

- (1) **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) **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.**
- (3) **This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.**

7-2.1 Payroll Records

Reference is made to Section 7-1.02K(3), "Certified Payroll Records (Labor Code § 1776)," of the Standard Specifications. In particular, the Contractor's attention is directed "to the last paragraph, which is amended to read:

"If by the 7th working day after the 25th of the month, the Contractor has not submitted satisfactory payrolls for all work performed during the monthly period ending on or before the 25th of that month, the Department may withhold an amount equal to ten percent (10%) of the estimated value of the work performed (exclusive of Mobilization) from that month's estimate, except that this withholding shall not exceed \$10,000 nor be less than \$1,000. Withholdings for failure to submit satisfactory payrolls shall be additional to all other withholdings or retentions provided for in the contract. The withholding for failure to submit payrolls for any monthly period will be released for payment on the monthly estimate for partial payments following the date that all the satisfactory payrolls for which the withholding was made are submitted."

The Contractor is advised that Contractor shall submit either Contractor's Daily Dispatch Report at the start of each working day OR a Daily Personnel and Equipment Log (included as Appendix D of these Special Provisions) to the Engineer by the start of the first working day subsequent to the performance of the work, or Contractor may incur task-specific liquidated damages in the amount of \$500 per calendar day for every day hence until submittal is made.

The Contractor is further advised that, pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015, all contractors and subcontractors working on a contract for public work on a public works project must furnish electronic certified

payroll records to the Labor Commissioner.**7-2.2. Contractor Employee Jury Service**

All Contractors with contracts with the County of \$100,000 or more shall comply with the provisions of Title 2, Chapter 2.85, as amended, of the San Mateo County Ordinance Code, with respect to provision of jury duty pay to employees and have and adhere to a written policy that provides that its employees shall receive from the Contractor, on an annual basis, no less than five (5) days of regular pay for actual jury service in San Mateo County. The policy may provide that employees deposit any fees received for such jury service with the Contractor or that the Contractor deduct from the employees' regular pay the fees received for jury service. A copy of the Ordinance and a Compliance Form is attached to the Proposal Section of these Specifications.

Award of a Contract to a low bidder will not be made until such bidder has certified compliance with the provisions of Title 2, Chapter 2.85, as amended, of the San Mateo County Ordinance Code.

7-3. Highway Construction Equipment

Attention is directed to Section 7-1.020, "Vehicle Code," of the Standard Specifications and these Special Provisions.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the County has determined that, within such areas as are within the limits of the project and are open to public traffic, the Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code. Attention is directed to the statement in Section 591 that this section shall not relieve him or any person from the duty of exercising due care. The Contractor shall take all necessary precautions for safe operation of his equipment and the protection of the public from injury and damage from such equipment.

7-4. Public Safety

Public Safety shall conform to the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications and to these Special Provisions.

7-5. Trench Safety

Trench Safety shall conform to the provisions in Section 7-1.02K(6)(b), "Excavation Safety," of the Standard Specifications and Section 107 of these Special Provisions.

Full compensation for conforming to the requirements of this Section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

**SECTION 8.
PROGRESS OF WORK AND TIME OF COMPLETION**

Attention is directed to the provisions of Section 8, "Prosecution and Progress," of the Standard Specifications, except as herein provided.

8-1. Time of Completion

The Contractor shall begin work within **TEN (10) CALENDAR DAYS** after receiving Notice to Proceed from the Department of Public Works, and shall diligently prosecute the same to completion before the expiration of

SIXTY (60) WORKING DAYS

from the date of said beginning, as described above.

The Contractor is advised that punch list items are required to be completed before the expiration of the working days stated above.

The Contractor may request, in writing, for an extension of working days, which request shall state the reason for said request and the number of additional working days. The Engineer will consider said request and respond, in writing, stating either the number of additional working days approved or the reason for denying the request.

8-2. Liquidated Damages

Attention is directed to Sections 8-1.04, "Start of Job Site Activities," 8-1.05, "Time," and 8-1.10, "Liquidated Damages," of the Standard Specifications. The Contractor shall pay to the County of San Mateo the sum of Five Hundred Dollars (\$500.00) per calendar day for every calendar day delay over and above the number of working days prescribed above for finishing the work.

The Contractor is advised that task-based liquidated damages may be enforced in conformance with the following bid item-specific Special Provisions:

- (1) **Section 7-2.1, "Payroll Records"**
- (2) **Section 39-1, "Asphalt Concrete (Type A HMA, 1/2" Maximum, Medium Grading)"**
- (3) **Section 39-3, "Deep Lift Areas (0.50' Deep Asphalt Concrete)"**
- (4) **Section 39-7, "Plane Asphalt Concrete Pavement (Full Width)"**

(5) Section 84, "Markers"**8-3. Progress Schedule**

The Contractor is advised that an initial/baseline project schedule and subsequent schedule updates is required for the work included under this Contract, and such schedules shall be in accordance with these Special Provisions.

The provisions of Section 8-1.02, "Schedule," of the Standard Specifications are superseded by the following:

"The Contractor shall submit a baseline project schedule to the Engineer within **five (5) working days** after receipt of the Notice to Proceed from the Department of Public Works. This baseline schedule and any subsequent schedule updates shall show:

- (1) Completion of all work within the specified contract time;
- (2) The proposed order of work; and
- (3) Projected starting and completion times for major phases of the work, for the total project, including dates for ordering materials and for substantial completion of the project.

Reference is made to Section 8-1, "Time of Completion," of these Special Provisions."

The Contractor is advised that:

- (1) **Contractor shall notify the Engineer a minimum of twenty-four (24) hours, prior to cancellation of any scheduled work. Should the Contractor fail to provide such notice, the cost for any travel time and mileage incurred by the Engineer will be deducted from the total amount due to the Contractor.**
- (2) **Cement-treat operations may need to be performed over multiple days period. Cement-treat hours of operation may be between the hours of 8:00 A.M. and 5:00 P.M. and shall conform to the provisions of Section 12, "Maintaining Traffic," of these Special Provisions. Contract shall be paid per the unit cost regardless of the number of days needed to complete the cement treat operation.**
- (3) **Property Owner Notifications: The Contractor's attention is directed to the importance of providing proper notification to the property owners. Reference is made to Sections 11, "Mobilization," and 12,**

“Maintaining Traffic,” for the provisions related to primary and secondary property owner notifications.

The schedule shall be developed by a critical path method. The baseline progress schedule shall have as many activities as necessary, and as approved by the Engineer, to be sufficient to assure adequate planning of the project, and to permit monitoring and evaluation of progress and the analysis of time impacts. The Contractor shall provide sufficient material, equipment, and labor to meet the completion times in this schedule.

The baseline project schedule submitted shall meet in all respects the time and order of work requirement of the contract. If the Contractor fails to define any element of work, activity or logic, and the error is discovered by either party, it shall be corrected by the Contractor at the next scheduled monthly update or revision.

The Engineer shall have **five (5) working days** to review and accept, reject or return a submitted schedule for revision. The Contractor shall not commence project work until after receipt of written approval of the preliminary project schedule from the Engineer.

The Contractor shall submit a revised progress schedule within **five (5) working days** when requested by the Engineer, or when there is significant change in the Contractor's operations that will affect the work schedule.

During the period of the Contract, on or before the first calendar day of each month, the Contractor shall submit to the Engineer a complete, updated progress schedule. Said updated schedules shall provide a complete analysis of work previously completed and work yet to be performed, including a status update of each salient component that is delayed or not on schedule, the impact such delays will have on each of the remaining salient features of the work (with revised completion dates), and a revised completion date for all of the project work. Updated schedules shall incorporate all current schedule information, actual progress, approved adjustments of time and proposed changes in sequence and logic.

The Engineer may require the Contractor to also submit, on a weekly basis, a schedule of work for the following workweek. The Engineer will determine the dates for submittal of weekly schedules.

If the Contractor or the Engineer considers that an approved or anticipated change will impact the contract progress, a schedule analysis and revised schedule supporting the proposed adjustment of time shall be submitted to the Engineer for review and approval.

If the Engineer deems that the baseline progress schedule, any necessary progress schedules and/or required supplemental schedules do not provide the information required in the section and/or is unacceptable in size, appearance, neatness and legibility, progress payments will be withheld by the Engineer until a schedule containing the required information and/or with improved appearance has been submitted by the Contractor and approved in writing by the Engineer.

The Engineer's written approval of any schedule shall not transfer any of the Contractor's responsibilities to the Engineer. The Contractor alone shall remain responsible for adjusting forces, equipment, and work schedules to ensure completion of the work within the time(s) specified in the contract. Full compensation for conforming to all provisions of this Section 8, "Progress of Work and Time of Completion," shall be considered as included in the unit prices paid for the various Contract items of the work, and no additional compensation will be allowed therefore.

Full compensation for conforming to the requirements of this Section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 9.
MEASUREMENT AND PAYMENT

9-1. Force Account Work

Attention is directed to the provisions of Section 9-1.04, "Force Account," of the Standard Specifications and these Special Provisions.

The first sentence of bullet item 2 under Section 9-1.04B, "Labor," of the Standard Specifications is amended to read:

"Labor surcharge percentage in *Labor Surcharge and Equipment Rental Rates* and *General Prevailing Wage Rates* current during the work paid at force account for:"

With respect to extra work, the Bidder's attention is directed to the provisions of Section 4-1.05, "Changes and Extra Work," of the Standard Specifications. No extra work or change shall be made, unless pursuant to a written contract change order from the Engineer. No claim for an addition to the Contract sum shall be valid unless so ordered.

9-2. Payments to Contractor

Payments shall be made according to the provisions of Section 9, "Payment," of the Standard Specifications and these Special Provisions. Attention is directed to Section 9-1.16, "Progress Payments," regarding progress or partial payments, and to Section 9-1.17, "Payment After Contract Acceptance," regarding final estimates and payments.

Section 9-1.16E(2), "Progress Withholds," of the Standard Specifications is superseded by the following:

The County of San Mateo shall retain five percent (5%) of such estimated value of the work done, and five percent (5%) of the value of materials so estimated to have been furnished and delivered and unused or furnished and stored as aforesaid as part security for the fulfillment of the Contract by the Contractor. In no event shall the County of San Mateo withhold less than five percent (5%) of the total Contract price until final completion and acceptance of the project.

The Contractor may, upon request and at the Contractor's own expense, substitute security for any money withheld to ensure performance of the Contract in accordance with Government Code Section 4590.

The filing of a Notice of Completion for the work herein provided shall not

constitute an acceptance by the County of latent defects in said work.

9-3. Payments Withheld from Contractor

The County may withhold sufficient monies from any sum otherwise due the Contractor, pursuant to this Agreement, to protect the County against loss on account of:

- A. Repair or replacement of street pavement or base, and/or culverts or other structures, on or near the work, damaged by reason of the Contractor's operations due to hauling materials or moving heavy equipment.
- B. Defective work not corrected.
- C. Claims filed or reasonable evidence indicating probable filing of claims.
- D. Failure of the Contractor to make payments properly to the subcontractors for material or labor.
- E. Reasonable doubt that the Contract can be completed for the balance then unpaid.
- F. Damage to another Contractor.
- G. Failure of the Contractor to provide water pollution control.
- H. Failure of the Contractor to submit satisfactory as-built drawings.

Payment of the amounts withheld shall be made upon the determination by the County that the withholding of such amounts is no longer necessary.

9-4. Stop Notices

Section 9-1.16E(4), "Stop Notice Withholds," of the Standard Specifications is superseded by the following:

"The County of San Mateo, by and through the Department of Public Works or other appropriate County office or officers, may at its option and at any time retain any amounts due the Contractor, sums sufficient to cover claims filed pursuant to Section 9000 et seq. of the Civil Code."

9-5. Construction Claims

Each Bidder is hereby notified of Section 9204 and Section 20104 et seq. of the Public Contract Code as those Sections (attached hereto as Appendix E) relate to the resolution of construction claims and to Section 3186 of the Civil Code, as amended January 1, 1999 with regard to stop notices and public entity's rights to retain monies in order to provide for that entity's reasonable cost of litigation. The Bidder is further notified that all provisions of Sections 9204 and

21014 et seq. of the Public Contract Code and Section 3186 of the Civil Code, as outlined above, shall be considered as incorporated into and become an integral part of these Specifications.

END OF SECTION

SECTION 10.
DEVELOP AND APPLY WATER

Develop and apply water shall conform to the provisions of Section 10-5, "Dust Control," Section 10-6, "Watering," and Section 18, "Dust Palliatives," of the Standard Specifications, these Special Provisions, and the directions of the Engineer.

The Contractor's attention is directed to the fact that the local water purveyor in the Menlo Park Area is California Water Service Company (Calwater); however, the County makes no guarantee that the Calwater can provide water to the Contractor for this project. Contractor shall make arrangements prior to commencement of work to obtain an adequate water supply. Calwater can be contacted by calling (650) 854-5454.

In addition to all other water supply requirements for the construction work, the Contractor's attention is directed to the importance of dust control. The Contractor shall provide dust control at all times, including Saturdays, Sundays and holidays, as directed by the Engineer. The Contractor shall diligently control dust resulting from the Contractor's operations and from public traffic passing through the work by the application of water and/or dust palliative. Whenever the Contractor appears to be negligent in controlling dust, as determined by the Engineer, the Engineer may direct attention to the existence of a dust hazard and instruct the Contractor to immediately alleviate said hazard. If the Contractor fails to follow the Engineer's instructions, the Engineer may have this completed by the County and deduct the costs incurred by the County from the Contractor's payment for this item.

For the purpose of progress payments, payment for this item shall be based on the pro rata share of the work completed. When, in the opinion of the Engineer, the Contractor has been inattentive to a dust hazard, any portion of the progress payment for this item, "Develop and Apply Water," may be withheld until the dust hazard has been corrected.

The Contract lump sum price paid for this item, "Develop and Apply

Water,” shall include full compensation for furnishing all labor, materials (including dust palliative binder and water), tools, equipment and incidentals necessary for doing all work involved in developing and applying all water and/or dust palliative required for the work, and for controlling dust resulting from the Contractor's operations, public traffic, wind or other conditions at all times (including Saturdays, Sundays, holidays) and when ordered by the Engineer, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional or separate payment shall be made therefore

END OF SECTION

SECTION 11. MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, “Mobilization,” of the Standard Specifications and to these Special Provisions and provide the County with photographic evidence that notifications were distributed. The photographs shall include a representative sampling of the notice and are to be date and time stamped.

11-1. Property Owner Primary Notification

The Contractor shall furnish all affected property owners and/or residents written notification that describes the proposed work. The notices shall include relevant dates and describe anticipated impacts to property owners during the work, including, but not limited to, a description of landscaping and improvements that may be affected and/or removed and a statement that the owners/residents have a right to salvage all such existing landscaping, improvements and/or materials that the Contractor may remove to facilitate construction within the right of way. The content, format and method of delivery of such notices shall be approved by the Engineer prior to distribution. The Contractor is advised that these notices shall not be placed in mailboxes, as it is a violation of Federal postal regulations.

Affected property owners and residents shall be considered all those who:

1. Front on or are contiguous to the Project limits.
2. Have ingress/egress route only from within the Project limits.
3. Have executed a Right-of-Entry Agreement with the Real Property Division, County of San Mateo.

The Contractor shall provide approved notification to all affected owners/residents a minimum of **TEN (10) CALENDAR DAYS** prior to the commencement of any Project site work. Failure to distribute notices shall be sufficient cause for the Engineer to suspend the work until such notices are distributed.

For additional property owner notification requirements, the Contractor’s attention is directed to Section 12, “Maintaining Traffic,” of these Special Provisions.

The Contract lump sum price paid for this item, "Mobilization," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work required by these Special Provisions for Mobilization, including submittal of a written program and working drawings, in a form approved by the Engineer, as specified in these Special Provisions, the Standard Specifications and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 12. MAINTAINING TRAFFIC

Attention is directed to Section 12, "Temporary Traffic Control," of the Standard Specifications, Sections 7-1.03, "Public Convenience," and 7-1.04, "Public Safety," of these Special Provisions, the Standard Plans, the Project Plans and the directions of the Engineer. The first paragraph of Section 12-1.04, "Payment," of the Standard Specifications shall not apply. In connection with said sections, it is understood that all lights, signs, barricades, flaggers or other necessary devices shall be furnished and maintained by the Contractor at the Contractor's expense.

Contractor is advised that general roadway excavation shall not commence until authorized in writing by the Engineer.

Property Owner Secondary Notification

The Contractor shall furnish all affected property owners and/or residents secondary written notification that describes the proposed work, including relevant dates; the Contractor's attention is directed to Section 11, "Mobilization," of these Special Provisions for primary notification requirements. The content, format and method of delivery of such secondary notices shall be approved by the Engineer prior to distribution.

Affected property owners and residents shall be considered all those who:

1. Front on or are contiguous to the Project limits.
2. Have ingress/egress route only from within the Project limits.
3. Have executed a Right-of-Entry Agreement with the Real Property Division, County of San Mateo.
- 4.

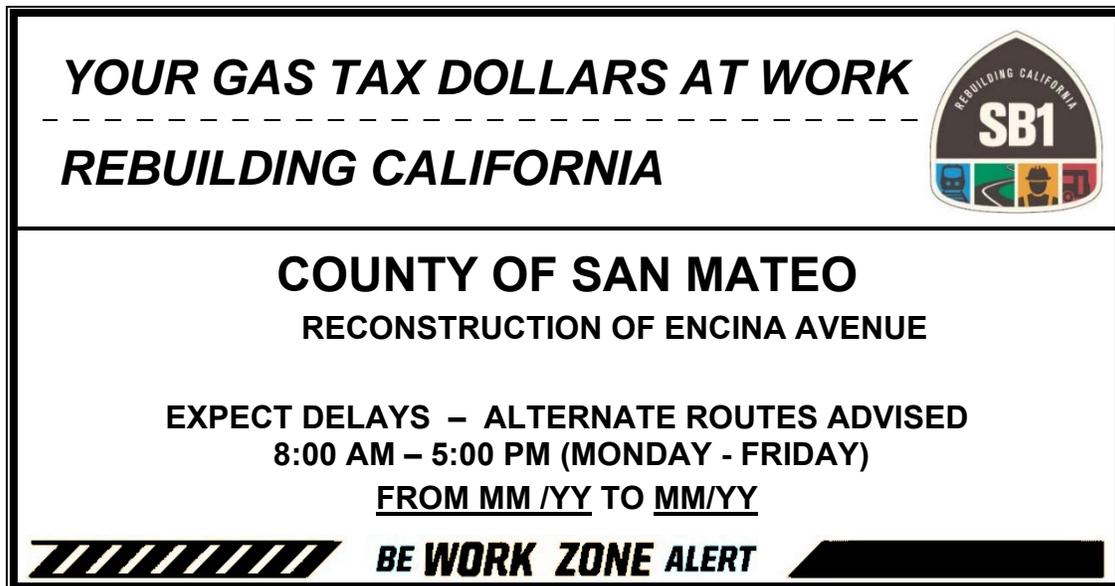
The Contractor shall provide approved notification to all affected owners/residents a minimum of **FORTY-EIGHT (48) HOURS** prior to the commencement of any Project specific site work to allow residents to move their vehicles away from the work area. Failure to distribute notices shall be sufficient cause for the Engineer to suspend the work until such notices are distributed.

Traffic Control Plan

The Contractor shall furnish an overall Traffic Control Plan for all phases

of work. The Plan shall be in accordance with 2018 Standard Plan T-13 unless these requirements are modified as directed by the Engineer. The Contractor shall submit the Traffic Control Plan within **FIVE (5) WORKING DAYS** after the pre-construction conference. The Engineer shall establish the time and place for said pre-construction conference. Delays upon the part of the Contractor in submitting a Plan, in the format as outlined in these Special Provisions and as directed by the Engineer, shall not constitute a valid reason for time extensions should the Contract time elapse before completion of said project. The Contractor is further advised that consideration for adequate review time, as determined by the Engineer, shall be included in the work schedule.

The Traffic Control Plan shall include orange advisory signs (aluminum or plywood, or as approved by the Engineer), **3' x 6' minimum**, stating expected delays, including dates, times and affected streets. Wording of advisory signs shall be as follows



Advisory signs shall be set in accordance to the locations as shown on the Location Map of Plan Sheet 1. Signs shall be set in place a minimum of **SEVEN (7) CALENDAR DAYS** prior to commencement of construction site work, unless otherwise directed by the Engineer. No construction site work shall commence prior to the Engineer's written approval of the Traffic Control Plan and installation of required signs.

Hand-written signs will not be permitted.

Proposals by the Contractor to close portions of roadways within the Project limits to through traffic during and/or outside of working hours shall be submitted, as a part of the Traffic Control Plan, to the Engineer for review. Acceptance of such proposals shall be entirely at the discretion of the Engineer. Should the Engineer reject the Contractor's road closure proposals, the Contractor shall be required to adhere to the provisions herein relating to passage of public traffic through the work and maintenance of traffic lanes through the work.

The Contractor shall provide a minimum of one (1) unobstructed traffic lane, not less than twelve feet (12') wide or full width of road, in each direction between the hours of **5:00 P.M.** and **8:00 A.M.** Between the hours of **8:00 A.M.** and **5:00 P.M.**, the Contractor shall provide a minimum of one unobstructed, reversible traffic lane, not less than **nine feet (9')** wide, that is flagger controlled. The Contractor may, at his option, submit an alternate work hour proposal to the Engineer for review. Acceptance of such proposal shall be entirely at the discretion of the Engineer, and any additional costs associated with alternate work hours proposed by the Contractor shall be borne solely by the Contractor, and no additional compensation will be allowed therefore. Should the Engineer reject the Contractor's alternate work hour proposal, the Contractor shall be required to adhere to the work schedule outlined herein.

When ordered by the Engineer, the Contractor shall furnish additional flaggers for the purpose of expediting the passage of public traffic through the work under one-way controls. The Contractor may also, at his option, utilize a pilot car. During all non-working days, one channelized and unobstructed traffic lane, not less than nine feet (9') wide, shall be provided in each direction or full width of road. Traffic may be stopped in both directions only as specifically authorized by the Engineer.

If any component in the traffic control system is damaged, displaced or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair or replace said component to its original condition and reinstall the component to its original location.

The provisions in this Special Provision will not relieve the Contractor from responsibility to provide additional devices or take such measures as may be

necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications.

At locations where traffic is being routed through construction under one-way controls, the movement of the Contractor's equipment from one portion of work to another shall be governed in accordance with such one-way controls.

During cement treatment work, paving and striping operations, the Contractor shall furnish and place sufficient barricades and detour signs at all cross streets to protect new pavement surfaces and markings. The duration of placement of said barricades shall be as approved by the Engineer.

Whenever the Contractor's operations create a condition hazardous to traffic or to the public, the Contractor shall take the necessary precautions and provide additional traffic control measures, as directed and approved by the Engineer, only, to protect those who must pass through the work. If the Contractor shall appear to be neglectful or negligent in providing warning or protective measures, the Engineer may direct attention to the existence of a hazard, and require that additional barricades, flashers, warning and detour signs or lights be installed by the Contractor, or additional flaggers provided. Any action or lack of action by the Engineer as provided herein shall not relieve the Contractor from responsibility for public safety.

Access to all driveways shall be maintained with steel plates or other means as approved and as directed by the Engineer during working and non-working hours.

The Contract lump sum price paid for this item, "Maintaining Traffic," shall include full compensation for furnishing a complete Traffic Control Plan, for providing all labor (including flagging costs, pilot car, steel plates), materials (including all stationary and portable signs, lights, traffic cones, and lane delineators), tools, equipment and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system as shown on the Plans, the approved Traffic Control Plan, and the Standard Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefore.

12-1. Temporary Pavement Delineation

This work shall consist of furnishing, applying, maintaining, and removing temporary pavement striping and/or markings in conformance with the provisions of Section 12-3.01, "Temporary Traffic Control, General," 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 California Manual of Uniform Traffic Control Devices published by the California Department of Transportation or to relieve the Contractor from his responsibility as provided in Section 7-1.04, "Public Safety," of the Standard Specifications.

The Contractor will be responsible for setting the control for placing temporary striping on roads with existing centerlines and traffic lanes, including turn lanes and bicycle lanes. Unless otherwise shown on the Plans or directed in writing by the Engineer, centerline striping shall match existing centerline striping and shall be straight on tangent alignment and shall be on a true arc on curved alignment.

Temporary pavement delineation shall be applied by any means satisfactory to the Engineer.

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 temporary pavement delineation is applied.

All work necessary to establish satisfactory lines for temporary pavement delineation shall be performed by the Contractor. Temporary pavement delineation that is damaged from any cause during the progress of the work shall be immediately repaired or replaced by the Contractor at his own expense.

12-1.1 Temporary Pavement Delineations for Centerlines and Traffic Lanes

Except as provided for below, and unless otherwise approved by the Engineer, temporary pavement delineation for centerlines and traffic lanes, including turn lanes and bicycle lanes, shall consist of temporary reflective pavement markers placed at longitudinal intervals of not more than twenty-four feet (24') apart. Any changes in the longitudinal intervals shall be at the option of the Contractor, with the pre-approval of the Engineer. Temporary reflective pavement markers shall be the same color as the centerline or lane line markers/markings that they replace. The type of temporary pavement markers used shall be at the option of the Contractor, with pre-approval from the

Engineer.

Temporary reflective pavement markers shall be applied in accordance with the manufacturer's recommendations. Butyl adhesive pads shall be used to apply temporary reflective pavement markers to the top layer of permanent surfacing.

Temporary pavement delineation shall be maintained until replaced with permanent pavement delineation. Temporary pavement delineation that is damaged from any cause during the progress of the work shall be repaired or replaced by the Contractor at his own expense.

When no longer required, temporary pavement delineation that conflicts with permanent pavement delineation, or new traffic patterns for the area, as determined by the Engineer, shall be removed and disposed of in accordance with the provisions in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

12-1.2 Temporary Stripes and Markings – Traffic Tape or Paint

After new pavement has been completed, temporary traffic tape or paint shall be applied for all crosswalks, stop bars and legends, as well as at the locations shown on the plans or designated by the Engineer.

The temporary traffic tape or painted traffic stripes and pavement markings shall be complete in place at the designated locations, as shown on the plans or as designated by the Engineer, prior to opening the traveled way to public traffic.

Temporary Traffic Tape and Temporary Paint shall conform to the following:

(1) Temporary Traffic Stripe Tape:

Temporary traffic stripe tape shall be applied for all crosswalks and stop bars, as well as at the locations shown on the plans or designated by the Engineer.

The contractor's attention is directed to Section 12-6.03D(2) of the Standard Specifications for application specifications. In addition, surfaces on which the tape is to be applied shall be cleaned of all dirt and loose material and shall be dry when the tape is applied.

Temporary traffic tape that is damaged from any cause during the progress of the work shall be repaired or replaced by the Contractor at his own expense.

Removable type traffic tape shall be removed when determined by the Engineer that it is no longer required for the direction of public traffic, conflicts with new traffic pattern for the area, or is applied to the final layer of surfacing or existing pavement to remain in place. Disposal of the tape shall conform to Section 5-11, "Disposal of Material Outside of the Highway Right of Way," of these Special Provisions.

(2) Temporary Paint:

Temporary painted traffic stripes and pavement markings shall be located such that the temporary painted traffic stripes and markings will be completely covered by the permanent traffic stripes or markings.

Should, upon application of the permanent traffic stripes or markings, the temporary painted traffic stripes and markings still be visible, the Contractor will remove the paint, as directed by and to the satisfaction of the Engineer, all at the Contractor's sole expense, and no additional compensation will be allowed therefor.

Full compensation for conforming to the requirements of Temporary Pavement Delineation shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 13.
WATER POLLUTION CONTROL

The provisions of Section 13, “Water Pollution,” of the Standard Specifications are superseded by these Special Provisions and the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP).

Information regarding this program is available at www.flowstobay.org.

The Contractor is advised that failure to fully comply with the provisions of this Section, and all requirements listed in the California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit Order No. R2-2015-0049 (MRP), and where applicable, the State Water Resources Control Board NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2010-0014-DWQ (Construction General Permit), and any resource agency permits obtained for the project, where applicable, except where amended in writing and signed by the Director of Public Works or his duly authorized representative, shall constitute substantial non-compliance with the requirements of the Clean Water Act, the NPDES permit program, and the Contract.

The County shall provide periodic site monitoring to ensure that the work complies with the requirements specified herein and in any resource agency permits. The County will provide the Contractor with copies of the completed monitoring reports. Should any work be found to be non-compliant, a follow up site monitoring visit will be conducted to ensure the items have been corrected. If deficiencies noted during a monitoring visit are not corrected before the follow up monitoring visit, the costs associated with additional follow up visits to correct the noted deficiencies shall be deducted from the final payment for all of the Contract work.

Construction sites are common sources of water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and wetlands, San Francisco Bay and the Pacific Ocean. The Contractor shall be responsible for any environmental damage caused by his operations and those of his subcontractors or employees.

Water pollution shall be defined as including the introduction of any material, including sediment, trash, or other debris, equipment or vehicles into any watercourse, including creeks, ponds, ditches, storm drain facilities, and any surfaces immediately tributary to those areas, except as specifically authorized by any resource agency permits. Water pollution controls are materials and measures that prevent the introduction of any material to any watercourse. Water pollution control materials and measures may consist of temporary silt fencing; straw mulch/straw logs; spill cleanup materials; pavement sweepers; sand bags or continuous berms; etc.

Water pollution controls shall be applied, maintained and removed by the Contractor as specified herein and as directed by the Engineer. For construction activities occurring between June 15 and September 15, sufficient quantities of applicable water pollution control materials shall be available at the work site prior to commencing any work. For construction activities occurring between September 15 and June 15, all applicable water pollution control measures shall be installed, and all applicable water pollution control materials shall be available at the work site, prior to commencing any work.

A. Water Pollution Control Program

Before starting any work on the project, the Contractor shall submit, for acceptance by the Engineer, a written program including Storm Water Pollution Prevention Plans (SWPPPs) and applicable plan drawings and details to control water pollution effectively during construction of the project. The program shall show the schedule for any erosion control work included in the contract and for all water pollution control measures that the Contractor proposes to take in connection with construction of the project to minimize the effects of the operations upon water resources. The Contractor shall not perform any clearing and grubbing or earthwork on the project, other than that specifically authorized in writing by the Engineer, until the program has been approved by the Engineer.

If the measures being taken by the Contractor are inadequate to control water pollution effectively, the Engineer may direct the Contractor to revise the operations and the water pollution control program. The directions will be in writing and will specify the items of work for which the Contractor's water

pollution control measures are inadequate. No further work shall be performed on those items until the water pollution control measures are adequate and, if also required, a revised water pollution control program has been approved. Attention is directed to "Contractor Response" of this Section for additional provisions relating to correction of the Contractor's water pollution control program, and payment.

The Engineer will notify the Contractor of the acceptance or rejection of any submitted or revised water pollution control program within 5 working days.

The County will not be liable to the Contractor for failure to accept all or any portion of an originally submitted or revised water pollution control program, nor for any delays to the work due to the Contractor's failure to submit an acceptable water pollution control program or failure to adhere to the provisions of an accepted water pollution control program.

B. Contractor Response

The Contractor is advised that he may be required to respond to the work site after hours and/or on weekends or holidays to mitigate potential water pollution, soil erosion or sedimentation and/or to repair damaged water pollution controls. Failure to respond within four (4) hours of notification by the Department of Public Works shall constitute substantial non-compliance with these Special Provisions.

Should the County Road Maintenance Division be required to provide any after-hours, weekend or holiday repairs to the Contractor's water pollution controls due to the Contractor's failure to respond, all costs associated with providing that response, including overtime wages, equipment and material costs, shall be deducted from the Contractor's final payment. The Contractor shall also be fully responsible for any fines, penalties or mitigations imposed by any regulatory agency caused by his failure to respond, regardless if the County Road Maintenance Division attempts any repairs or pollution prevention work in his absence.

C. Excavation and Grading

The Contractor shall not commence any excavation, backfilling, grading or stockpiling operations until water pollution control materials have been delivered to the work site. The Contractor shall certify, in writing, that the quantity of water

pollution control materials at the site is sufficient to protect against water pollution caused by the work, and shall specify the type of material and intended use in said written certification.

Excavation and grading activities shall be scheduled for dry weather periods and as directed and approved by the Engineer, only. Excavation and grading activities shall not be allowed to commence or continue during periods of rainfall or runoff.

The Contractor may elect to perform excavation or grading activities immediately prior to periods of forecasted rain if he certifies in writing to the Engineer that the site will be completely secured against erosion and/or water pollution at the conclusion of each workday and prior to any rainfall. The work site shall be considered as completely secured against erosion and/or water pollution during or prior to forecast periods of rain if the turbidity of runoff from the site does not exceed the turbidity of runoff from adjacent, undisturbed sites by more than 50 NTUs (Nephelometric Turbidity Units). Should the turbidity of runoff from the work site exceed this limit, the Contractor shall be required to immediately place additional erosion and/or water pollution controls at his expense as directed by the Engineer, and shall be subject to any administrative fines or penalties associated with water quality or permit violations, and no additional compensation will be allowed therefore.

D. General Housekeeping

The Contractor shall control the amount of runoff entering upon disturbed construction and staging areas, particularly during excavation, to reduce the amount of water pollution controls required. Temporary diversion berms and/or sandbags may be employed to divert runoff from entering upon construction and staging areas as approved by the Engineer.

Paved surfaces shall be broom-swept as necessary to prevent water pollution. Water spray system of the sweeper units shall be used as appropriate to reduce dust generation. If pavement flushing is necessary, silt ponds or other techniques to trap sediment and other pollutants shall be required.

Dumpsters shall be covered, maintained, and checked frequently for leaks. It is recommended that dumpsters be lined with plastic to prevent leakage of liquids. At no time will the Contractor be permitted to wash dumpsters at the site.

The Contractor shall place trashcans and recycling receptacles around the site for use by his forces. Trashcans and recycling receptacles shall be kept covered and shall be emptied at appropriate intervals to reduce litter at the site.

All wastes shall be disposed of properly outside the highway right of way in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions" and Section 14, "Construction Waste Management," of these Special Provisions.

The Contractor shall maintain portable toilets in good working order and wastes shall be disposed of properly. The Contractor shall check toilets frequently for leaks, and repair or replace any toilets found to be leaking. Portable toilets shall be protected against tipping by ground anchors, bollards, or any other suitable means as approved by the Engineer.

E. Stockpiles

All soil and/or rock stockpiles shall be protected against wind, rainfall and runoff at all times. Plastic sheeting may be used to cover soils, including aggregate base, and shall be securely anchored by sandbags or other suitable means. At no time will any stockpiled materials be allowed to erode into any watercourse or onto any roadway or other tributary surface.

F. Vehicle Maintenance

The Contractor shall designate a completely contained area of the construction site, well away from watercourses and tributary areas, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance. The Contractor shall require the use of drip pans or drop cloths to catch drips and spills if any vehicle or equipment fluids (e.g. motor oil, radiator coolant, etc.) must be drained on site. Diesel oil shall not be used to lubricate or clean equipment or parts. All spent fluids shall be stored in separate containers, and recycled whenever possible, or disposed of as hazardous waste.

Spills or leaks shall be immediately contained and cleaned up by the Contractor, all at his expense, and shall be reported to the Engineer immediately after containment.

All vehicles and equipment shall be maintained in good repair. The Contractor shall inspect frequently for and immediately repair any leaks. The Contractor shall perform major maintenance, repair jobs, and vehicle and

equipment washing off site.

G. Spill Prevention and Response

Fluid spills shall not be hosed down. The Contractor shall use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible. If water must be used, the Contractor will be required to collect the water and spilled fluids and dispose of it as hazardous waste. Spilled fluids shall not be allowed to soak into the ground or enter into any watercourse.

Spilled dry materials shall be swept up immediately. The Contractor shall not wash down or bury any dry spills. Spills on dirt areas shall be removed by digging up and properly disposing of contaminated soil. The Contractor shall report significant spills to the Engineer immediately.

H. Tire Washing

Should the Contractor's equipment be tracking soil onto a public road, the Engineer shall require a tire-washing swale at the exit from the construction site and/or staging areas. The Engineer shall also require that soil be removed from the traveled way by whatever means necessary to prevent water pollution.

I. Roadwork and Paving

The Contractor shall avoid creating excess dust when breaking and/or removing asphalt or concrete. Broken asphalt and/or concrete pieces shall be completely removed from the site as soon as possible, or shall be stored in a separate, secure stockpile protected against from wind, rainfall and runoff. Material derived from roadway work shall not be allowed to enter any watercourse, or tributary area.

Slurry resulting from sawcutting operations shall be shoveled or vacuumed and completely removed from the site. The Contractor shall not be permitted to sweep or flush any sawcutting debris or slurry into any watercourse, or tributary area.

J. Concrete and Mortar

Except as approved by the Engineer for temporary concrete washouts for concrete mixers or trucks, the Contractor shall ensure that concrete and mortar are contained within the lines and grades shown on the Plans and not allowed to leave the construction site. Any excess concrete, mortar and/or mix water placed or spilled beyond the limits of concrete construction as shown on the Plans shall

be immediately collected, removed and disposed of properly.

Location of temporary concrete washouts for concrete mixers or trucks shall be as approved, in writing, by the Engineer. Should the Contractor allow washing out of concrete mixers or trucks prior to receiving said written approval, Contractor may be required to clean up the unapproved washout area to the satisfaction of the Engineer and/or relocate temporary concrete washouts, all at the Contractor's sole expense, and no additional compensation will be allowed therefore.

Dry sacks of cement shall be protected against wind, rainfall and runoff. Opened sacks of cement shall be secured and protected from spilling.

K. Training

Contractor shall ensure that all persons responsible for preparing, amending and implementing SWPPPs be appropriately trained in accordance with the requirements of the Construction General Permit and these Special Provisions. The Contractor shall provide documentation of all training for persons responsible for implementing these requirements upon request by the Engineer.

When required, the County will provide introductory training to the Contractor, his employees and subcontractors at the job site before work commences for any project with resource agency permits. The training will provide background information on sensitive species, permit requirements and site-specific water quality issues. When not required, the County is available to provide such training at the Contractor's request.

The Contract lump sum price paid for this item, "Water Pollution Control," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work required by these Special Provisions for Water Pollution Control, including submittal of a written program and working drawings, in a form approved by the Engineer, as specified in these Special Provisions, the Standard Specifications and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 14. CONSTRUCTION WASTE MANAGEMENT

The County has established that this Project shall minimize the creation of construction and demolition waste on the job site. Factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination, shall be minimized. For any waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

The contract lump sum price paid for this item, "Construction Waste Management," shall include full compensation for furnishing all labor, equipment and incidentals, including the provision of required documentation of proper materials disposal and the development of a Waste Management Plan, all as described herein, and no separate payment will be made therefore.

No partial payment will be made for this Contract item of work until all work required, as specified herein, is completed to the satisfaction of the County, and all necessary documentation provided.

14-1 Diversion Goals

One hundred percent (100%) of inert wastes, and at least fifty percent (50%) of the remaining construction and demolition debris shall be diverted from landfills.

Inert wastes, such as concrete, brick, rock, asphalt, and soil not intended for on-site use, shall be taken to a facility that will reuse or recycle them.

Other mixed construction & demolition (C&D) wastes shall be taken to a facility with a C&D sorting program, as listed in the Construction and Demolition Debris Recycling Guide referenced below, if additional recycling is needed in order to meet the requirements set forth in this Section. If debris box service is used, the debris boxes must be taken to a C&D sorting facility if materials are not separated on-site for recycling.

The Contractor has the option of separating on-site for recycling non-inert materials, such as cardboard, paper, wood, metals, green waste, new gypsum wallboard, tile, porcelain fixtures, and other easily recycled materials, and directing them to recycling facilities and taking the remaining mixed waste (but no

more than 50% by weight or yardage) to a facility for disposal. If waste is taken for disposal, documentation must be provided to show that 50% of C&D wastes (in addition to 100% of inert wastes) have been diverted.

14-2 References and Resources

A Construction and Demolition Guide (C&D Guide) is available online at <https://www.smcsustainability.org/waste-reduction/construction-demolition/>. For more information or resources, contact the County of San Mateo's Office of Sustainability by phone at (888) 442-2666 or by email at sustainability@smcgov.org. The Contractor's attention is directed to **Appendix A** for the County of San Mateo Waste Management Plan Form and the Waste Management Daily Transport Report.

14-3. Waste Management Plan and Daily Transport Report

The Contractor is required to complete a Waste Management Daily Transport Report, listing details of the material transported on that particular day, which is to be signed by both the Contractor's representative and the County inspector on the job site.

The Waste Management Plan shall be submitted to the Engineer, Department of Public Works, 555 County Center – 5th Floor, for approval within SEVEN (7) WORKING DAYS after the pre-construction conference.

The Waste Management Plan shall include a description of how the contractor will meet the requirements of this contract and shall include a list of disposal and recycling facilities where waste materials will be taken, a description of what will be taken to each facility (inert wastes, metals, wood, glass, plastics, mixed waste, etc.), a description of the means of transportation of recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and designated center, or whether mixed materials will be collected by a waste hauler and removed from the site), and an estimated amount (weight, yardage, etc.).

Approval will be granted if the plan shows:

- (1) One hundred percent (100%) of inert wastes being reused or recycled AND at least fifty percent (50%) of C&D wastes being reused or recycled; OR

- (2) All waste that is not separated on-site for recycling is sent to a mixed C&D sorting facility for recycling.

14-4. Waste Management Plan Implementation

A. Plan Distribution:

The contractor shall provide copies of the approved Waste Management Plan to the project superintendent and each subcontractor.

B. Instruction:

The contractor shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.

C. Meetings:

The contractor shall conduct monthly Construction Waste Management meetings or at least one meeting for projects with length of less than twenty (20) working days. Meetings shall include subcontractors affected by the Waste Management Plan. At a minimum, waste management goals and issues shall be discussed at regularly scheduled project meetings.

D. Separation Facilities:

The contractor shall designate a specific area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid co-mingling of materials. Bins set within the County Right of Way shall be subject to approval by the County. All bins used shall be protected during non-working hours from offsite contamination.

E. Materials Handling Procedures:

Materials to be recycled shall be protected from contamination, and shall be handled, stored and transported in a manner that meets the requirements set by the designated facilities for acceptance.

F. Hazardous Wastes:

Hazardous wastes shall be separated, stored, and disposed of according to State and local regulations. Unless specified in other section,

the County is not aware of any hazardous wastes within the project site. Notify the Engineer if hazardous waste is encountered.

G. Reporting:

As a condition of final approval and retention release, submit documentation to the Engineer. Projects that establish monthly progress payments shall also require monthly reporting on the Waste Management Plan. Such reports shall be submitted prior to the monthly cutoff for progress payments and shall include, at a minimum, a summary of waste materials recycled, salvaged and disposed of for the Project. Submitted with this summary will be documentation (receipts/scale tickets, waybills) showing the quantities and types of materials diverted and disposed. The documentation shall coincide with the Waste Management Daily Transport Reports (in Appendix A) that were signed by both the Contractor and the County inspector. A Notice of Completion will not be filed for the project and retention released until all reports as required for the project are submitted and approved.

The above-mentioned summary and documentation shall contain the following information:

- (1) For each material recycled and salvaged from the Project, include the amount (in cubic yards or tons, or in the case of salvaged items, state quantities by number, type and size of items) and the destination (i.e., recycling facility, used building materials yard or other local users).
- (2) For each material landfilled or incinerated from the Project, include the amount (in cubic yards or tons) of material and the identity of the landfill, incinerator and/or transfer station. All projects are subject to inspection.
- (3) Documentation shall consist of photocopies of receipts and weight tags or other records of measurement or equivalent documentation from recycling companies, deconstruction contractors, and landfill and disposal companies. The contractor shall sign the completed Waste Management Plan to certify its accuracy as part of the

documentation of compliance.

It is unlawful for any person to submit documentation to the County for an approved Waste Management Plan that that said person knows to contain any false statements, including but not limited to false statements regarding weight and/or yardage of materials recycled or diverted, or to submit any false or fraudulent receipt or weight tag or other record of measurement.

END OF SECTION

SECTION 15.
EXISTING HIGHWAY FACILITIES

The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Facilities", of the Standard Specifications, Section 15, "Existing Highway Facilities," and Sections 107, "Trench Safety," of these Special Provisions, Appendix B of these Project specifications, the Plans, and the directions of the Engineer.

The Contractor's attention is directed to the fact that, prior to construction of valley gutters and beginning of cement treatment operations, work shall be completed for all sewer work as stipulated in this Special Provision and as directed by the Engineer.

It is anticipated that utilities not shown on the Plans may exist within the right of way and may interfere with construction progress. In the event such utilities are discovered, the Engineer shall be notified. Attention is directed to Section 5-1.36C, " Nonhighway Facilities", of the Standard Specifications.

The Contractor shall be responsible for locating existing utilities before proceeding with sanitary sewer, and road excavation work to avoid unnecessary breakage of the existing underground utilities to remain. The Contractor's attention is directed in particular to the existence of underground utilities located within the Project limits.

Facilities not designated on the Plans or by the Engineer for removal shall remain in place. Damage to these facilities as a result of the Contractor's operations, as determined by the Engineer, shall be repaired by the Contractor, all at the expense of the Contractor and to the satisfaction of the Engineer, and no additional compensation will be allowed for therefore.

The Contractor's attention is directed to the following:

(1) Maintaining Emergency Access to Sanitary Sewer and Storm Drain Systems

Due to the inherent risk of backup and overflow incidents associated with sanitary sewer and storm drain systems, the Contractor is advised of the importance of maintaining access to the facilities of said systems, in order to provide emergency maintenance service in the event of such an incident. With

respect to this risk, reference is made to Section 39, "Asphalt Concrete" of these Special Provisions.

The Contractor's attention is directed to Appendix B of these Special Provisions for sanitary sewer monitoring and reporting requirements.

(2) Sanitary Sewer Facilities

(a) Maintaining Flows

Flows within the sanitary sewer system shall be maintained at all times during this Project.

- (b) The Engineer, or designated representative of the Fair Oaks Sewer Maintenance District (District), must be present during all operations to perform work on sanitary sewer facilities to ensure conformance with District's requirements. The Contractor shall request for the Engineer to contact and coordinate with the District a minimum of five (5) working days prior to start of any work on the District's sanitary sewer facilities. *No inspections shall occur on Fridays, weekends or holidays unless special arrangements are made with the District.***

(3) Utility Adjustments

- (a)** Utilities shall not be adjusted to final grade until the adjacent surfacing has been completed.

- (b)** Same-day paving of adjusted utilities shall not be allowed. Once utility adjustments are completed, traffic cones shall be placed over the adjusted utilities, the newly poured concrete collars allowed to cure overnight, and utility paving completed the following day, unless otherwise authorized by the Engineer.

- (c) If paving of adjusted utilities is not to be done the following day, the Contractor shall place cutback to temporarily bring the surface around adjusted utilities to grade until paving can be completed, unless otherwise directed by the Engineer.**

- (d)** The Contractor is encouraged to protect the concrete collars from the cutback. Should the Contractor choose not to protect the concrete collars from the cutback, the Contractor will be required to thoroughly clean the concrete collars, to the satisfaction and approval of the

Engineer, to ensure asphalt concrete pavement will properly adhere to the concrete collar. The Contractor shall not proceed without the Engineer being present during such cleaning operations.

- (e) The cost for placing and removing said cutback, and, if necessary, cleaning concrete collars, shall be considered as included in the Contract unit prices paid for the various utility adjustments and no additional compensation will be allowed therefore.
- (f) **The Contractor is advised that utilities will not be considered as having been completed nor paid for until after final paving has been done and, in the case of manholes, debris removed from inside the manhole when such debris is considered to be due to work performed by the Contractor.**

The Contractor shall be responsible for providing, by any means necessary, reference points for existing highway facilities (such as water valves, manholes, monuments) that are to be adjusted such that said facilities can be located after the roadway has been paved by the Contractor. All tie-out points shall be removed upon completion of the work. If paint markings are used to locate facilities, the Contractor shall remove these markings by power washing or other method, as approved by the Engineer. The Contractor shall be required to clean any markings placed in association with this project. The cost for removing said markings shall be fully borne by the Contractor, and no additional compensation will be allowed therefore.

The Contractor shall call USA North811 (USA) service alert a minimum of forty-eight (48) hours in advance of any excavation or trenching work. USA may be contacted either on-line at usanorth811.org or by phone by dialing (800) 227-2600 or 811.

15-1. Pothole and Protect Existing Utilities

Potholing, or exploratory excavation, shall be undertaken solely as directed by the Engineer and upon receipt of written authorization from the Engineer, where the Engineer believes the proposed work is suspected of conflicting with existing utilities, and to confirm size and material of existing utilities.

All potholes needed for sewer, infiltration gallery work and all project

related work shall not be paid under this item, "Pothole and Protect Existing Utilities," and shall as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

Contractor shall verify with the Engineer the proposed pothole locations and provide pothole information (location, depth, pipe type, pipe diameter, etc.) to the Engineer.

Potholing shall be accomplished by excavating a minimum two-foot (2') and maximum four-foot (4') square hole to a **maximum depth of four feet (4')** for all other work, and care to not disturb adjacent pavement must be taken. Hand excavation techniques shall be implemented in highly sensitive area where the risk of mechanical methods are too dangerous. Backfill shall be compacted in eight-inch (8") lifts to ninety-five percent (95%) relative density, unless otherwise directed by the Engineer. If necessary, surface material shall be replaced in kind so that no discontinuity in smooth surface results.

Existing utilities shall be protected from damage in conformance with the provisions in Section 5-1.36C, "Nonhighway Facilities" of the Standard Specifications, the Plans, these Special Provisions, and as directed by the Engineer.

The Contract unit price paid per each for this item, "Pothole and Protect Existing Utilities," shall include full compensation for providing all labor, tools, materials and incidentals, and for doing all work required to pothole, protect existing utilities, replace surface material in kind, if necessary, and compacting backfill material, and no additional compensation will be allowed therefore.

Quantities for potholing will be determined as units from actual count.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantities of this item "Pothole and Protect Existing Utilities" required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item.

The County reserves the right to eliminate or reduce the quantities of this item, "Pothole and Protect Existing Utilities," from the project. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall**

not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the Engineer

15-2. Adjust Water Facilities to Grade (Cal Water)

Water valve boxes shall be adjusted to grade in conformance with Section 15, "Existing Facilities," of the Standard Specifications," of the Standard Specifications, the Plans, these Special Provisions, the standards of the California Water Service Company (Cal Water), and the directions of the Engineer. Cal Water's standard detail is included on the Plans.

The Contractor shall request for the Engineer to contact and coordinate with Cal Water a minimum of five (5) working days prior to adjusting the water valve boxes to ensure conformance to Cal Water's requirements.

Water valve boxes shall be adjusted by removing the existing concrete pad and pouring a new pad of Class 2 concrete. Adjustment of water valve box riser may be required. Extension rings will not be acceptable.

The Contractor is advised that Cal Water's water valves shall be exposed and be accessible in no later than five (5) days after the new pavement is placed. If these water valves are not exposed five (5) days after the paving work, Cal Water or the Company's designated contractor will expose the water valves and all cost for exposing California Water's water valves will be deducted from the Contractor payment, and no additional compensation will be allowed therefor.

Quantities of water valve boxes adjusted to grade will be determined as units from actual counts.

The Contract unit price paid per each for this item, "Adjust Water Valve Box to Grade (Cal Water)," shall include, but not be limited to, full compensation for furnishing all labor, material, equipment and incidentals necessary for doing all work involved to adjust water valve boxes to grade, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contractor bid price will be made for any increase or decrease in the quantities of this item, "Adjust Water Valve Box to Grade (Cal

Water),” required. The provisions of Section 9-1.06, “Changed Quantity Payment Adjustments,” of the Standard Specifications shall not apply to this item of work.

The County reserves the right to eliminate this item, “Adjust Water Valve Box to Grade (Cal Water),” from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

15-3. Remove and Dispose Existing Abandoned Asbestos Cement Pipe

Contractor is advised existing abandoned asbestos cement water pipes may be present within the project area and may be shallow at certain segments. Asbestos cement sewer lateral may also be present within the project area. In the event existing abandoned asbestos cement pipes are encountered, they shall be cut with a handsaw or a band saw only. Contractor is to follow all safety procedures for the handling and disposal of asbestos cement pipes encountered in addition to the provisions in Section 5-11, “Disposal of Material Outside the Highway Right of Way,” of these Special Provisions.

The Contract unit price paid per linear foot for this item, “Remove and Dispose Existing Abandoned Asbestos Cement Water Pipe and Sewer Lateral,” shall include full compensation for providing all the necessary labor, materials, tools, equipment and incidentals, and for doing all the work involved in remove and dispose existing abandoned asbestos cement water pipe, including, but not limited to, excavation and backfill, excavation dewatering, saw-cutting, disposal excavated material to the appropriate landfill, and incidental work, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment of the Contractor bid price will be made for any increase or decrease in the quantity of this item, “Remove and Dispose Existing Abandoned Asbestos Cement Water Pipe and Sewer Lateral,” required. The provision of the Section 9-1.06, “Changed Quantity Payment Adjustments,” of the Standard Specifications shall not apply to this item.

The County reserves the right to eliminate this item, “Remove and

Dispose Existing Abandoned Asbestos Cement Water Pipe and Sewer Lateral,” from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

15-4. Remove and Reset Mailboxes

Existing mailbox (including mailbox banks) within the Project limits shall be kept in use. However, any mailboxes that need to be relocated or removed, as determined by the Engineer for construction purposes, shall be accomplished only after the property owners have been given an opportunity to perform this task themselves, otherwise, said mailboxes shall be removed and reset in temporary locations and, at the appropriate time, reset in a permanent location, as directed by the Engineer.

Mailbox relocation work shall be coordinated with the United States Postal Service, and all temporary and permanent locations must be satisfactory to the United States Postal Service AND the Engineer. As such, the Contractor is required to contact the United States Postal Service prior to commencing any mailbox relocation work. Ted Viray, the Postmaster for this area, can be reached at (650) 323-2701.

Existing mailboxes that are mounted on steel, wrought iron or other type of metal supports shall, at the option of the Engineer, be removed and reset as a single unit. The relocated post shall be embedded in foundation material equal to the existing or as approved by the Engineer.

Mailboxes (except those mounted on metal supports and new mailboxes furnished by residents/owners) shall be installed on new redwood posts by the Contractor. Groups of mailboxes on single-post or multi-post supports shall be provided with redwood planks as supporting cross-members on or between post(s). Minimum plank thickness shall equal nominal two-inch (2”) stock. Multi-post installations shall be paid for as two (2) units. Redwood posts shall be construction heart grade, S4S. Backfill material shall be placed in layers one-third of a foot (0.33’) thick, and each layer shall be moistened and thoroughly compacted.

Existing newspaper boxes shall be considered as mailboxes for measurement and payment.

The Contract unit price paid per each for this item, "Remove and Reset Mailbox," shall include, but not be limited to, full compensation for furnishing all labor, tools, materials, equipment and incidentals necessary for doing all work involved in relocating mailboxes to final position, including relocating mailboxes to temporary locations as required, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contract bid price will be made for any increase or decrease in the quantity of this item, "Remove and Reset Mailboxes," required. The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments" of the Standard Specifications shall not apply to this item of work.

The County reserves the right to eliminate this item, "Remove and Reset Mailboxes," from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

15-5. Adjust Gas Valve to Grade (PG&E)

Gas valve boxes shall be adjusted to grade in conformance with Section 15, "Existing Facilities," of the Standard Specifications, the Plans, these Special Provisions, the standards of the Pacific Gas & Electric (PG&E), and the directions of the Engineer. PG&E's standard detail is included on the Plans.

The Contractor shall request for the Engineer to contact and coordinate with PG&E a minimum of five (5) working days prior to adjusting the gas valve boxes to ensure conformance to PG&E's requirements.

Gas valve boxes shall be adjusted by removing the existing concrete pad and pouring a new pad of Class 2 concrete. Adjustment of gas valve box riser may be required. Extension rings will not be acceptable.

The Contractor is advised that PG&E's gas valves shall be exposed and be accessible in no later than five (5) days after the new pavement is placed. If these gas valves are not exposed five (5) days after the paving work, PG&E or

the Company's designated contractor will expose the water valves and all cost for exposing PG&E's gas valves will be deducted from the Contractor payment, and no additional compensation will be allowed therefor.

The Contract unit price paid per each for this item, "Adjust Gas Valve Box to Grade (PG&E)," shall include, but not be limited to, full compensation for furnishing all labor, material, equipment and incidentals necessary for doing all work involved to adjust gas valve boxes to grade, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contractor bid price will be made for any increase or decrease in the quantities of this item, "Adjust Gas Valve Box to Grade (PG&E)," required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments" , of the Standard Specifications shall not apply to this item of work.

The County reserves the right to eliminate this item, "Adjust Gas Valve Box to Grade (PG&E)," from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

15-6. Remove Concrete Blocks and Structures at Traffic Chicane

Remove concrete blocks and structures at traffic chicane, where shown on the Plans, shall conform to Section 15 "Existing Facilities" of the Standard Specifications, the Plans and these Special Provisions, and as directed by the Engineer.

Contractor shall be careful not to damage any vegetation/facilities within the chicanes. Contractor shall hand dig around existing facilities. The Contractor is advised that the concrete blocks and structures shall be removed completely including the existing inner concrete strip. Any damage to facilities intended to remain, caused by the Contractor's operations, shall be replaced at his expense.

All concrete and steel removed in performing this item of work shall be disposed of outside the highway right of way in conformance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the unit prices paid for the various Contract items of work involved, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 17.
CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions of Sections 15, "Existing Facilities," and 17-2, "Clearing and Grubbing," of the Standard Specifications, these Special Provisions, the Plans and the directions of the Engineer.

The Contractor attention is directed to Sub-section 14-2, "References and Resources," of Section 14, "Construction Waste Management," of these Special Provisions.

Areas within the limits of work, as shown on the Plans, or as directed by the Engineer, shall be cleared as necessary for the construction of improvements and related work. The areas to be cleared and grubbed will not necessarily extend to all right-of-way lines. The exact limits for clearing and grubbing shall be approved by the Engineer in advance of commencing any work.

Existing trees and shrubs within the limits of work shall be removed, unless otherwise specified in these Special Provisions or directed by the Engineer.

All existing vegetation, fencing, driveways, and walks outside the areas to be cleared and grubbed, shall be protected from injury and damage resulting from the Contractor's operations.

Removal of any concrete improvements including bubble-up boxes, mailboxes, underdrain pipes, roadside signs, fences, trees, boulders at 3538 Oak Drive, shrubs and hedges shall be removed completely, as shown on the Plans and as directed by the Engineer.

Existing vegetation and trees to remain shall be protected, unless designated to be removed by Plan or as directed by the Engineer.

The Contractor shall not remove fences, trees, shrubs, hedges, mailboxes, or any other landscaping or improvements prior to receiving written approval from Engineer.

Existing improvements, such as fences, mailboxes, and landscaping, that need to be removed and/or relocated, as determined by the Engineer for construction purposes, shall be accomplished only after the property

owners have been given an opportunity to perform this task themselves. If the property owners do not perform this task, then the Engineer may direct the Contractor to perform this operation. Existing improvements removed shall become the property of the Contractor and shall be hauled away by the Contractor, unless arranged with the property owners to deposit the existing improvements on their property at a location designated by the property owner. Written proof of any arrangements made between the Contractor and property owners shall be provided to the Engineer.

Removing, salvaging and/or relocating existing improvements shall conform to the provisions of Section 15, "Existing Facilities," and Section 80, "Fences," of the Standard Specifications and these Special Provisions.

Bubble-Up boxes and underdrain pipes that are within the grading conform limits and project limit, shall be cutoff and/or adjusted/extended to be flush with the final grade (ie. in shoulder area), as directed by the Engineer.

Concrete removal shall conform to the provisions of Section 15, "Existing Highway Facilities," of the Standard Specifications and these Special Provisions and shall be removed as shown on the Plans and as directed by the Engineer and in accordance with 5-11, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

All materials removed shall become the property of the Contractor and shall be disposed of in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

Where conforms are made to existing concrete and no joints exist between concrete to be removed and concrete to remain, the concrete shall be cut in a neat line to the extend of the concrete with a power driven saw before concrete is removed.

Nothing herein shall be construed as relieving the Contractor of his responsibility for final cleanup of the highway, as provided in Section 4-1.13, "Clean Up," of the Standard Specifications.

The Contract lump sum price paid for this item, "Clearing and Grubbing," shall include, but not be limited to, full compensation for furnishing all labor, materials, including placement of structure backfill, as required, equipment and incidentals necessary for doing all work involved in clearing and grubbing,

including, but not limited to, the removal and disposal of concrete, fencing (or relocation and salvaging thereof), underdrain pipes, shrubs, hedges, and stumps to a depth as required for construction/of one foot (1') below proposed ground levels, miscellaneous highway facilities, minor trimming of hedges and shrubs as necessary, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 19. EARTHWORK

Earthwork shall conform to the provisions of Section 19, "Earthwork," of the Standard Specifications, these Special Provisions, and the directions of the Engineer.

For all open excavations greater than five feet in depth:

- i. Pursuant to State law regulations, all open excavations greater than five feet in depth shall be constructed with bracing, sheeting, shoring or other equivalent method designed for the protection of life and limb. The Contractor must at all times comply with the requirements of the construction safety orders of the Division of Industrial Safety, uniform Building Code, Cal-OSHA, and other governing codes and restrictions.
- ii. The above-stipulated requirements shall be considered the minimum to be provided. It shall be the Contractor's responsibility to provide the additional strength required to support the sides of the excavation against loads which may exceed those employed to derive the criteria set forth in the Industrial Safety orders. The Contractor shall be solely responsible for any and all liabilities which may arise from his failure to provide adequate shoring, bracing or sheeting as necessary to support the excavation under any and all conditions of loading which may exist, or which may arise during construction of the project.
- iii. The Contractor shall assign a project safety supervisor who shall, by training and experience, be fully qualified to supervise the installation, maintenance and removal of sheeting, shoring and bracing. The project safety supervisor shall have full authority over the work in all job safety matters and shall be present at all times when work is in progress in excavations and trenches greater than five feet in depth.

The Contractor's attention is further directed to Section 5-6, "Preservation of Property," of these Special Provisions. Damages, as a result of the Contractor's operations to properties and facilities to remain, shall be repaired or replaced at the Contractor's expense.

Should the Engineer determine that work be suspended for the

Winter Season due to the Contractor not aggressively prosecuting the Project to completion within the stipulated time, the Contractor shall be responsible for “winterizing” the Project to the satisfaction for the Engineer, and maintaining said Project in a safe and acceptable manner, regardless of the amount of effort involved, all at the Contractor’s expense, and no additional compensation will be allowed therefore.

“Winterizing” shall include the general maintenance of the Project site to a level that will not leave any detrimental effects for future construction, clean-up of material tracked from the Project limits, supplying and placing material to provide and maintain access, necessary work to maintain existing drainage patterns, and all work necessary to comply with Sections 5-5, “Project Appearance,” 5-10, “Public Convenience,” and 7-4, “Public Safety,” of these Special Provisions.

19-1. Roadway Excavation (Road Work)

Roadway excavation shall conform to the provisions of Section 19-2, “Roadway Excavation,” of the Standard Specifications, these Special Provisions, the Plans and the directions of the Engineer. Roadway excavation work shall be coordinated with utility company work, if any. The Contractor’s attention is directed to Section 5-3, “Cooperation” of these Special Provisions.

Excavation of the existing travel way shall not commence until authorized, in writing, by the Engineer. The Contractor’s attention is directed to Section 12, “Maintaining Traffic,” and Section 5-10, “Public Convenience,” of these Special Provisions.

The Contractor shall not construct both sides of the concrete valley gutter concurrently. Roadway excavation for concrete valley gutter shall be performed on one side of the street at a time, unless directed otherwise by the Engineer in writing.

Roadway excavation shall be performed to the limits and elevations shown on the Plans and as specified in these Special Provisions, or as designated by the Engineer. The Contractor’s attention is directed to the close grade tolerances that may be required to assure positive drainage within street and curb and gutter and valley gutter areas. Failure to adhere to the grades indicated and the tolerances allowed, and failure of drainage tests, as determined

by the Engineer, will require the Contractor to take all corrective actions stipulated by the Engineer, all at the Contractor's expense.

Damage to property, facilities, improvements, landscaping and/or irrigation systems to remain, whether inside or outside the Project limits, which, in the Engineer's judgment, were due to the Contractor's operations, shall be repaired or replaced to the satisfaction of the Engineer by the Contractor entirely at his expense, and no additional compensation will be allowed therefor.

The Contractor is advised that the locations of existing utilities are at approximate depths, and it is anticipated that unknown live and abandoned utilities and service laterals may be located within the planned structural section or immediately below the grading plane. The Contractor shall determine the exact locations and depths of these utilities and service laterals before starting excavation, at the Contractor's own expense, and no additional compensation will be allowed therefor.

Conform lines, as shown on Plans, shall be sawcut in accordance with Section 39-6, "Sawcut Asphalt Concrete and Portland Cement Concrete," of these Special Provisions.

Removal of existing asphalt concrete pavement shall not be permitted until installation of concrete 6-inch bands and valley gutters are completely installed, water tested and approved. Any proposals to deviate from this order of work must be submitted to the Engineer in writing for review and approval or rejection. Removal of existing pavement, as shown on the Plans, shall be considered as included in this item of work, "Roadway Excavation (Road Work)," and no additional compensation will be allowed therefore.

The Contractor's attention is directed to Section 5-6, "Preservation of Property," of these Special Provisions. Damages, as a result of the Contractor's operations to properties and facilities to remain, shall be repaired or replaced at the Contractor's expense.

Roadway excavation (Road Work) shall consist of all excavation involved for road reconstruction not related to sewer work, including, but not limited to, the removal of asphalt concrete and other materials in the roadway prism, except as provided for under Sections 39-3, "Deep Lift Areas (0.50' Deep Asphalt Concrete)," and 51-1, "Class 3 Concrete," of these Special Provisions.

All other excavation, including excavation required for all sewer work (i.e. sewer main, sewer laterals, sewer trenches and pits, etc), required by the Plans and not specifically designated in these Special Provisions as a pay item shall be considered as included in the various Contract items of work, and no additional compensation will be allowed therefor.

Any newly installed gutters, valley gutters and aprons that are shown by water tests to pond water, shall be removed and reinstalled, as directed by the Engineer and at the Contractor's expense, before road work commences. Removal of existing pavement, base, subbase, basement soil, and existing driveway underdrain pipes shall be considered as included in this item of work, "Roadway Excavation," and no additional compensation will be allowed therefore.

Suitable excavated material within the project limits, as determined by the Engineer, may be used in embankment to meet the required roadway finished grade and roadway shoulder areas and at other areas designated by the Engineer only. Note that all areas designated for Class II AB shall not be replaced with excavated material. The placement of suitable excavated material in such areas shall be considered as included in the Contract unit price paid per cubic yard for this item, "Roadway Excavation (Road Work)," and no additional compensation will be allowed therefore.

Surplus material shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions in 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions, at no additional cost to the County.

The Contractor is advised that excavation may conflict with existing tree roots and care must be taken to avoid damaging the roots of trees to remain. The Engineer shall be notified immediately if conflicts with tree roots greater than **four inches (4")** in diameter are identified so that the Engineer may call an arborist to the site to evaluate. **No tree roots greater than 4" in diameter shall be cut without prior written authorization from the Engineer.** Where roots greater than 4" in diameter are encountered, the Contractor may be required by the Engineer to hand excavate material in order to conform to the project structural section requirements.

Tree roots requiring removal must be severed by means of a root

cutter.

The Contractor's attention is directed to the fact that hand excavating areas may be necessary at utility crossings when such crossings, as shown on the Plans and as directed by the Engineer, are shallow. Should the Contractor damage any utilities due to Contractor's excavation operations, Contractor shall immediately bring the damaged utility to the attention of the Engineer. The Contractor shall then repair the damaged utility, all at Contractor's sole expense and as directed by the Engineer, and no additional compensation will be allowed therefor.

The quantity of material hand excavated will be paid for on a cubic yard basis as roadway excavation, and no additional compensation will be allowed therefore.

Any "Special Excavation" techniques, including excavation around tree roots that are to be saved, as required by the Engineer shall be considered as work included in this item, "Roadway Excavation," and no additional compensation will be allowed therefore.

Excavation required for driveway and shoulder conforms, swales, concrete valley gutters and aprons, grade to drain areas, and asphalt concrete, and establishment of designed grading plane, as shown on the Plans and as directed by the Engineer, shall be considered as included in the Contract unit price paid per cubic yard for this item, "Roadway Excavation (Road Work)," and no separate payment will be made therefore. The Contractor is advised that excavation quantities for grade to drain areas will not be calculated separately for purposes of payment. Said quantities shall be considered as included in the various quantities for roadway excavation specified herein.

The Contractor is reminded that roadway excavation required for deep lift areas, as shown on the Plans, shall be in accordance with the provisions of Section 39-3, "Deep Lift Areas (0.50' Deep Asphalt Concrete)," Section 39-5, "Header Boards" and 51-1, "Class 3 Concrete," Concrete curb and valley gutters of these Special Provisions, and shall be paid for under said Contract item, and no additional compensation will be allowed therefore.

Upon completion of rough grading at the grading plane, or placement of any subsequent layer thereon, the surface of the roadbed shall be brought to a

smooth, even condition free of humps and depressions, satisfactory for use of public traffic.

After the surface of the roadbed has been brought to a smooth and even condition for the passage of public traffic as above provided, any work ordered by the Engineer for the accommodation of public traffic prior to commencing subgrade operations shall be performed by the Contractor, entirely at his expense. After subgrade preparation for a specified layer of material has been completed, the Contractor shall, at his expense, repair any damage to the roadbed or completed subgrade, including damage caused by his operations or use by public traffic.

The measurement of roadway excavation quantities shall conform to Section 19-2.04, "Payment," of the Standard Specifications and these Special Provisions. Quantities of roadway excavation will be computed by means of average end areas. For computational purposes, the depth of the excavation within areas to be cement treated shall be determined based on the difference between the existing grade and the subgrade grading planes, regardless of whether such excavation is deemed necessary to account for swell of the material to be cement treated. No adjustment for swelling or shrinkage of the material to be cement treated will be made in the roadway excavation quantity calculations. Excess material generated as a result of cement treatment that is excavated beyond the limits, as defined in these Project Specifications, the Plans, or as authorized by the Engineer, will not be measured nor paid for separately. The cost of excavation and disposal of excess material shall be considered included in the Contract unit price paid per cubic yard for roadway excavation, and no separate payment shall be made therefore. Additionally, the Contractor shall be responsible for the cost of all remedial work associated with over-excavated areas, and such work shall be performed in a manner as directed by the Engineer.

The Contractor is advised to review the project site for material to be excavated. Regardless of material encountered, full compensation for performing roadway excavation as described herein shall be included in the Contract unit price for this item, "Roadway Excavation (Road Work)," and no additional compensation will be allowed therefore.

The Contractor shall provide the Engineer all documentation as to the weight of materials removed and recycled during the course of the project. The Contractor shall provide a copy of all receipts or other proof from any recycling center used by the Contractor. The Contractor's attention is directed to Section 14, "Construction Waste Management," of these Special Provisions.

The Contract unit price paid per cubic yard for this item, "Roadway Excavation (Road Work)," shall include full compensation for furnishing all labor, tools, materials, equipment and incidentals necessary for doing all work involved in excavating, hand excavating, hauling, filling, spreading, grading and compacting, as specified in these Special Provisions, including, but not limited to, disposing of surplus excavated material outside of the highway right-of-way, and grading areas for positive drainage flow, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

19-2. Roadway Excavation (Sewer Work)

19-2.1 Contractor's Operations

The Contractor shall perform his work in such a manner as to not harm the undisturbed condition of the underlying or adjacent soils or damage or prevent the proper placement of fill. When, in the opinion of the Engineer, natural soils or fill are damaged or disturbed by the operations of the Contractor, thereby precluding the utilization of the site as planned, the Contractor shall correct such damage or disturbance. Corrections shall be as directed by the Engineer and may include, but are not limited to, the removing of natural and fill foundation soils both laterally and vertically and replacing with compacted fill to the required grades or the construction of alternative methods of support. The cost of any such repair, rehabilitation, or modification shall be borne by the Contractor.

19-2.2 Construction Observation

The Engineer will observe all sub grades, the stripping of topsoil from the site, and the placing and compaction of all fill and other earthwork related operations specified in these Special Provision. The Engineer shall be notified at least two (2) working days in advance of the beginning of operations, which require his attention, and fills shall not be made nor materials used without the

Engineer's specific approval.

The Contractor shall allow time for field survey measurements of any subgrade required for any purpose. All fills for which specific standards or density are required must be tested and approved by the Engineer before they will be accepted.

19-2.3 Percent Compaction

Where the term "compaction" is used herein, it is defined as a relative compaction and refers to the in-place dry density of the fill expressed by the Test Method of ASTM D698 and of modified proctor ASTM D2049 of AASHTO T1 80. All compacted materials may be tested by the County. The County pays for first test only. All subsequent tests of failed sections shall be paid for by the Contractor until the desired compaction is reached, and no additional compensation will be allowed therefor. The Contractor shall notify the County a minimum of one (1) working day prior to when compacted materials are ready to be tested.

The Contractor shall adjust the water content of the fill material to an amount that will enable the specified degree of compaction to be attained in each lift. Each lift shall be thoroughly mixed before compaction to ensure a uniform distribution of water content. Jetting and/or flooding for compaction will not be allowed.

All backfill shall be compacted immediately after placement.

The Contractor shall be responsible for obtaining the densities specified. Should he fail, through negligence or otherwise, to compact to specified density, or to backfill and compact to surface grade, thus permitting saturation of the backfill material from rains or from any other source, the faulty material shall be removed and replaced with approved material which shall be compacted to the specified density at optimum moisture content, and no additional payment will be made for doing such work or removal and replacement.

19-2.4 Earthwork Balance

The trench excavations on this project may not be suitable to complete the trench backfill as indicated on the Plans.

Native material may be used as backfill material where approved by the Engineer, provided the following minimum requirements are met:

- a. Materials with a minimum sand equivalent of 30.
- b. Materials free from debris, roots and other organic matter, broken pavement, rocks, stones, or lumps exceeding 3 inches in greatest dimension.
- c. Materials with no excessive moisture that would impact compaction requirements.

Native material may not be used for pipe bedding or shading, which shall conform to Section 104-2, "Remove Existing 6" VCP and Install 6" PVC by Open Trench Method" of these Special Provisions.

The Engineer shall be the sole judge with respect to acceptability of native materials for backfill.

All unsuitable material from excavation shall be disposed of as described in Section 102-2, "Cleaning Up," of these Special Provisions. The Contractor shall import any required backfill, and no additional compensation shall be allowed therefor.

19-2.5 Blasting

Blasting will not be allowed on this project.

19-2.6 Grading Tolerance

Final grade shall conform to the liens and grades shown on the Plans.

19-2.7 Removal of Obstructions

Unless otherwise noted, the Contractor shall remove all brush, logs, stumps, and roots, heavy sods, heavy growth grass, and all decayed and vegetable matter that interfere directly with the work. The Contractor shall also remove all rock, stones in excess of six inches, broken concrete and pavement, debris and all obstructions of any kind or character, whether natural or artificial, encountered in the work.

Full compensation for removal of obstructions, including, but not limited to disposal of removed material in accordance with the provisions in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be made therefor.

19-2.8 Excess Excavated Material

It is possible that the Contractor may encounter soft and saturated soils,

though no groundwater was encountered during subsurface explorations. Under these conditions, the Contractor shall place a 4-6 inch layer of crushed rock in trenches as bedding material and approximately 12 inches in the bottom of the manhole excavations to provide a workable surface. The rock section shall be underlain with Mirafi 500X fabric or equivalent.

Full compensation for excess excavated material including, but not limited to disposal of removed material in accordance with the provisions in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be made therefor.

19-2.9 Trench Safety

Refer to Section 107, "Trench Safety, Trenching, and Trench - Subsequent Trench Backfill."

19-2.10 Excavation Dewatering

The Contractor shall take measures as may be required and shall furnish, install, and operate such pumps or other devices as may be necessary to remove groundwater seepage, storm water or sewage, that may be found or accumulate in the excavations during the progress of the work. Once seepage or ground water conditions in the trench are encountered, no further trenching will be allowed until suitable dewatering procedures are in operation. The Contractor shall keep all excavations free from water at all times during the construction of the work and until the County gives permission to cease pumping. The Contractor shall keep completed work areas free from accumulation of water and sewage at such times as may be required by the County for inspection or other purposes. The Contractor's attention is directed to Section 13, "Water Pollution Control," of these Special Provisions. Dewatering water may not be discharged to the storm drain and must be discharged to a sanitary sewer or hauled and disposed of offsite.

Every effort shall be made to keep the trench dry at all times. As a minimum requirement, water shall not be allowed to accumulate in the trenches unless sufficient backfill has been placed to prevent pipe floatation.

Contractor is referred to Section 107, "Trench Safety, Trenching, and Trench Backfill".

19-2.11 Payment for Roadway Excavation (Sewer Work)

Full compensation for conforming to all requirements of this section, "Roadway Excavation (Sewer Work)," including excavation, backfill, and excavation dewatering, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 21.
EROSION AND SEDIMENT CONTROL

The provisions of Section 21, “Erosion Control,” of the Standard Specifications are superseded by these Special Provisions.

The Contractor is advised that failure to fully comply with the provisions of this Section and Section 17-2, “Water Pollution Control,” of these Special Provisions, and all requirements listed in the National Pollutant Discharge Elimination System (NPDES) General Permit, San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, and any resource agency permits obtained for the project, where applicable, except where amended in writing and signed by the Director of Public Works or his duly authorized representative, shall constitute substantial non-compliance with the requirements of the Clean Water Act, the NPDES permit program, and the Contract.

The County shall provide periodic site monitoring to ensure that the work complies with the requirements specified herein and in any resource agency permits. The County will provide the Contractor with copies of the monitoring reports. Should the work be found to be non-compliant, a follow up site monitoring visit will be conducted to ensure the items have been corrected. The costs associated with any compliance monitoring required beyond a single follow up site monitoring visit shall be deducted from the final payment for all of the Contract work.

21-1. Temporary Erosion Control

The Contractor shall be required to adhere to the provisions of Section 10, “Develop and Apply Water,” Section 13, “Water Pollution Control,” this Section, and the directions of the Engineer throughout the work.

Temporary erosion controls may consist of straw logs, straw mulch, silt fencing, temporary berms, or any combination of these or other means acceptable to the Engineer to prevent polluted runoff and/or wind erosion. The use of any type of hay or any straw containing oat or weed seed is expressly forbidden. The Contractor is encouraged to review the Best Management Practices (BMPs) included in the County of San Mateo Maintenance Standards for installation and maintenance recommendations.

Temporary erosion controls shall be applied, maintained and removed by the Contractor as specified herein and as directed by the Engineer. The

Contractor shall not commence any excavation, backfilling, grading or stockpiling operations until sufficient quantities and types of temporary erosion control materials have been delivered to the work site as determined by the Engineer.

Additional temporary erosion controls, if necessary and as directed by the Engineer, shall be installed at the conclusion of the workweek to the satisfaction of the Engineer. The Engineer may also require the installation of temporary erosion controls at the conclusion of any workday when rain and/or wind is occurring or forecast.

The Contractor is advised that he may be required to respond to the work site after hours and/or on weekends or holidays to mitigate potential erosion or sedimentation and/or to repair damaged silt fencing and other erosion controls. Provisions for the Contractor's Required Response are included in Section 13, "Water Pollution Control," of these Special Provisions.

A. Staging Areas

The Contractor shall contain runoff that may potentially leave any staging area to within the staging area by any suitable means approved by the Engineer.

Staging area BMPs shall be maintained throughout the duration of the work. Staging area BMPs shall be completely removed and disposed of outside the highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way" of these Special Provisions, by the Contractor at his expense at the conclusion of the work. Attention is directed to Section 13, "Water Pollution Control," of these Special Provisions for provisions relating to tracking of mud from staging areas.

B. Staging Area Finish

The Contractor shall finish all staging areas as specified herein and as directed by the Engineer.

All stockpiles, debris and exclusion fencing shall be completely removed and disposed of outside the highway right of way by the Contractor at the conclusion of construction operations. Staging area surfaces shall be smoothed and contoured to drain in the same manner as prior to their use. The smoothed and contoured surface shall be covered with not less than six (6) inches and not more than twelve (12) inches of three-inch (3") un-compacted drain rock unless other material is approved in advance in writing by the Engineer. Any adjacent

areas disturbed by the Contractor's operations shall be smoothed and mulched as specified below.

Loose soil and/or rock resulting from any grading work required to restore the pre-construction condition shall not be scattered or "flaked" on any slope.

C. Mulch

The Contractor shall mulch all finished soil surfaces at the conclusion of the work and as part of any winterization as shown on the Plans, as specified herein and as directed by the Engineer.

Mulch shall consist of a uniform application of rice straw to a depth of not less than two (2) inches. Straw bales and flakes shall be broken apart and loosely spread prior to crimping. Mulch shall be manually crimped into the soil surface using rakes, pitchforks or other appropriate means. Mulch shall not be track-walked using heavy equipment.

The Contractor may propose in writing an alternate type of straw mulch. Any type of proposed straw shall be certified by the manufacturer as weed-free and seed-free. The Contractor may also propose to use locally collected redwood duff (fallen dried redwood leaves, seeds and seed pods, small twigs, etc.) in addition to or instead of rice straw. Written proposals for alternate straw or redwood duff shall include identification of the source of the material, including written permission from the property owner to collect redwood duff, if applicable. Proposals to use alternate types of straw or redwood duff will be submitted to the Engineer for his approval not less than three (3) working days in advance of placing mulch. The Engineer reserves the right to reject alternate proposals and require the use of rice straw mulch.

The Contractor shall avoid mulching over newly-planted trees/plants. Mulch shall not be applied below the ordinary high water line of any water body.

D. Winterization

Should the Contractor fail to complete the work within the specified number of working days with any time extensions allowed by the Engineer and the permitting agencies, the Contractor shall be required to winterize the sites and any staging areas at his expense as specified herein and as directed by the Engineer.

Winterization shall include, at a minimum, removal or securing, at the

Engineer's option, of any stockpiled materials; removing equipment from the vicinity; restoring staging areas for winter use by the County's Road Maintenance Division as specified under "Staging Area Finish" above; covering any vertical excavation faces with plastic sheeting secured with sandbags and not extending below the ordinary high water line; mulching all other excavations with rice straw as specified under "Mulch" above; and ensuring positive drainage through the work sites.

E. Payment

Full payment for conformance with this Special Provision shall be considered as included in the Contract price paid for Water Pollution Control, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 22.
FINISHING ROADWAY

Finishing roadway shall conform to the provisions in Section 22, "Finishing Roadway," of the Standard Specifications.

Section 22-1.04 "Payment," of the Standard Specifications shall not apply. The Contract lump sum price paid for this item, "Finishing Roadway," shall include full compensation for furnishing all labor, equipment, tools, materials, and incidentals, and for doing all work involved in finishing roadway, as specified in these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 26.
AGGREGATE BASE (CLASS 2)

Aggregate base shall be Class 2 and shall conform to the provisions in Section 26, "Aggregate Bases," of the Standard Specifications and these Special Provisions.

Aggregate base shall be placed where shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer.

Aggregate base shall be produced from commercial quality aggregate consisting of broken stone, crushed gravel, natural, clean, rough-surfaced gravel and sand, or a combination thereof.

Aggregate base shall consist of reclaimed aggregate material up to 50% of the total volume whenever possible, as allowed in Section 30-1.02B, "Class 2 Supplementary Aggregate," which states:

"If supplementary aggregate is specified, supplementary aggregate must comply with $\frac{3}{4}$ -inch maximum gradation specified in section 26-1.02. Supplementary aggregate must not include cinders. Do not use supplementary aggregate with more than 50 percent by volume of reclaimed asphalt concrete. Supplementary aggregate must weigh at least 105 lb/cu ft, determined under California Test 212, Compacted Method (by Rodding)."

The grading of the material shall conform to the three-quarter inch ($\frac{3}{4}$ " maximum specified in Section 26-1.02B, "Class 2 Aggregate Base," of the Standard Specifications.

Spreading and compacting shall be performed by methods that will produce a uniform base, firmly and properly compacted to not less than ninety-five percent (95%) relative compaction, and free from pockets of coarse or fine material. All compacted materials may be tested by the County. The Contractor's attention is directed to Section 6-2, "Materials Testing," of these Special Provisions. Acceptance testing shall be performed using California Test Method (CT) 338 or ASTM D6938, as directed by the Engineer.

The Contractor shall notify the County a minimum of one (1) working day prior to when compacted materials are ready to be tested. The County pays for Contractor's call for first test only. Should the first test fail, or the Engineer's designee to perform the first test arrive and the Contractor not be ready for the

test, then all subsequent tests will be paid for by the Contractor until the desired compaction is reached, and no additional compensation will be allowed therefore.

Aggregate base shall be placed where shown on the Plans (including placement, as necessary, for final connections at driveway openings and designated shoulder areas), as specified in these Special Provisions and as directed by the Engineer.

Aggregate base that is used to provide temporary access to work areas and driveways, as well as all other work that is necessary to comply with 7-1.03, "Public Convenience," of these Special Provisions, shall not be included in the Contract quantity for Aggregate Base (Class 2), and shall be considered as included in the various Contract items of work, and no additional compensation shall be allowed therefore.

The Contract unit price paid per cubic yard for this item, "Aggregate Base (Class 2)," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary for doing all the work involved in furnishing, hauling and placing aggregate base, complete in place as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

Asphaltic emulsion shall be paid for as specified in Section 94, "Asphaltic Emulsion," of these Special Provisions, and no additional compensation will be allowed therefore.

END OF SECTION

**SECTION 27.
CEMENT TREATMENT**

The Contractor shall request for the Engineer to contact Recology, the waste management company in the area, a minimum of five (5) working days prior to beginning cement treat operations, to ensure coordination with Recology's garbage pick-up schedule.

Cement Treatment must be scheduled so paving can be completed before the next scheduled garbage pick-up and should be scheduled on a Friday to allow adequate cure time before the road is opened to all vehicles.

Cement Treatment may take place over a minimum of one (1) to two (2) days for the cement treatment for this road.

This work consists in general of the in-place mixing of native material, cement and water, and spreading and compacting the mixture to the lines, grades and dimensions, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and shall be performed in accordance with Section 27, "Cement Treated Bases," of the Standard Specifications, except that paragraph six of Section 27-1.03F, "Compacting," stating that the maximum compacted thickness of any one (1) layer shall not exceed one-half foot (0.50-foot) shall not apply. The treated mixture shall be spread to the required planned width, grade and cross section, and may be spread and compacted in one (1) layer, as approved by the Engineer

The Contractor's attention is directed to the fact that, prior to beginning cement treatment operations, work shall be completed for items in Section 39-5 "Header Boards," Section 51-1 "Class 3 Concrete," Section 64 "Pipes," Section 68 "Subsurface Drain," Sections 103 "Sanitary Sewer Rehabilitation - Pipe Bursting Method," Section 104 "Sanitary Sewer Rehabilitation - Open Trench Method," Section 105 "Sag Repair," Section 106 "Manhole Construction," Section 109 "Sanitary Sewer Lateral Replacement," and Section 110 "Sanitary Sewer Testing," as stipulated in these Special Provisions and as directed by the Engineer.

Reference is made to Section 17, "Clearing and Grubbing" of these Special Provision regarding the required cutting and removal of tree roots prior to and during cement treatment.

The Contractor's attention is further directed to the requirement to bring any street that has been cement treated back to drivable condition by the end of the same work day in which it has been cement treated. Cement treatment operations may need to be completed over a minimum one (1) to two (2) days to accommodate this requirement, as directed by the Engineer.

The Contractor is also advised that cement treatment may conflict with sanitary sewer facilities, storm drain facilities, gas lines, water lines, and other underground utilities. Damage to existing facilities as a result of the Contractors operations, as determined by the Engineer, shall be replaced or repaired, all at the Contractor's expense, and no additional compensation will be allowed therefore.

In accordance with Section 12, "Maintaining Traffic," of these Special Provisions, the Contractor shall conduct his operations in a manner that does not cause undue delay to traffic passing through the Project. Cement treated areas shall be compacted, trimmed, cured and sanded, as required by the Engineer, so that two-way traffic can be restored within the time frames specified. The Contractor is advised that cement treatment may conflict with sanitary sewer facilities, storm drain facilities, gas lines, water lines, and other underground utilities. Damage to existing facilities as a result of the Contractors operations, as determined by the Engineer, shall be replaced or repaired, all at the Contractor's expense, and no additional compensation will be allowed therefore.

The quantity of Portland cement to be added to the existing material for cement treatment shall be such that the cement content of the completed mixture is **five percent (5%)** by weight of the dry material. For calculation purposes, **108.8 pounds per cubic foot** shall be considered as the dry weight of the existing material. Portland Cement shall conform to the provisions of Section 90, "Portland Cement," of these Special Provisions, and shall be furnished in accordance with, and the quantity to be paid for determined as provided for in, Section 90, "Portland Cement," of these Special Provisions.

The Engineer may order an increase or decrease in the specified Portland cement content. If such an increase or decrease is ordered, the compensation payable to the Contractor for cement treatment shall be increased or decreased on the basis of the Contract unit price paid per ton for Portland cement, and no additional adjustment of compensation will be made for variations in the costs of any work resulting from such change in the quantity of Portland Cement.

Water shall conform to the provisions of Section 90-1.02D, "Water," of the Standard Specifications and Section 10, "Develop and Apply Water," of these Special Provisions.

All existing asphalt concrete shall be removed prior to the cement treatment operation. Scarification of asphalt concrete will not be required.

Material to be cement treated shall be scarified and thoroughly broken up by means of equipment constructed and operated to leave an undisturbed plane at a uniform depth below the surface shown on the typical cross sections on the Plans. Precautions shall be taken to avoid forming furrows of loosened material below the grading plane mentioned above, and to obtain a uniform consistency of the material for the full width to be treated.

All material other than rock shall be broken up such that all the broken pieces will pass a one-inch (1") sieve. Before the addition of cement and water to the material, all rocks greater than two and one-half inches (2-1/2") in size shall be removed.

The material shall then be shaped and sized for the addition of cement. The windrow height or blanket width shall be limited to such size that all the material can be passed through the mixing machine at each operation. Mixing operations shall conform to Section 27-1.03C(3), "Mixing," of the Standard Specifications.

The tops of windrowed material shall be flattened or slightly trenched to receive the cement. Cement shall not be spread upon the prepared material more than four (4) hours ahead of the road mixing operation. No cement or soil-cement mixture shall be spread when the air temperature is less than 40 degrees Fahrenheit in the shade. The direction and force of the wind shall be considered prior to depositing and spreading cement. Excessive wind force, as to cause blowing of dust and cement, shall be sufficient cause for the Engineer to order a

stop to operations.

Except in areas where hand mixing or other method is necessary, as directed or approved of by the Engineer, cement shall be uniformly spread by mechanical equipment in the amount necessary to meet the soil-cement percentage requirements. The rate of cement spread per linear foot of windrow or blanket shall not vary more than ten percent (10%) from the designated rate.

The Contractor's attention is directed to the fact that hand mixing areas or using smaller equipment to mix areas may be necessary at utility crossings when such crossings, as shown on the Plans and as directed by the Engineer, are shallow or areas (such as adjacent to chicane or roundabout) where typical cement treating equipment will have difficulty maneuvering. Should the Contractor damage any utilities due to Contractor's cement treat operations, Contractor shall immediately bring the damaged utility to the attention of the Engineer. The Contractor shall then repair the damaged utility, all at Contractor's sole expense and as directed by the Engineer, and no additional compensation will be allowed therefore.

The Contractor's attention is directed to the fact that hand mixing may be required to avoid breakage of existing shallow utility crossings.

No traffic other than the mixing equipment will be allowed to pass over the spread cement until after completion of curing or the application of sand cover. The Contractor is reminded that roads that have been cement-treated must be brought to drivable condition by the end of the same work day in which it has been treated. The Contractor's attention is directed to Section 27-1, "Sand Cover," of these Special Provisions.

The percentage of moisture in the soil material at the time of cement application shall be the amount that assures a uniform mixture of soil material and cement during mixing operations. Said moisture percentage shall not exceed the optimum moisture content for the soil cement mixture, as determined by the Engineer.

The resulting mixture shall be uniform and more than one pass of the equipment through the material may be required. If equipment is used that requires more than one pass and cement is applied in a dry state, at least one

pass shall be made before mixing water is added to the material.

The cement content of samples taken from time to time from the mixture spread on the roadbed shall not vary above or below the specified cement content by more than one percent (1.0%) of the weight of the dry material as determined by California Test Method No. 338.

The treated mixture shall be spread to the required planned width, grade and cross section, and may be spread and compacted in one (1) layer, as approved by the Engineer.

Cement treated material shall be compacted in conformance with Section 27-1.03F, "Compacting," and Section 27-1.03G, "Operation Time Requirement," of the Standard Specifications.

Not more than two (2) hours shall elapse between the time water is added to the soil-cement mixture and the time of completion of initial rolling. Not more than three (3) hours shall elapse between the time water is added to the soil-cement mixture and the time of completion of final compaction after trimming.

Rolling shall be performed in such a manner that the finished surface shall be true to the required grade and cross section within the surface tolerance specified.

Areas inaccessible to rollers shall be compacted to the required compaction by any means approved by the Engineer. The Contractor shall assure that adequate compacting equipment is available to produce the required compaction within the operation time limits.

The finished surface of cement treated material shall not vary more than 0.05-foot above or below the grade established by the Engineer. The thickness of cement treated material shall not be more than 0.05-foot thinner than the planned thickness at any point. In no case shall the total thickness of the combined structural section components vary more than 0.05-foot from the planned thickness at any point.

Areas where cement treatment has been performed shall be cured as provided for cement treated bases in Section 27-1.03I, "Curing," and Section 94, "Asphaltic Emulsions," of the Standard Specifications.

Cement treated areas shall be cured with an application of asphaltic emulsion curing seal, which shall be furnished and applied in accordance with

the provisions of Section 94, "Asphaltic Emulsion," of the Standard Specifications. Curing seal shall be applied uniformly at a rate between 0.10 and 0.20 gallons per square yard. The exact rate will be determined by the Engineer.

Water will not be allowed for curing. Sand shall be applied on asphaltic emulsion curing seal prior to opening road to traffic and shall be paid for in accordance with Section 27-1 "Sand Cover" of these Special Provisions.

Asphaltic Emulsion curing seal shall be furnished in accordance with the provisions of Section 94-1, "Asphaltic Emulsion (Prime Coat, Curing Seal or Tack Coat)," of these Special Provisions.

The quantity of asphaltic emulsion curing seal to be paid for will be determined as provided for in Section 94, "Asphaltic Emulsion," of the Standard Specifications and as specified in Section 94, "Asphaltic Emulsion (Prime Coat, Curing Seal, or Tack Coat)," of these Special Provisions.

Care shall be taken to avoid tracking asphaltic emulsion onto existing pavement surfaces beyond the limits of construction, curbs, gutters, sidewalks, walkways and driveways. Asphaltic emulsion stains occurring during the course of this work shall be cleaned at the Contractor's expense by sandblasting or any other method approved by the Engineer, and no additional compensation will be allowed therefore.

No equipment, including trucks, or paving shall be permitted on the cement treated material during the first three (3) days after applying the curing seal, unless otherwise permitted by the Engineer. Public traffic shall be permitted on the cement treated material as approved by the Engineer. When directed by the Engineer, the designated area to permit traffic shall be covered with sand.

The Contractor's attention is directed to Section 27-1, "Sand Cover," of these Special Provisions. Sand shall be furnished in accordance with, and the quantity to be paid for determined as provided for in, Section 27-1, "Sand Cover," of these Special Provisions.

Cement treating operations shall proceed in such a manner that cement treated areas can be compacted, trimmed, cured, and sanded (if required by the

Engineer) so that two-way traffic can be restored at the completion of each day's work.

The cement treated surface shall be maintained in a smooth and satisfactory condition. Damage to the curing seal or cement treated native soil shall be repaired by the Contractor at his/her expense, and no additional compensation will be allowed therefore.

Cement treatment will be measured and paid for by the square yard. The area in square yards will be determined from measurements of the planned surface of cement treated material, such measurements to be made parallel to the ground slope. Any cement treatment outside the dimensions shown on Plans will not be paid for; and any cement treatment outside the structural section limits, as shown on the Plans, shall not be paid for unless approved by the Engineer. Section 27-1.04, "Payment" of the Standard Specifications shall not apply to this item.

The Contract unit price paid per square yard for this item, "Cement Treatment," for the thickness shown in the Typical Section on the Plans shall include full compensation for furnishing all labor, materials (except Portland cement, asphaltic emulsion and sand cover), tools, equipment, and incidentals necessary for doing all work involved in cement treatment (including hand mixing areas where necessary), as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation be allowed therefore. Section 27-1.04, "Payment," of the Standard Specifications shall not apply to this item.

The Contractor's attention is directed to Sections 90, "Concrete," and 94, "Asphaltic Emulsion," of the Standard Specifications, and Sections 90, "Portland Cement," and 94-1, "Asphaltic Emulsion (Prime Coat, Curing Seal, or Tack Coat)," of these Special Provisions.

27-1 Sand Cover

Sand shall be placed in cement treated areas and on asphalt emulsion curing seal, as directed by the Engineer. Sand shall be free from clay or organic material and shall be of such size that from ninety percent (90%) to one hundred percent (100%) will pass a No. 4 sieve, and not more than five percent (5%) will pass a No. 200 sieve.

Sand shall be spread uniformly within the rates specified by the Engineer. Prior to asphalt concrete paving, all loose sand shall be removed from a cement treated area, as directed by the Engineer. The treated surface shall be maintained in a smooth and satisfactory condition.

The Contract unit price paid per ton for this item, "Sand Cover," shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in applying and removing sand, as specified in these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantities of this item, "Sand Cover," required. The provision of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item.

The County reserves the right to eliminate this item, "Sand Cover," from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

END OF SECTION

SECTION 39.
ASPHALT CONCRETE

Asphalt concrete shall be Type A HMA and shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these Special Provisions.

The Contractor shall be responsible for locating and reference marking all existing highway facilities (such as manholes, valves, and monuments) within the Project limits prior to any paving work.

39-1. Asphalt Concrete (Type A HMA, 1/2" Maximum)

Asphalt concrete to be used for roadway area, including the conform, deep lift areas, driveway conform areas, shoulder areas, and miscellaneous areas, as shown on the Plans and as designated by the Engineer, shall be Type A HMA, 1/2" maximum.

The Contractor's attention is directed to the importance of providing emergency access in the event of backups and/or overflows in the sanitary sewer system and, when rain is forecast, in the storm drain system. To provide said emergency access for responding to backups and/or overflows, the Contractor shall conform to the following provisions and the directions of the Engineer:

- (1) Sanitary sewer and, if required, storm drain manholes shall be exposed no more than three (3) days after paving operations have buried said manholes, unless otherwise directed, in writing, by the Engineer. This requirement is regardless of the Contractor's proposed schedule to adjust utilities to final grade.**
- (2) Prior to the three (3) days, or until the Contractor has uncovered any manhole, whichever is sooner, the Contractor shall be available to arrive at the site within ONE (1) HOUR of notice provided by the owner of said manholes. The Contractor shall arrive at the site with personnel and equipment to uncover the manhole where access is needed. All costs associated with uncovering the manholes and making them safe for public travel afterwards shall be the responsibility of the Contractor. The Contractor shall also be**

responsible for all costs involved in repairing or correcting any damage to either public facilities or private properties and resolving liabilities arising as a result of the Contractor not complying with this condition.

The Contractor's attention is further directed to the provisions of Section 39-2.01C(15), "Compaction," of the Standard Specifications for smoothness tolerance requirements and the importance of maintaining pavement smoothness that is equal to or better than currently exists.

Should the newly paved roadway fail to meet the County's smoothness tolerances in conformance with the Standard Specifications and these Special Provisions, the Contractor shall, at the Contractor's own expense, perform corrective measures. Such corrective measures shall be approved of by the Engineer. Failure to obtain County approval of proposed corrective measures may result in additional corrective measures, all at the Contractor's sole expense, and no additional compensation will be allowed therefore.

Following any initial corrective measures, the Engineer will again make a determination as to roadway smoothness.

Asphalt concrete to be used for the adjustment of existing utilities and installation of new survey monuments shall be Type A HMA, 3/8" maximum grading and shall not be calculated nor paid for under this item, "Asphalt Concrete (Type A HMA, 1/2" Maximum)," but shall be included in the Contract unit prices paid for the various Contract items of work to adjust existing utilities to grade, and no additional compensation will be made therefore. Reference is made to Sections 15, "Existing Highway Facilities," of these Special Provisions.

The Contractor will be responsible for removing all existing traffic stripes, pavement markings, and pavement markers within the Project limits prior to any paving work. Removal of existing traffic stripes, pavement markings and pavement markers shall be in conformance with the Standard Specifications, these Special Provisions and the directions of the Engineer. Reference is made to Section 84, "Markings," of these Special Provisions.

The amount of asphalt binder to be mixed with the aggregate shall be between four percent (4%) and six percent (6%) by weight of dry aggregate. The exact amount of asphaltic binder to be mixed with the aggregate shall be as determined by the Engineer.

Areas to which asphaltic emulsion has been applied shall be closed to public traffic. Care shall be taken to avoid tracking asphaltic emulsion onto existing pavement surfaces beyond the limits of construction.

The Contractor will be responsible for any damage to existing curbs, gutters, sidewalks, and driveways. Any asphalt concrete or asphaltic emulsion stains occurring during the course of this Contract will be cleaned by sandblasting, or any other method satisfactory to the Engineer. The cost of repairing this damage shall be considered as included in the Contract unit price paid for Asphalt Concrete (Type A HMA, 1/2" Maximum), and no additional compensation will be allowed therefore.

The Contractor will not be allowed to remove existing roadway surface to place the asphalt concrete pavement until an approved water drainage test is performed on all concrete valley gutters, curbing, and asphalt concrete swales. Any valley gutter, curbing, and/or swales not meeting grade requirements specified shall be removed and replaced at the Contractor's expense. The Contractor's attention is directed to Section 19-1.03C, "Grade Tolerance," of the Standard Specifications.

At road conforms and driveway openings designated by the Engineer, additional asphalt concrete surfacing material shall be placed and hand raked, if necessary, and compacted to form smooth tapered connections. **The Contractor shall provide temporary ramps, of asphalt concrete or other approved material, at joints for transverse conforms in the direction of travel and project limits, and shall provide temporary ramps to provide smooth connections, of asphalt concrete or other approved material, at joints at driveways, as well as any valves boxes, manholes (sanitary sewer and storm drain), or monuments that require adjustment and at any other locations designated by the Engineer, unless otherwise directed by the Engineer.** The Contractor is further advised that it will be his/her responsibility to ensure that the existing drainage patterns are maintained at all locations, as

indicated on the Plans or as directed by the Engineer. Full compensation for furnishing all labor, tools, incidentals necessary for doing all work to hand rake said connections shall be considered as included in the Contract price paid for asphalt concrete, and no additional compensation will be allowed therefore.

The Contractor is reminded of the importance of public safety and the need to install the temporary asphalt concrete ramps before opening road to traffic at the same day the grade differential is introduced. The Contractor is advised that Contractor may incur task-specific liquidated damages in the amount of \$500 per calendar day for every day hence until temporary asphalt concrete ramps are completely installed.

Longitudinal joints in the top layer must match lane lines. Alternate the longitudinal joint offsets in the lower layers at least 0.5 foot from each side of the lane line. Other longitudinal joint placement patterns are allowed if authorized by the Engineer.

Any asphalt concrete placed outside the lines and dimensions shown on the Plans, and that is not authorized by the Engineer in writing, shall not be paid for. Such quantity of asphalt concrete will be determined by the Engineer using any method he/she deems best suited to obtain an accurate quantity, and such quantity will be deducted from the total paid the Contractor, and no additional compensation will be allowed therefore. The unit weight of asphalt concrete for purposes of deduction shall be the average tested weight of the asphalt concrete used on this Project, or, absent any testing, 155 pounds per cubic foot.

The Contract unit price paid per ton for this item, "Asphalt Concrete (Type A HMA, 1/2" Maximum)," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in furnishing and placing asphalt concrete, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

39-2. Compaction Testing

New asphalt concrete (Type A HMA, maximum) placed within the roadway prism, as well as other areas shown on the Plans and as designated by the Engineer, may be tested for compaction, as directed by the Engineer.

Compacting shall be performed to achieve not less than ninety-five percent (95%) of the maximum theoretical density. The Contractor's attention is directed to Section 6-2, "Materials Testing," of these Special Provisions. Acceptance testing shall be performed using California Test Method (CT) 375, as directed by the Engineer.

39-3. Deep Lift Areas (0.50' Deep Asphalt Concrete)

Deep Lift Areas (0.50' Deep Asphalt Concrete) shown on the Plans shall conform to the applicable provisions of Section 19-1.03C, "Grade Tolerance," of the Standard Specifications, these Special Provisions, the Plans, and the directions of the Engineer.

Asphalt concrete for deep lift areas shall be Type A HMA, 3/4" maximum, and shall conform to the applicable provisions of Section 39, "Asphalt Concrete," of the Standard Specifications, and these Special Provisions.

Deep lifts shall consist of removing existing surfacing and underlying base to a depth of 0.75 feet below the new proposed grades, preparing subgrade to meet specified relative compaction, and backfilling the resultant excavation with new asphalt concrete to 0.25 feet below the new proposed grades at the approximate locations shown on the Plans. The new asphalt concrete should be placed and compacted in layers of 0.25' in compacted thickness.

The Contractor is advised that any AC plugs required for the new valley gutter to be installed on Encina Avenue shall not be compensated under this Section 39-3, "Deep Lift Areas (0.50' Deep Asphalt Concrete)," but shall be considered as included in the Contract unit price paid for item 51-1, "Class 3 Concrete," and no additional compensation will be allowed therefore.

Prior to placement of asphalt concrete for deep lifts, the outside edges of the deep lift areas, as shown on the Plans and as directed by the Engineer, shall be sawcut to provide a clean, neat and uniform joint utilizing a method approved by the Engineer. The Contractor will be required to take corrective steps where the outer limits of the deep lift areas are not clean, neat, and uniform, as determined by the Engineer. The cost of taking any corrective steps necessary to provide for a clean, neat, and uniform edge, including but not limited to over excavation, prior to resurfacing, as determined by the Engineer, shall be fully

borne by the Contractor.

Excavated material shall become the property of the Contractor and shall be disposed of outside of the Highway Right-of-Way in conformance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions.

The subgrade material remaining in place shall be graded to a plane, brought to optimum moisture content, and the upper one foot (1') compacted to not less than ninety-five percent (95%) relative compaction.

All compacted materials may be tested by the County. The Contractor shall notify the County a minimum of one (1) working day prior to when compacted materials are ready to be tested. The County pays for Contractor's call for first test only. Should the first test fail, or the Engineer's designee to perform the first test arrive and the Contractor not be ready for the test, then all subsequent tests will be paid for by the Contractor until the desired compaction is reached, and no additional compensation will be allowed therefore.

Areas of the grading plane that are low as a result of over excavation shall be filled, at the Contractor's expense, with asphalt concrete.

Any damage to pavement and base material which is to remain and as a result of the Contractor's operations, as determined by the Engineer, shall be repaired or removed and replaced with new asphalt concrete, as directed by the Engineer. Repairing or removing and replacing such damaged pavement shall be at the Contractor's expense. The Engineer shall be the sole judge of the adequacy of the completed remedial work.

The approximate locations where deep lifts are required are shown on the Plans.

No excavation shall be left open during non-working hours unless specifically authorized, in writing, by the Engineer. Roadway areas from which surfacing and base material have been removed shall be backfilled to the level of the adjacent undisturbed paved surfaces and/or barricaded, as approved by the Engineer, prior to the time public traffic is allowed thereon. Contractor may incur task-specific liquidated damages in the amount of \$500 per calendar day for every day that the Contractor fails to adhere to the above schedule for deep lift until deep lift have been

completed, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer.

The Contract unit price paid per square yard for this item, Deep Lift Areas (0.50' Deep Asphalt Concrete),” shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in furnishing and placing asphalt concrete, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment in the Contract bid price will be made for any increase or decrease in the quantities of this item, Deep Lift Areas (0.50' Deep Asphalt Concrete)”. The Provisions in Section 9-1.06, “Changed Quantity Pay Adjustments,” of the Standard Specifications shall not apply to this item.

39-4. Place Asphalt Concrete (Miscellaneous Areas)

Place Asphalt Concrete (Miscellaneous Areas) shall conform to the provisions of Sections 39-2.01C(9), “Miscellaneous Areas and Dikes,” of the Standard Specifications, these Special Provisions, the Plans, and the directions of the Engineer.

The surfacing of miscellaneous areas to be paid for at the Contract price for Place Asphalt Concrete (Miscellaneous Areas), in addition to the price paid for the materials involved, shall be limited to median areas (exclusive of inside shoulders), island areas, driveway and roadway conforms, designated shoulder areas, pedestrian walkways, gutters, gutter flares, ditches, overside drains, drainage swales, aprons at the ends of drainage structures, areas outside the traveled way which are shown on the plans as miscellaneous areas, and other areas designated by the Engineer.

Asphalt concrete used for miscellaneous asphalt concrete areas shall be Type A HMA (1/2” maximum) and shall conform to the provisions of Section 39, “Asphalt Concrete (Type A HMA),” of these Special Provisions.

Aggregate base required for miscellaneous asphalt concrete areas shall conform to the provisions of Section 26, “Aggregate Bases (Class 2),” of these Special Provisions.

Asphaltic Emulsion (Tack Coat) required for miscellaneous asphalt concrete areas shall conform to the provisions of Section 94, "Asphaltic Emulsion (Prime Coat, Curing Seal, or Tack Coat)".

The Contractor is advised that it will be his responsibility to assure that existing drainage patterns are maintained at all locations, as indicated on the Plans, unless otherwise directed by the Engineer.

Any miscellaneous asphalt concrete placed beyond the limits, as shown on Plans or as directed by the Engineer, and resulting from the Contractor's operations, shall be at the Contractor's expense, and no additional compensation will be allowed therefore.

The Contractor's attention is directed to the fact that payment for furnishing asphalt concrete (Type A HMA) and aggregate base for miscellaneous asphalt concrete areas (driveway and shoulder conforms), and for sawcutting of existing asphalt concrete pavement, shall be paid for separately in accordance with the provisions of Section 26, "Aggregate Base (Class 2)," Section 39, "Asphalt Concrete (Type A HMA)," and Section 39-6, "Sawcut Asphalt Concrete and Portland Cement Concrete Pavement," of these Special Provisions.

The Contractor's attention is directed to the fact that full compensation for furnishing and placing asphaltic emulsion (tack coat), complete in-place, shall be considered as included in the Contract price paid for this item, "Place Asphalt Concrete (Miscellaneous Areas)". Reference is made to Section 94, "Asphaltic Emulsion (Prime Coat, Curing Seal, or Tack Coat)".

The Contract price paid per square yard for this item, "Place Asphalt Concrete (Miscellaneous Areas)," shall include full compensation for preparing areas to receive asphalt concrete and for furnishing all labor, materials (except for asphalt concrete (Type B) and aggregate base), tools, equipment and incidentals, and for doing all work involved in placing asphalt concrete in miscellaneous asphalt concrete areas, including, but not limited to, all backfill, and sub-grade preparation, installing header board as shown on the Plans, hauling, placing, spreading, and compacting of asphalt concrete in miscellaneous asphalt concrete areas, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contract bid price will be made for any increase or decrease in the quantities of this item, "Asphalt Concrete (Miscellaneous Area)," required. The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item of work.

39-5. Header Boards

Header boards shall be installed along the proposed edge of pavement, and at other locations designated by the Engineer, prior to paving.

Header boards shall be pressure-treated lumber consisting of two-inch (2") thick by eight-inch (8") wide (2" x 8") and half-inch (1/2") diameter by twelve-inch (12") rebar stakes and shall be installed flush with final pavement grade.

The Contract price paid per linear foot for this item, "Header Boards," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in installing header boards, as specified in these Special Provisions and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contract bid price will be made for any increase or decrease in the quantities of this item, "Header Boards," required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item of work.

39-6. Sawcut Asphalt Concrete and Portland Cement Concrete

Sawcut Asphalt Concrete and Portland Cement Concrete shall conform to these Special Provisions, the Plans, and the directions of the Engineer.

Existing asphalt concrete and Portland cement concrete shall be sawcut at roadway, driveway, and shoulder conforms, and where existing concrete is to be removed to facilitate construction of, curb and gutter, valley gutter, aprons, and at other locations shown on the Plans or directed by the Engineer. Asphalt concrete shall be sawcut as necessary to construct drainage structures and sewer facilities. The exact limits shall be as shown on the Plans, unless prior written approval for adjustment is given by the Engineer. The Contractor shall provide a neat, clean, and uniform joint at all conforms, as directed by the Engineer. The Contractor shall be compensated for providing said joint at the Contract unit price paid per linear foot for this item, "Sawcut Asphalt Concrete

and Portland Cement Concrete,” regardless of the method used to provide said joint. The Contractor is advised that the method used to provide a neat, clean, uniform joint shall be subject to the approval of the Engineer.

All sawcutting operations shall be performed with a power-driven saw and the sawcut shall extend completely through the asphalt concrete and Portland cement concrete (or other facilities). The use of pavement breakers or other devices for cutting pavement will not be permitted unless specifically authorized, in writing, by the Engineer.

Cracked or broken pavement caused by, or new or existing improvements damaged by, the Contractor's operations shall be removed to a line established by the Engineer, and shall be replaced with new asphalt concrete or Portland cement concrete, all at the Contractor's expense and as directed by the Engineer, and no additional compensation will be allowed therefore.

The Contractor’s attention is directed to Section 13, “Water Pollution Control,” of these Special Provisions regarding slurry resulting from sawcutting operations, which must be shoveled or vacuumed and completely removed from the site. Any slurry shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with Section 5-11, “Disposal of Material Outside the Highway Right of Way,” of these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved in sawcutting asphalt concrete and Portland cement concrete, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, shall be considered as included in the various Contract unit prices paid, and no additional compensation will be allowed therefore.

39-7. Plane Asphalt Concrete Pavement (Full Width)

Plane Asphalt Concrete Pavement (Full Width) shall conform to these Special Provisions, the Plans and the directions of the Engineer, and shall only apply to a portion of the intersection of Encina Avenue. **Any damage to concrete valley gutters resulting from the Contractor’s planing operations shall be repaired by the Contractor, all at the expense of the Contractor and**

to the satisfaction of the Engineer, and no additional compensation will be allowed therefore.

Full width planing shall be to a depth of 0.25 feet below the existing grade so resurface will be consistent. Actual planing depths may vary from 0 to 0.40 feet. If the existing pavement depth is less than 0.25 feet within the planing section the Contractor shall inform the Engineer of the existing pavement depth, of plane to the existing pavement depth and resurface to existing grade

Planing of asphalt concrete pavement shall be performed by cold planing. The cold planing machine shall have a cutter head at least thirty inches (30") wide and shall be operated so as not to produce fumes or air pollution.

The Contractor is advised that more than one pass may be necessary to develop the specified depth and width. The final planing cut shall result in a uniformly rough surface.

Planned cut lines at conforms to existing asphalt concrete and Portland cement concrete to remain shall be neat and uniform, and shall be straight and the edges vertical to the depth specified. Planing shall be contiguous to Portland cement concrete.

Plane Asphalt Concrete Pavement shall include the removal and disposal of all traffic stripes, pavement legends and pavement markers within the limits of the the area to be planed project limits to be removed. No additional compensation will be made for the removal.

Existing highway facilities within the roadway area to be planed shall not be damaged in any way. Any damage, as a result of the Contractor's operations, to existing highway facilities shall be repaired or replaced by the Contractor at his expense, and no additional compensation will be allowed therefore. Repair or replacement of such facilities shall conform to the standards and specifications of the facility owner, and shall be inspected and approved of, in writing, by the facility owner.

Plane Asphalt Concrete Pavement (Full Width) will be measured by the square yard. The square yard quantity to be paid for this item, "Plane Asphalt Concrete Pavement (Full Width)," will be the actual surface area planed regardless of the number of passes required.

Material planed from the roadway surface, including asphalt concrete cutback and pavement reinforcing fabric, shall become the property of the Contractor and shall be disposed of outside of the Highway Right-of-Way in conformance with the provisions of Section 5-11, “Disposal of Material Outside the Highway Right-of-Way,” of these Special Provisions.

The Contractor may propose an alternative method to planing, provided that the contractor’s alternative method produces the desired result. The alternative method is subject to the Engineer’s approval.

The Contractor shall provide temporary **three-foot (3’) wide** ramps, of cutback or other approved material, at/along all planed joints for transverse conforms, and at/along cross-streets and driveways, as well as at any other locations designated by the Engineer, unless otherwise directed by the Engineer. All labor and material costs associated with conform ramp construction and removal prior to paving operation shall be considered as included in the Contract unit price paid for this item, “Plane Asphalt Concrete Pavement (Full Width),” and no additional payment will be allowed therefore.

The Contractor is reminded of the importance of public safety and the need to install the temporary cutback ramps the same day planning of asphalt concrete pavement occurs.

The Contractor is advised that Contractor may incur task-specific liquidated damages in the amount of \$500 per calendar day for every day hence until either temporary cutback ramps are installed or final pavement is completed.

The Contract price paid per square yard for this item, “Plane Asphalt Concrete Pavement (Full Width),” shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in planing asphalt concrete pavement full width, including, but not limited to, transporting, placing, and/or disposing of asphalt concrete surfacing, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 51.
CONCRETE STRUCTURES

Concrete Structures shall conform to the provisions of Section 51, "Concrete Structures," Section 73, "Concrete Curbs and Sidewalks," and Section 90, "Portland Cement Concrete," of the Standard Specifications, these Special Provisions, and the directions of the Engineer.

51-1. Class 3 Concrete

Class 3 concrete shall conform to the provisions of Section 51, "Concrete Structures," Section 73, "Concrete Curbs and Sidewalks," and Section 90, "Concrete," of the Standard Specifications, these Special Provisions, the Plans, and the directions of the Engineer.

Portland cement concrete Class 3 concrete shall be produced from commercial quality aggregate and cement content per cubic yard of concrete shall not be less than 463 pounds (300 kg/m³) of cement.

Concrete curb and valley gutter shall be constructed or reconstructed at the locations shown on the Plans and as designated by the Engineer. The Contractor is advised that the portions of any Portland cement concrete facilities that are removed to conform to the new grades shall be replaced "in kind," except where indicated on Plans.

Excavation for Class 3 concrete structures shall be considered as included in the Contract unit prices paid per cubic yard for Class 3 concrete, and no separate payment will be allowed therefore.

Existing improvements, such as fences, sprinklers and landscaping, that need to be relocated or removed, as determined by the Engineer for construction purposes, shall be accomplished only after the property owners have been notified and given an opportunity to perform this task themselves. If the property owners do not perform this task, then the Engineer may direct the Contractor to perform this operation. Existing improvements removed shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions by the Contractor, unless

arranged with the property owners to deposit the existing improvements on their property at a location designated by the property owner.

The Contractor shall perform an approved water drainage test on all concrete gutters and valley gutters. Any gutters and/or valley gutters not meeting grade or resulting in the retention of water from the required water test shall be removed and replaced at the Contractor's expense. The Contractor's attention is directed to Section 19-1.03C "Grade Tolerances," and Section 73-1.03, "Construction," of the Standard Specifications.

Special care shall be taken during construction to accurately match the existing and/or required alignment and grades for all concrete work and to insure positive drainage, as specified in these Special Provisions and as directed by the Engineer.

The progression and sequence of the various phases of the concrete work shall be approved by the Engineer. Work within a particular location or area shall not commence without approval of the Engineer.

The Contractor shall notify the Engineer **two (2) working days** prior to beginning concrete work, and shall provide **one (1) working day** advance notification whenever his work is interrupted. The Contractor's attention is directed to Section 12, "Maintaining Traffic," of these Special Provisions for property owner notification.

Work within the overall limits of removal stipulated in these specifications will be allowed only on one side of the street at any given time or by staggering the blocks so that pedestrian travel is not impeded or interrupted unless said work sequence is modified with approval of the Engineer.

Any removed concrete shall become the property of the Contractor and shall be disposed of outside of the highway right of way in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions. Payment for Removing Concrete shall be considered as included in the various Contract unit prices paid, and no additional compensation will be allowed therefore.

Where no joint exists in the pavement on the line at which the concrete is to be removed, a straight, neat cut with a power driven saw shall extend completely through the concrete before removing concrete pavement. Payment

for sawcutting Portland cement concrete shall be considered as included in the various Contract unit prices paid, and no additional compensation will be allowed therefore.

Curb and valley gutter shall be sawcut at the first scoring line at or beyond the planned point of removal. Sawcutting operations shall conform to the following special provisions:

- (1) Sawcutting shall be performed with a power driven saw and the sawcut shall extend completely through the asphalt concrete and Portland cement concrete. The use of pavement breakers or other devices for cutting pavement will not be permitted unless specifically authorized, in writing, by the Engineer.
- (2) Cracked or broken pavement caused by, or new or existing improvements damaged by, the Contractor's operations shall be removed to a line established by the Engineer, and shall be replaced with new asphalt concrete or Portland cement concrete, all at the Contractor's expense and as directed by the Engineer, and no additional compensation will be allowed therefore.
- (3) **The Contractor's attention is directed to Section 13, "Water Pollution Control," of these Special Provisions regarding slurry resulting from sawcutting operations, which must be shoveled or vacuumed and completely removed from the site.** Any slurry shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

The concrete for curb and valley gutters shall be cured by the curing compound no. 6 method conforming to Section 90-1.03B(3), "Curing Compound Method," of the Standard Specifications. The curing compound shall be a non-pigmented curing compound with fugitive dye conforming to the requirements in ASTM Designation: C 309, Type 1-D, Class A, except that loss of water in the water retention test shall not exceed 0.15-kilograms per meter squared in 24 hours. The curing compound shall be applied at the approximate rate of one gallon per 150 square feet of area.

Concrete to be removed shall be removed in accordance with the

provisions in Section 15-1.03B, "Removing Concrete," of the Standard Specifications. Any removed concrete shall become the property of the Contractor and shall be disposed of outside of the highway right of way in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

Damage to existing concrete improvements not designated on the Plans or by the Engineer for removal, and as a result of the Contractor's operations, shall be repaired by the Contractor, all at the expense of the Contractor and to the satisfaction of the Engineer, and no additional compensation will be allowed for therefore.

Areas where asphalt concrete and base are removed beyond the limits of the existing concrete for the installation of concrete formwork shall be backfilled with a minimum 0.5-foot full depth asphalt concrete (Type A HMA, 3/4" maximum). The cost of asphalt concrete for this work shall be included in the Contract unit price paid for this item, "Class 3 Concrete," and no additional compensation will be allowed therefore.

The Contractor shall provide a neat, clean, and uniform joint at all curb, gutter, and sidewalk conforms and, when possible, joints shall be located at existing score lines. The Contractor is advised that the method used to provide joints at conforms shall be subject to the approval of the Engineer.

Holes shall be drilled into existing concrete for placement of slip dowels to tie new concrete work to existing concrete. Holes shall be nine inches (9") deep and slip dowels shall be eighteen inches (18") long, as shown on the Plans and as directed by the Engineer.

The Contractor is advised that all concrete work for installing new curb and valley gutter requiring reconstruction, shall be completed prior to commencement of cement treat operations/roadwork.

Aggregate base required for curb and valley gutter requiring reconstruction, shall conform to the provisions of Section 26, "Aggregate Bases," of the Standard Specifications and these Special Provisions. Payment for aggregate base (Class 2) shall be considered as included in the Contract unit price paid for "Aggregate Base (Class 2)," and no additional compensation will be allowed therefore.

All sawcutting required for the installation of new curb and valley gutter requiring reconstruction, shall conform to the provisions of Section 39-6 "Sawcut Asphalt Concrete or Portland Cement Concrete," of these Special Provisions.

The Contract unit price paid per cubic yard for this item, "Class 3 Concrete," shall include, but not be limited to, full compensation for providing all labor, materials (including expansion joint material, dowels, bar reinforcement, and wire meshing, and asphalt concrete (Type A HMA, 3/4" maximum, medium grading for backfill), tools, equipment and incidentals necessary for doing all work involved in constructing and/or reconstructing Class 3 concrete, including but not limited to, concrete curbs, gutters, sidewalks, driveways, valley gutters, walkways, and other work, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contract bid price will be made for any increase or decrease in quantities for this item, "Class 3 Concrete," required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item of work.

51-2. Drainage Junction Box or Drainage Inlet (Class 2 Concrete)

Drainage Junction Box or Drainage Inlet (Class 2 Concrete) shall conform to the provisions in Section 51, "Concrete Structures," of the Standard Specifications and these Special Provisions.

Concrete for drainage junction boxes and drainage inlets shall conform to Section 90-1, "General," Section 90-2, "Minor Concrete," of the Standard Specification." Reference is made to Section 90, "Portland Cement," of these Special Provisions.

Drainage Junction Box (Class 2 Concrete)

Class 2 concrete drainage junction boxes shall be paid for per each as Drainage Junction Box (Class 2 Concrete).

Drainage Inlet (Class 2 Concrete)

Class 2 concrete drainage inlets shall be paid for per each as Drainage Inlet (Class 2 Concrete).

Portland cement concrete for drainage junction boxes and drainage inlets shall be produced from commercial quality aggregate and cement shall contain

not less than **590 pounds** of cement per cubic yard (350 kg/m³).

The Contractor is advised that installation of new drainage structures, complete in place, shall be completed prior to commencement of cement treat operations.

Full compensation for providing reinforcing steel bar, and drainage inlet frames and covers, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, shall be considered as included in the Contract price per each for this item, "Drainage Junction Box (Class 2 Concrete) or Drainage Inlet (Class 2 Concrete)," and no separate payment will be made therefore.

The Contractor shall take care when working in and around facilities to remain. The cost of repairing, to the satisfaction of the Engineer, any damage to said facilities to remain and resulting from the Contractor's operations, as determined by the Engineer, shall be performed by the Contractor, all at his expense, and no additional compensation will be allowed therefore.

The Contract unit price paid per each for these items, "Drainage Junction Box (Class 2 Concrete)," and "Drainage Inlet (Class 2 Concrete)," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary for doing all work involved in constructing drainage junction boxes and drainage inlets from Class 2 concrete, including, but not limited to, furnishing and setting metal frames, grates and covers, dewatering where required, connecting new pipes to new structures (including cutting existing pipe ends flush with inside structure face), reinforcing steel bar, work required to avoid and protect all existing utility lines, and other work as may be required by the Engineer to complete the installation, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 56.
ROADSIDE SIGNS AND MARKERS

Roadside signs and markers shall be installed in conformance with the provisions in Section 82, "Signs and Markers," of the Standard Specifications, these Special Provisions, the Standard Plans and the Project Plans, the California Manual on Uniform Traffic Control Devices, and the directions of the Engineer.

56-1. Remove and Reset Existing Roadside Signs

Existing roadside signs, and markers as shown on the Plans and as directed by the Engineer, shall be removed, set at temporary locations, if necessary and as directed by the Engineer, and reset or installed at permanent locations, as directed by the Engineer, all in conformance with Sections 82, "Signs and Markers", of the Standard Specifications, the Plans and these Special Provisions, and the directions of the Engineer.

The Contractor is advised that "Roadside Sign" shall be defined herein for this Section 56-1, "Remove and Reset Existing Roadside Signs," as the entire sign assembly of the post, sign panel and mounting hardware, unless otherwise specified on the Plans, in these Special Provisions, or as directed by the Engineer.

Existing roadside signs to be removed and reset and existing roadside markers shall be removed and installed with new post, as shown on the Plans and as directed by the Engineer. Removed roadside signs shall be set at permanent locations at time of removal whenever possible; otherwise removed roadside signs shall be set and maintained at temporary locations, as directed by the Engineer, at the time of removal, until they are reset at permanent locations, as directed by the Engineer.

New locations shall be as determined in the field by the Engineer.

The Contractor is advised that removal of the existing roadside signs shall be accomplished by removing the entire roadside sign assemblies, including the post. Cutting of the existing post will not be allowed. The existing posts for signs are considered to be in serviceable condition and shall either be reused or salvaged in conformance with these Special Provisions. Roundabout signs shall be placed on a new post.

Existing roadway, street name, and regulatory traffic signs shall be maintained in a location that is visible to motorists at all times. However, any signs that interfere with construction shall be relocated, as necessary, to accommodate the work.

Any damage to new and existing highway facilities resulting from these operations shall be repaired by the Contractor, all at his expense, and no additional compensation will be allowed therefore.

The approximate location of said roadside signs and markers to be removed and reset are as shown on the Plans. New locations shall be as determined in the field by the Engineer.

Following is a list of existing roadside signs and markers to be removed and reset:

QUANTITY	NAME OF SIGN ASSEMBLY	TOP PANEL SIGN CODE AND SIZE	STATION	OFFSET
1	ROADWAY MARKER	OM3	STA 'E' 14+78.23	4.14 LT
1	CHICANE DIRECTION	R3-8 MOD	STA 'E' 19+67.50	0.04 RT
1	CHICANE DIRECTION	R3-8 MOD	STA 'E' 19+69.08	1.84 RT
1	CHICANE DIRECTION	R3-8 MOD	STA 'E' 19+69.08	0.04 RT
1	CHICANE DIRECTION	R3-8 MOD	STA 'E' 19+70.85	0.04 RT
1	ROADWAY MARKER	S2	STA 'E' 27+39.19	30.15 RT
1	ROADWAY MARKER	S2	STA 'E' 27+44.19	20.70 RT
1	ROADWAY MARKER	S2	STA 'E' 27+44.19	30.64 RT
1	ROADWAY MARKER	S2	STA 'E' 27+69.18	63.63 RT
1	ROADWAY MARKER	S2	STA 'E' 27+76.70	63.63 LT

The Contract unit price paid per each for this item, "Remove and Reset Existing Roadside Signs," shall include, but not be limited to, full compensation for furnishing all labor, material (including replacement posts if needed or installation), tools, equipment and incidentals necessary for doing all work involved to remove and reset roadside and roundabout signs, including, but not limited to, removing and salvaging, if necessary, existing roadside signs, and

resetting of roadside signs, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contract bid price will be made for any increase or decrease in the quantities of this item, "Remove and Reset Existing Roadside Signs and Install Markers," required. The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item of work.

56-2. Install Object Markers

Object markers shall conform to the following special provisions:

- (1) Object markers shall be Class 1 Flexible Post Delineator conforming to Standard Plan A73C, or approved equal.
- (2) Object markers shall not be surface mounted, but shall be permanently installed using an eighteen inch (18") minimum embedment length, as shown on Standard Plan A73C.
- (3) Actual locations will be determined in the field, and be as directed by the Engineer.

Quantities of install object markers will be determined as units from actual counts.

The Contract unit price paid per each for this item, "Install Object Markers," shall include, but not be limited to, full compensation for furnishing all labor, material, equipment and incidentals necessary for doing all work involved to install object marker, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contractor bid price will be made for any increase or decrease in the quantities of this item, "Install Object Markers," required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item of work.

The County reserves the right to eliminate this item, "Install Object Markers," from the Project completely. The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to

incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.

END OF SECTION

SECTION 64.**PIPES****64-1. Install 12" HDPE Storm Drain Pipe**

Plastic pipe shall conform to the provisions of Section 64, "Plastic Pipe," of the Standard Specifications and these Special Provision, as shown on the Plans and as directed by the Engineer. Section 4-1.06, "Differing Site Conditions (23 CFR 635.109)," of the Standard Specifications shall not apply to this item.

Storm drain pipe shall be Advanced Drainage Systems (ADS) N-12 IB WT (water-tight) corrugated high density polyethylene (HDPE) pipe with smooth interior wall and conform to AASHTO M-294 for 12" pipe, or approved equal. Pipe joints shall be a bell and spigot assembly with elastomeric sealing gaskets. Sealing gaskets shall meet the requirements of ASTM F-477. Solvent cement joints shall not be allowed. All pipe joints shall be made using manufactured HDPE fittings and couplings, conforming to AASHTO M-294. Band type compression couplings shall not be allowed.

The Contractor shall verify the locations of utilities or other obstacles and resolve any grade line conflicts prior to any trenching and installation of new HDPE pipe.

Structure excavation necessary to comply with the trench depth requirements of pipe manufacturers and as approved by the Engineer shall be completely removed and disposed of outside the project site in conformance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

The Contractor shall place HDPE storm drain pipe as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer. Proposed invert elevations shall govern over graphical depictions on the Plans and/or the theoretical slope/distance elevation calculations.

Short sections of pipe from junction boxes to storm chambers as included in subsurface drain bid items.

The proposed 12" HDPE pipes shall be connected from the proposed drainage inlets to the proposed drainage junction boxes that are to accept the 12" HDPE pipes, as specified in these Special Provisions, and as

directed by the Engineer. The pipe ends shall be cut flush with the interior wall of the new drainage inlets and drainage junction boxes and mortar shall be used to create a smooth interior wall face at the new connections.

HDPE storm drain pipe shall be measured on the horizontal, along the centerline, rounded up to the nearest foot, regardless of the amount of pipe ordered to accomplish the work.

The Contractor shall take care not to damage any existing facilities when placing the pipe and making the HDPE connections. Any damage to the existing facilities caused by the Contractor or his equipment, as determined by the Engineer, shall be repaired to the satisfaction of the Engineer, all at the Contractor's expense.

Prior to installation and backfilling of new storm drain pipe, the Contractor shall verify the locations of utilities or other obstacles and resolve any grade line conflicts.

Full compensation for conforming to the standard trench backfill and bedding detail shown on the Plans shall be considered as included in the Contract unit price per linear foot for 12" HDPE pipe installed and no additional compensation will be allowed therefore.

The Contract unit price paid per linear foot for this item, "Install 12" HDPE Storm Drain Pipe," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing the HDPE pipe complete in place, including grading, excavation, backfill, dewatering, disposal of material, connecting pipe to new structures, cutting the pipe ends flush, providing and installing all required fittings, plugging any openings between pipe and structure with a Class A (Class 2) mortar mix, shaping and trowelling the bottom of structures to create a smooth transition between structure and pipe, for conforming to the drainage details, and for all other work mentioned in these Special Provisions, as shown on the Plans, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 68
SUBSURFACE DRAIN

68-1. Subsurface Drain (Stormtech or Approved Equal)

Subsurface drain (Stormtech or Approved Equal) shall conform to the provisions in Section 68, "Subsurface Drains," of the Standard Specifications and these Special Provisions. Subsurface drain is composed of permeable material **(2" washed, crushed angular stone, connection pipe and fittings)** enclosed by filter fabric as shown on the plans. Excavated material for the subsurface drain shall be disposed of in accordance with Section 14, "Construction Waste Management" and Section 5-11, "Disposal of Material Outside the Highway Right of Way". **Stormtech product information may be obtained at <https://www.stormtech.com/> or manufacturer's local representative.**

The Contract unit price paid per square foot for this item, "Subsurface Drain Gallery 1", (Stormtech or Approved Equal) using SC-310 storm chamber or approved equal shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in the installation of the subsurface drains (except for the road section 3" Asphalt Concrete and 12" Class 2 aggregate base from lip of gutter to lip of gutter) including excavation, permeable material, subsurface drains, end caps, stubs, fittings, elbows, and filter fabric complete in place, as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

The Contract unit price paid per square foot for this item, "Subsurface Drain Gallery 2", (Stormtech or Approved Equal) using SC-740 storm chamber or approved equal shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in the installation of the subsurface drains (except for the road section 3" Asphalt Concrete and 12" Class 2 aggregate base from lip of gutter to lip of gutter) including excavation, permeable material, subsurface drains, end caps, stubs, fittings, elbows, and filter fabric complete in place, as shown on the Plans, as specified in these Special Provisions and as

directed by the Engineer.

The Contract unit price paid per square foot for this item, "Subsurface Drain Gallery 3", (Stormtech or Approved Equal) using SC-310-3 storm chamber or approved equal shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in the installation of the subsurface drains (except for the road section 3" Asphalt Concrete and 12" Class 2 aggregate base from lip of gutter to lip of gutter) including excavation, permeable material, subsurface drains, end caps, stubs, fittings, elbows, and filter fabric complete in place, as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

The Contract unit price paid per square foot for this item, "Subsurface Drain Gallery 4", (Stormtech or Approved Equal) using SC-740 storm chamber or approved equal shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in the installation of the subsurface drains (except for the road section 3" Asphalt Concrete and 12" Class 2 aggregate base from lip of gutter to lip of gutter) including excavation, permeable material, subsurface drains, end caps, stubs, fittings, elbows, and filter fabric complete in place, as shown on the Plans, as specified in these Special Provisions and as directed by the Engineer.

The excavation, asphalt concrete, and Class 2 aggregate base for the road section 3" asphalt concrete and 12" Class 2 aggregate base (from lip of gutter to lip of gutter) placed above the subsurface drain gallery, in lieu of Cement Treated Native, as shown on the Plans, these Special Provisions, and as directed by the Engineer, shall not be included in the per unit cost for subsurface drain 15 and Section 26, "Aggregate Base (Class 2)", and Section 39-1, "Asphalt Concrete (Type A HMA, 1/2" Maximum).

No adjustment of the Contract bid price will be made for any increase or decrease in the quantities of subsurface drains required. The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments", of the Standard

Specifications shall not apply to this item.

The County reserves the right to adjust locations and dimensions of the subsurface drains at no additional cost to the County based on potential underground conflicts encountered.

The County reserves the right to eliminate these items, "Subsurface Drain Gallery 1, 2, 3, 4" from the project completely. The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.

68-1a. Filter Fabric

Filter fabric shall conform to the provisions of Sections 68-1.03B, 68-4.02C and 96-1.02B of the Standard Specifications, and to these Special Provisions. Filter fabric shall conform to the requirements set forth for underdrains in Section 96.1.02B of the Standard Specifications. **Stormtech or approved equal subsurface drains and permeable material shall be wrapped with a filter fabric which meets AASHTO M288 Class 2 non-woven geotextile requirements around the perimeter of the permeable material . Stormtech or approved equal isolator rows shall also have a filter fabric placed between the permeable material and the Stormtech or approved equal subsurface drain which meets AASHTO M288 Class 1 woven geotextile requirements.**

Filter fabric shall be placed where shown on the Plans and as directed by the Engineer, in accordance with the requirements in these Special Provisions.

Filter fabric shall be manufactured from one or more of the following materials: polyester, nylon or polypropylene. Filter fabric shall be furnished in an appropriate protective cover which shall protect it from ultraviolet radiation, and from abrasion due to shipping and handling. Filter fabric shall be accompanied by a Certificate of Compliance conforming to the provisions in Section 6-2.03C, "Certificate of Compliance," of the Standard Specifications, and to these Special Provisions.

Filter fabric shall be handled and placed in accordance with the

manufacturer's recommendations. Filter fabric shall be stretched, aligned and placed in a wrinkle-free manner; and adjacent borders of the filter fabric shall be overlapped twelve inches (12").

Should the filter fabric be damaged during placing, the torn or punctured section of filter fabric shall be repaired by placing a piece of filter fabric over the damaged area, with said piece of filter fabric being large enough to meet the overlap requirement. Such damage to the filter fabric resulting from the Contractor's vehicles, equipment or operations shall be repaired by the Contractor solely at his/her expense.

Full compensation for providing Filter Fabric, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, shall be considered as included in the Contract price per linear foot for the item, "Subsurface Drain Gallery 1, 2, 3, 4" and no separate payment will be made therefore.

68-1b. Class 1 Permeable Material (Type B)

Permeable material shall be Class 1 (Type B, 2" washed, crushed angular stone) and shall conform to the provisions of Section 68-2.02F, "Permeable Material," of the Standard Specifications, and to these Special Provisions and as directed by the Engineer.

Permeable material shall be installed over Subsurface Drains, as shown on the Plans and details.

Full compensation for providing Class 1 Permeable Material (Type B), as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, shall be considered as included in the Contract price per linear foot for the item, "Subsurface Drain Gallery 1, 2, 3, 4" and no separate payment will be made therefore.

END OF SECTION

SECTION 75.
MISCELLANEOUS IRON AND STEEL

Miscellaneous iron and steel shall conform to the provisions in Section 75, "Miscellaneous Metal," of the Standard Specifications, these Special Provisions, as shown on the Standard Plans, and as directed by the Engineer.

Line 8 of Section 75-2.02B, "Frames, Grates and Covers" of Section 75-2 "Miscellaneous Iron and Steel," of the Standard Specifications is amended to read:

"Drainage inlet frames and grates shall be galvanized in accordance with the provisions of Section 75-1.02B, "Galvanizing," of the Standard Specifications."

Types of frames, grates, and manhole covers, to be included in new facilities shall be the same for each respective item of work, as shown on the Plans.

Full compensation for providing reinforcing steel bar, and drainage inlet frames and covers, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 81.
PAVEMENT MARKERS AND DELINEATORS

The work performed in connection pavement markers and delineators shall conform to the provisions in Section 81, "Miscellaneous Traffic Control Devices", of the Standard Specifications, these Special Provisions, the Plans, and the directions of the Engineer.

81-1. Pavement Markers

Pavement markers shall conform to the provisions in Section 81-3, "Pavement Markers", of the Standard Specifications and these Special Provisions, the Standard Plans and the Project Plans, and the directions of the Engineer. All pavement markers removed shall be replaced in kind, unless otherwise directed, in writing, by the Engineer.

The Contractor is reminded of the importance of public safety and the need to complete all pavement markers in a timely manner. Therefore, unless otherwise approved by the Engineer, Contractor shall: (1) complete cat-tracks within five (5) working days after completion of paving operations; and (2) complete installation of all pavement markers within ten (10) working day after completion of paving operations.

Should the Contractor proceed with the installation of pavement markers prior to approval of cat-tracks, Contractor shall remove all incorrectly installed pavement markers, as determined by the Engineer, and re-install as directed and approved by the Engineer. All such work shall be at the Contractor's sole expense, and no additional compensation will be allowed therefor.

Retro-reflective pavement markers, as shown on the Plans and as specified in these Special Provisions, shall conform to the provisions of Section 81-3.02C, "Retroreflective Pavement Markers," of the Standard Specifications, and shall be placed in accordance with the Standard Plans, the Project Plans and the directions of the Engineer.

Section 81-3.03, "Construction," of the Standard Specifications is amended to delete references to and/or the option to place pavement markers before written Engineer approval. Pavement markers shall not be placed on new

asphalt concrete surfacing, until authorized, in writing, by the Engineer.

Pavement markers shall be placed on the lines and to the limits established by the Contractor and approved by the Engineer. Establishment of such lines shall consist of points spaced a maximum of two hundred feet (200') on tangents and fifty feet (50') on curves with placement of additional points as necessary. All other work necessary to establish satisfactory lines for markers, including correction of minor irregularities in the line and marker locations, shall be performed by the Contractor.

The Contractor is advised that the following quantities for pavement markers are to be installed:

- (1) **Type D (Two-way, Yellow, Retroreflective) Markers** **18**
To be placed on chicane in accordance with these Special Provisions.
- (2) **Blue Reflective, Fire Hydrant Markers** **5**
To be placed in accordance with these Special Provisions.

The Contractor is further advised that the quantities listed above are for estimation purposes only, and the County makes no guarantee as to the actual quantity. The Contractor is further advised to physically verify the quantities in the field.

Blue, reflective hydrant markers shall be replaced where removed by the Contractor, as shown on the Plans and as approved by the Engineer. All blue reflective fire hydrant markers removed shall be replaced with new two-way blue reflective markers. The Contractor is advised that there are approximately **five (5)** blue reflective markers to be either removed and replaced or installed, as indicated in the following table:

Blue Fire Hydrant Marker Locations
2 Encina Avenue, Station STA 'E' 10+02.00
433 Encina Avenue, Station STA 'E' 13+67.54
510 Encina Avenue, Station STA 'E' 19+94.31
510 Encina Avenue, Station STA 'E' 19+94.31 (On Oak Drive)
565 Encina Avenue, Station STA 'E' 27+41.64

In general, blue reflective markers should be placed six inches (6") from the centerline stripe, or six inches (6") from the approximate center of the pavement where there is no centerline stripe, on the side nearest the fire hydrant. All additional work necessary to establish satisfactory locations for blue fire hydrant markers shall be performed by the Contractor. Reference is made to Figure 3B-102 (CA), "Examples of Fire Hydrant Location Pavement Markers," page 762 of the California Manual on Uniform Traffic Control Devices (2014 Rev. 2).

Rapid Set Type Epoxy Adhesive or hot melt bituminous adhesive shall be used to cement markers to the asphalt concrete surfaces. Section 81-3, "Pavement Markers", of the Standard Specifications is amended to delete references to and/or the option to use any other type of adhesive other than Rapid Set Type or hot melt bituminous adhesive.

Bituminous adhesive shall be heated indirectly in an applicator with continuous agitation or recirculation. Bituminous adhesive shall not be heated above the maximum safe heating temperature recommended by the manufacturer and shall not be applied at temperatures greater than 425°, nor less than 375°.

Immediately after application of the adhesive, pavement markers shall be placed in position and pressure applied until firm contact is made with the pavement.

Placement of pavement markers using hot melt bituminous adhesive shall conform to the requirements of Section 81-3, "Pavement Markers," of the Standard Specifications, except as follows:

1. Markers shall not be placed when the pavement or air temperature is 50F or less.
2. Blast cleaning of new, clean asphalt concrete surfaces will not be required.

The Contractor shall take all necessary precautions to protect newly installed pavement markers from disturbance or damage until the Engineer determines the adhesive has set sufficiently to bear traffic. Newly installed pavement markers that are disturbed or damaged shall be reset by the

Contractor, entirely at the Contractor's expense, and no additional compensation will be allowed therefore.

Traffic control during pavement marker placement operations shall conform to the provisions of Section 12, "Maintaining Traffic," of these Special Provisions, and compensation shall be considered as included in the Contract lump sum price paid for "Maintaining Traffic," and no additional compensation will be allowed therefore.

The Contract unit price paid per each for these items "Pavement Marker (Blue Reflective, Fire Hydrant Marker)" and "Pavement Marker (Type D, Two-Way, Yellow, Retroreflective)", shall include full compensation for furnishing all labor, materials (including adhesive), tools, equipment and incidentals, and for doing all work involved in furnishing and placing pavement markers, complete in place, including, but not limited to, removal and disposal of existing pavement markers, and installing pavement markers, complete in place, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 84. MARKINGS

Pavement markings and legends shall conform to, and be installed in accordance with, the provisions in Section 84-2, "Traffic Stripes and Pavement Markings," of the Standard Specifications, these Special Provisions, the Standard Plans and the Project Plans, and the directions of the Engineer.

The types, dimensions and approximate locations of the existing pavement markings and legends shall be as shown on the Plans and as directed by the Engineer.

The Contractor is advised that, prior to asphalt concrete paving operations, it will be his responsibility to identify and tie-out all existing pavement markings and legends to be replaced within the Project limits, and to replace such traffic stripes and pavement markings to the existing locations, unless otherwise directed by the Engineer. The Engineer shall inspect and approve the location and tie-outs for all such pavement markings and legends.

The Contractor is reminded of the importance of public safety and the need to complete all pavement markings and legends in a timely manner. Therefore, unless otherwise approved in writing by the Engineer, Contractor shall: (1) commence placement of cat-tracks within five (5) working days after completion of paving operations; and (2) complete placement of permanent pavement markings within five (5) working days after approval of cat-tracks.

The Engineer shall have five (5) working days to review and accept or reject cat-tracks. The Contractor shall not commence installation of permanent pavement markings and legends prior to approval of cat-tracks by the Engineer.

Should the Contractor proceed with the installation of permanent pavement markings and legends prior to approval of cat-tracks, Contractor shall remove all incorrectly installed permanent pavement markings and legends, as determined by the Engineer, and re-install as directed and approved by the Engineer. All such work shall be at the Contractor's sole

expense, and no additional compensation will be allowed therefore.

Should Contractor failure to adhere to the above schedule for pavements markings and legends, Contractor shall incur task-specific liquidated damages in the amount of \$500 per calendar day for every day hence until pavement markings and legends have been completed, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer.

The Contractor shall be responsible for ensuring that the pavement markings and legends match the proposed pavement markings and legends as shown on the Plans or as directed by the Engineer. Pavement markings and legends not conforming to existing or approved layout shall be removed and re-applied, all at the Contractor's expense, and no additional compensation will be allowed therefore.

The Contractor shall indicate, on the road, pavement marking and legends layouts, and shall receive approval of layout (alignment, location, and detail) from the Engineer, in writing, prior to final placement. Methods used by the Contractor for alignment and layout shall not damage the pavement. Any damage to the pavement caused by the Contractor's operations, as determined by the Engineer, shall be repaired by the Contractor, all at Contractor's sole expense, and no additional compensation will be allowed therefore.

84-1. Thermoplastic Pavement Markings

Thermoplastic pavement markings shall be applied hot in conformance with manufacturer's recommended instructions and Section 84-2.03C "Application of Stripes and Markings," of the Standard Specifications. Thermoplastic material for traffic stripes shall be applied at a thickness of 0.070 inch; and thermoplastic material for pavement markings shall be applied at a thickness of 0.100 to 0.150 inch. The Contractor shall apply glass beads to the surface of the molten thermoplastic in accordance with Section 84-2.02D, "Glass Beads" of the Standard Specifications. State Specifications for glass beads may be obtained from the Transportation Laboratory, 5900 Folsom Boulevard, Sacramento, CA 95819, (916) 227-7000.

Thermoplastic pavement markings material shall be accompanied by a Certificate of Compliance in accordance with the provisions of Section 6-2.03C,

"Certificates of Compliance," of the Standard Specifications. Said certificates shall certify that the thermoplastic material complies with the specifications and that materials manufactured to the same formulation and process has previously passed State testing.

Thermoplastic pavement markings shall be placed as shown on the Plans and as directed by the Engineer. Pavement marking quantities for legends shall be as provided for on the Standard Plans. Other pavement marking quantities (including stop bars and crosswalks) will be measured by the square foot for the actual area covered.

The Contractor is advised that the following existing traffic stripes and pavement markings, as shown on the Plans, are to be replaced with thermoplastic traffic stripes and pavement markings:

Traffic Stripes and Pavement Markings

White Stop Bar (1' wide)50 ft²

Legends (Figure A24D of the Standard Plans)

Qty (2) White "STOP" Legends22 ft² each, 44 ft² total

The Contractor is advised that the quantities listed above are for estimating purposes only, and the County makes no guarantee as to the actual quantity. The Contractor is further advised to physically verify the quantities in the field.

The Contract unit prices paid for this item, "Thermoplastic Pavement Markings," which shall be per square foot for pavement markings, shall include full compensation for furnishing all labor, materials (including primer, and paint for cat tracks and dibble lines), tools, equipment and incidentals, and for doing all work involved in furnishing and placing thermoplastic pavement markings, complete in place, including, but not limited to, identifying and tying-out all existing and proposed thermoplastic pavement markings within the Project limits for approval by the Engineer, removing and disposing of grindings, and applying thermoplastic pavement markings, including establishing alignment of pavement markings and layout work (including cat tracks and dribble lines), complete in place, as shown on the Plans, as specified in the Standard Specifications and

these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 90.
PORTLAND CEMENT

Portland cement shall conform to the provisions in Section 90, "Concrete," of the Standard Specifications. More specifically, Portland cement for cement treatment shall conform to the provisions in Section 90-1.02B(2), "Cement," of the Standard Specifications, and shall be "Type II Modified".

Mineral admixtures shall not be substituted for Portland cement.

The Contractor's attention is directed to the fly ash requirement in Section 90-1, "Fly Ash Requirement" of these Special Provisions.

For calculation purposes, **108.8 pounds per cubic foot** shall be considered as the dry density of the existing material.

Portland cement will be measured and paid for by the ton in accordance with the provisions of Section 9-1.02, "Measurement," of the Standard Specifications, and no additional compensation will be allowed therefore.

The Contract unit price paid per ton for this item, "Portland Cement," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in furnishing Portland cement for cement treatment, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

The Contractor's attention is directed to Section 27, "Cement Treatment," of these Special Provisions. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments" of the Standard Specifications shall not apply to this item of work.

90-1. Fly Ash Requirement

Whenever possible, the mineral admixture of fly ash conforming to ASTM Designation: C 618 shall be combined with Type IP (MS) cement conforming to ASTM Designation: C595 to make cementitious material. Type IP (MS) cement shall be used in place of ASTM C 150 Type II or Type V Portland cement where possible.

Type IP (MS) may not be a substitution for ASTM C 150 Type III unless approved by the Engineer.

END OF SECTION

SECTION 94.
ASPHALTIC EMULSION

Asphaltic emulsion shall be Type SS1, and shall conform to the provisions of Sections 27-1.03I, "Curing," Section 39-2.01C(3)(f), "Tack Coat," and Section 94, "Asphaltic Emulsions," of the Standard Specifications, these Special Provisions, and the directions of the Engineer.

In addition to use as a curing seal, asphaltic emulsion shall be used as a "prime coat" for all aggregate base areas, whether prior to asphalt concrete application or left exposed (as on driveway conforms), and as a tack coat for asphalt concrete overlay. Rates of application shall be 0.20-0.25 Gal/SY, or as directed by the Engineer, when used as a curing seal and on driveway and shoulder conforms, and 0.06 Gal/SY, or as directed by the Engineer, when used as a tack coat.

The area to which asphaltic emulsion has been applied shall be closed to public traffic, as directed by the Engineer. Care shall be taken to avoid tracking asphaltic emulsion onto existing pavement surfaces beyond the limits of construction.

The Contractor will be responsible for any asphaltic emulsion stains occurring during the course of this Contract. Such stains will be cleaned by sandblasting, or any other method satisfactory to the Engineer. The cost of repairing this damage shall be considered as included in the Contract unit bid price paid per ton for asphalt concrete (Type A HMA, 1/2" Maximum)," and no additional compensation will be allowed therefore.

94-1. Asphaltic Emulsion (Prime Coat, Curing Seal or Tack Coat)

When used as a curing seal and for driveway and shoulder conforms, emulsion shall be spread at a rate of 0.20-0.25 gal/SY or as directed by the Engineer.

When used as a tack coat, emulsion shall be spread at a rate of 0.06 gal/SY or as directed by the Engineer.

The Contract unit price paid per ton for this item, "Asphaltic Emulsion," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in furnishing and placing asphaltic

emulsion as curing seal for cement treatment, prime coat for aggregate base and tack coat for asphalt concrete, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

The asphaltic emulsion used for miscellaneous asphalt concrete and deep lift areas shall not be paid under this item, "Asphaltic Emulsion," and shall be considered as included in these items, "Place Asphalt Concrete (Miscellaneous Area)" and "Deep Lift Areas (0.50' Deep Asphalt Concrete)".

No adjustment of the Contract bid price will be made for any increase or decrease in the quantities of this item, "Asphaltic Emulsion," required. The provision in Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item of work.

END OF SECTION

SECTION 100.
CONSTRUCTION STAKING

Section 5-1.26, "Construction Surveys," of the Standard Specifications shall not apply to this section.

The Contractor shall be responsible for all land surveying and shall provide construction stakes or marks necessary to establish the limits, lines, alignments, and grades required for proper construction staking layout and completion of the work as shown on the drawings, as specified in these Special Provisions, and as directed by the Engineer. All construction staking shall be provided under the direction of either a professional land surveyor licensed by the State of California or an Engineer qualified to perform land surveying.

The survey datum used for the project shall be in accordance or tied-in with the County datum, as referenced on the Plans.

The Contractor shall provide and establish the construction staking of principal structures, and set grades and benchmarks as required. It will be the Contractor's responsibility to layout the work from the lines and grades, and to transfer elevations from the benchmarks set. All staking, locating, and layout work required for construction purposes shall be performed by the Contractor. Where new construction connects to existing facilities, the Contractor shall check and establish the exact location of existing facilities prior to construction of new facilities.

When using construction stakes to establish alignment, the Contractor shall use a minimum of three (3) stakes to check horizontal alignments, and a minimum of two (2) stakes to check vertical alignments.

Should an occasion arise where the validity of a stake is questionable, either as to its location, or the elevation marked thereon, the Contractor shall check the stake or stakes in question. The Contractor shall be responsible for correcting any alignment or elevation errors that resulted from incorrect staking.

The Contractor shall maintain a complete and accurate log of all control and survey work as it progresses. On completion of site improvements, the contractor's surveyor shall prepare a certified survey drawing showing all dimensions, locations, angles, and elevations of construction.

The Contractor shall set or establish the necessary construction layout stakes and markings a minimum of **two (2) working days** in advance of the work and shall notify the Engineer when such markings have been set.

The Contractor shall protect all monumentation and survey points in their undisturbed location and condition. Damage, as a result of the Contractor's operations, to the existing monuments, survey markers, or reference points that are not part of this Contract, shall be repaired and replaced at the Contractor's expense.

The Contractor's attention is directed to Section 100-1, "As-Built Drawings," of these Special Provisions for additional requirement for submittal of As-Built Drawings upon completion of this project.

The Contract lump sum price paid for this item, "Construction Staking," shall include full compensation for furnishing all labor, supervision, materials, tools, equipment and incidentals, and for doing all work involved in construction staking, surveying, layout, and replacing any survey monuments or markers, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, including providing documentation and as-built survey data to the County Surveyor upon completion of the project, and no additional compensation will be allowed therefore.

The County reserves the right to eliminate this item, "Construction Staking," from the project completely. The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any costs. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.

100-1. As-Built Drawings

In order for the County to produce As-Built Drawings for this project, the Contractor shall submit a PDF copy of the Plans with appropriate as-built information mark-ups, which Plans shall be signed by the Contractor certifying the accuracy of the as-built drawings, including that elevations and locations of improvements are in accordance with the contract Documents. Should the Engineer determine that additional information is required to produce accurate As-Built Drawings, the Contractor shall provide such information within **ten (10)**

calendar days after receiving the written request for said additional information. The cost for providing this additional information shall be at the Contractor's expense, and no additional compensation will be allowed therefore.

Full payment for conformance with this Special Provision shall be considered as included in the Contract price paid for Construction Staking, and no additional compensation will be allowed therefore.

The Contractor is advised that Final Progress Payment may be withheld until satisfactory as-builts plans, as determined by the Engineer, are submitted to the County. Payment maybe withheld upon the determination by the County that the withholding of such amount is no longer necessary.

END OF SECTION

SECTION 101.
ROOT CONTROL

Installation of root control shall conform to the provisions in these Special Provisions, the Plans and as directed by the Engineer.

Root Control shall be "Typar Biobarrier" or approved equal. Width of biobarrier shall be at least 18". Seaming can be accomplished by using construction adhesive and/or overlapping. Overlapping joints seams shall be overlapped at least 3" (or 2 nodules width). Sod pins may also be used for seams without any gaps. Pins shall penetrate fabric between the nodules 1/4" from the top edge of the fabric at a 45 degree angle.

Adhesive can either be hot application or cold application. The hot application adhesive shall be "General Adhesive Co. Hot Melt #64 x 884" or approved equal with a continuous bead width of 6mm. The cold application adhesive shall be "Macco Adhesives Liquid Nails Heavy-Duty Adhesive LN-901 or approved equal.

The Engineer shall be notified immediately if conflicts with tree roots greater than **four inches (4")** in diameter are identified so that the Engineer may call an arborist to the site to evaluate. **No tree roots greater than 4" in diameter shall be cut without prior written authorization from the Engineer.** Where roots greater than 4" in diameter are encountered, the Contractor may be required by the Engineer to hand excavate material in order to conform to the project structural section requirements.

Tree roots requiring removal must be severed by means of a root cutter.

The Contract unit price paid per linear foot for this item, "Root Control," as required by the Plans and these Special Provisions, shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and placing root control complete in place, including adhesives, as specified herein and as directed by the Engineer, and no additional compensation will be allowed therefor.

The County reserves the right to eliminate this item, "Root Control," from the project completely. The Contractor shall request and receive written

confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantity of Root Control required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to this item.

END OF SECTION

SECTION 102.
SPECIAL CONDITIONS FOR SANITARY SEWER WORK

102-1. Project Location

The work under this contract will be performed at the locations as shown on the Project Plans.

102-2. Inspection of Work Sites

Bidders are required to inspect the sites of the work in order to satisfy themselves by personal examination or by such means, as they may prefer, of the location of the proposed work and of the actual conditions of the site of work. If, during the course of his examination, a bidder finds facts or conditions, which appear questionable or inconsistent, he may apply to the County for additional information and explanation before submitting his bid. However, no such supplemental information requested or furnished shall vary the terms of the specifications or the Contractor's sole responsibility to satisfy himself as to the conditions of the work to be performed.

102-3. Subsurface Conditions Data

The County has not conducted any investigation of subsurface soil conditions.

Lack of this information is not intended to be and shall not be construed to be a waiver of the provisions of Section 102-2, "Inspection of Work Sites" and will not relieve the bidder or Contractor from any risk, or from properly examining the sites and making such additional investigations as he/she may elect, or from properly fulfilling all the terms of the Contract Documents.

102-4. Pre-Construction Conference

After award of the Contract and prior to the issuance of the Notice to Proceed, the various parties with an interest in the project including the contracting partner, subcontractors, and public officials shall meet to discuss and coordinate the required construction activities and determine when construction can proceed. The conference will take place at a time and location designated by the County.

102-5. Existing Alignment of Sewers

The alignments of the existing sewers noted on the drawings are based on topographic surveys of the manhole inverts. No potholing was done over the existing sewers, and as such the alignment of the sewers may vary. The Contractor is to exercise extreme care in excavation such that existing utilities are not disrupted and existing utilities to remain are not damaged.

102-6. Surveys

See Section 100, "Construction Staking"

102-7. Contractor Coordination

The Contractor shall also coordinate his/her work in the project area with other contractors, public agencies, public utility agencies, and utility companies to minimize delays in the completion of the contract.

102-8. Existing Utilities

The Contractor is advised that California Water Service Company (Calwater) may have relocation of their water main pipe on Encina Avenue from Middlefield Road to End of Encina Avenue. Abandoned underground water main or service pipes may have been left at the sites.

The Contractor is also advised that the existing sewer laterals shown on the Project Plans are for informational purposes, and that he/she shall locate all existing sewer laterals for service lateral reconnection. The locations of all existing utilities, whether above ground or underground, are not indicated on the Plans, except for the approximate locations of some existing water and gas facilities or unless noted on the Project Plans otherwise.

The Contractor shall contact the USA North811 (USA) either on-line at usanorth811.org or by phone by dialing (800) 227-2600 or 811, and notify the Underground Services Alert Agency and notify the underground utility companies of his/her intention to work in the vicinity of their facilities and shall enlist their help to pinpoint the exact location, both in plan and elevation, of their utilities. The Contractor, at no increase in cost to the County, shall perform any special construction techniques required in order to avoid existing utilities.

Existing aboveground utilities, including but not limited to power transmission and distribution, telecommunication (cable, fiber optic, telegraph,

telephone, etc.) and traffic control systems, whether shown on the drawings or not, shall be maintained by the Contractor with the least possible interference with the use of such facilities at no increase in cost to the County.

The right is reserved by Owners of utilities and franchises to enter upon any street, road, right-of-way or easement for the purpose of maintaining their property/facilities and for making necessary repairs or changes as result of the work.

102-9. Construction Utilities

The Contractor shall provide all water required for construction purposes. He shall also provide power as required for the work.

Full compensation for providing water, power and other construction utilities for the whole project shall be considered as included in the various contract unit prices, and no separate payment will be made therefor.

102-10. Shop Drawing and Sample Submittals

1. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules and manufacturer's instructions as specifically required in the specifications and all other information as may reasonably be required to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the specifications and drawings. If the information shows any deviation from the contract requirements, the Contractor shall, by a statement in writing accompanying the information, advise the Engineer of the deviation and state the reason therefore. It shall be the Contractor's responsibility to ensure there is no conflict with other submittals and to notify the Engineer in any case where his submittal may concern work by another contractor or the County.
2. Samples are physical examples furnished by the Contractor to illustrate the quality of materials, equipment or workmanship, and to establish standards by which the work will be judged.

102-11. Review of Contractor's Submittals

1. The Contractor shall review, stamp with his approval, and submit within ten (10) working days, and in orderly sequence, all shop drawings and

samples required by the Contract Documents or subsequently by the Engineer as covered by field conditions of Change Orders. By approving and submitting the shop drawings and samples, the Contractor thereby represents and has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated each shop drawing and sample with the requirements of the work and Contract Documents.

2. The Engineer will review and approve shop drawings and samples within ten (10) working days, but only for conformance with the design concept of the work and with the information given in the Contract Documents. The Engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions. Complete and accurate shop drawings must be submitted for review time to begin. Incomplete or illegible submittals, as determined by the Engineer will be returned without comment.
3. The Contractor shall make any corrections required by the Engineer and shall resubmit the required number of corrected copies of shop drawings or new samples until approved. The Contractor shall bring to the Engineer's attention, through written correspondence revisions other than the corrections requested by the Engineer on previous submissions. For the trench shoring system, the Contractor shall submit to the Engineer the design and calculations for the system proposed. Said design and calculations shall be performed and stamped by a Civil or Structural Engineer, registered in the State of California.
4. Shop drawings and samples shall be properly identified as specified, or as the Engineer may require. At the time of submission, the Contractor shall inform the Engineer in writing of any deviation in the shop drawings or samples from the requirements of the Contract Documents.

102-12. Effect of Acceptance of Contractor's Submittals

1. The Engineer's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Engineer in writing of such deviation at the time of submission and the Engineer has

given written approval to the specific deviation, nor shall the Engineer's approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

2. **No portion of the work requiring a shop drawing or sample submission shall commence until the Engineer has approved the submission in writing. All such portions of the work shall be in accordance with approved shop drawings and samples.**

102-13. Number of Copies of Contractor's Submittals

The Contractor shall submit three (3) copies of review drawings or information regarding materials and equipment. The Engineer, after taking appropriate action, will return a marked copy to the Contractor.

102-14. Public Convenience

If, during short periods of time, the sewage flow is to be interrupted for connection purposes or other delicate operations, the Contractor must contact and notify the residents of the property of the schedule of interruptions of sewage flow. Short periods of time are defined to not exceed four (4) hours. Interruption longer than this will not be allowed without advance written approval of the Engineer. The Contractor shall provide written notification to such parties of interruption to sewage flow not less than two (2) working days prior to disruption and no more than five (5) working days prior to disruption.

The Contractor shall not open more trenches in advance of pipe laying than is necessary to expedite the work. No trench shall be open at the end of the working day.

Throughout the performance of the work, or in connection with this contract, the Contractor shall construct and adequately maintain suitable and safe crossings over trenches; driveway access and such detours as are necessary to care for vehicle and public pedestrian traffic. In no case, shall access to any driveway be impacted more than eight (8) hours.

102-15. Storage of Material

The Contractor is advised that areas within project right-of-way may be used for parking equipment and storing materials. The Contractor may park equipment or store materials only at locations where he has obtained permission from the adjacent property owner or from or County of San Mateo (including

areas within the road right-of-way). The Contractor shall not store materials at any site more than five (5) working days, before they are to be used. All unused materials shall be removed within five (5) working days after they are no longer needed. All stored materials shall be kept at least 15 feet from fire hydrants; five (5) feet from mailboxes and 20 feet from storm drain inlets.

102-16. Construction Noise Control

The Contractor shall take all necessary precautions to minimize construction noise. All plant and equipment shall be fitted with suitable noise reduction devices such as mufflers, inlet and exhaust silencers, and engine covers, which shall be maintained in good working order.

The Engineer shall decide on the adequacy of provision and maintenance of noise reduction equipment. When so instructed in writing by the Engineer, the Contractor shall immediately withdraw any item of plant or equipment from service and carry out all necessary additions, replacements or repairs to the noise reduction equipment to the satisfaction of the Engineer.

102-17. Sanitary Sewage Bypass Pumping

The Contractor shall be responsible for maintaining all flows within the sanitary sewer system at all times during this project. The Contractor shall bypass the flows around those sections of pipe to be replaced. Certain individual services and laterals within the project areas may also require bypassing during the pipe bursting operations as determined by the Engineer. New pipes shall not be used to convey sewage flows until the new pipe has been tested and approved for use by the Engineer, per Section 110, "Sanitary Sewer Testing," of these Special Provisions.

The Contractor shall be required to submit a Sanitary Sewer Bypass Plan for review and approval by the Engineer. This Sewer Bypass Plan shall describe the sequencing of operations and sewer bypass work and shall include all materials proposed to be used as part of the sewer bypass system.

The Contractor shall submit plan to bypass the flows around the sections of pipe to be replaced and the manholes being removed and replaced. The bypass shall be made by plugging an existing upstream manhole if necessary and pumping the sewage into a downstream manhole or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow.

The Contractor shall also provide a spare pump on site to handle the flow. The bypassing systems proposed to be used by the Contractor shall be submitted to the Engineer for review and approval. Approval of the bypass system by the Engineer shall in no way be construed as relieving the Contractor of any responsibility under this contract as related to protection of the interests of the County and the general public.

In the event of accidental spill or overflow, the Contractor shall immediately stop the spillage or overflow, perform cleanup operations, and disinfect the affected area, as determined by the Engineer, to the satisfaction of the Engineer.

The Contractor shall be equipped with the necessary tools and materials, that meet the requirements of all regulating agencies, to contain, clean up and dispose of any sewage contamination that may occur during bypass operations, including providing at least one (1) back-up pump in case of failure of the primary pump. The back-up pump(s) shall be on-site at all times, and the Contractor shall demonstrate to the Engineer that the back-up pump(s) are in working order prior to the start of any sewage bypass operations.

At the end of each working day, a temporary tie-in shall be made between the replaced section of pipe and the existing system. The bypass plug will either be removed or the pumps will be manned on a 24-hour basis.

Under no circumstances will the dumping of raw sewage on private property, in public streets, into storm drain systems or at any location other than an approved sanitary sewer main, be allowed.

Bypassing of untreated or partially treated wastewater to surface waters or drainage courses will not be permitted during construction. Bypassing of untreated wastewater to surface waters and drainage courses will result in assessment of any and all costs incurred by the County for the remedial actions. The Contractor shall comply with all State and Federal regulations. **The Contractor's attention is directed to the following requirements in the event that untreated or partially treated wastewater enters a natural water or drainage course:**

- a. **Contractor will begin cleanup efforts immediately.**
- b. **Contractor will notify the Engineer and, subsequently, the California Regional Water Quality Control Board at (510) 622-2300 and be**

prepared, at that time, to fully describe the nature of the spill and the cleanup efforts that are being undertaken to mitigate the spill.

- c. **Notification and response procedures shall be consistent with the California State Water Resources Control Board's Statewide General Waste Discharge Requirements for Sanitary Sewer Systems adopted on May 2, 2006 and subsequent amendments issued on February 20, 2008 and July 26, 2013, which are included in Appendix B of these Specifications.**

Full compensation for conforming to the requirements of this item, "Sanitary Sewage Bypass Pumping ," shall be considered as included in the unit prices paid for the various Contract items of work in Section 103-19 "Pipe Burst Existing 6" VCP and Install 6" HDPE in Street", Section 103-19 "Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement" and Section 104-2 "Install 6" PVC by Open Trench Method" of these Special Provisions, and no additional compensation will be allowed therefore.

102-18. Restoration of Structures and Surfaces

1. General

Whenever any of the work is accomplished on or through property other than the road right-of-way, the Contractor shall be required to take photographs of and video the private property (from point of entry onto private property to point of exit of private property, including the property address) where the work is to be performed prior to the starting of the work and after the work has been completed and furnish the County, before its final acceptance of the work, with a written release from the property owner or proper authority acting for the property owner of the property affected, stating that the restoration of structures and surfaces has been satisfactorily accomplished. The photographs and video shall be provided to the County.

All removal and restoration costs shall be borne by the Contractor. Material removed and not to be incorporated in the contract work shall become the property of the Contractor and shall be disposed of outside of the public right-of-way in accordance with Section 5-11 of

these Special Provisions at no additional cost to the County and/or affected property owner.

2. Cultivated Areas, Fences and Other Surface Improvements

All cultivated areas, either landscaping, natural vegetation areas, shrubs, irrigation lines, concrete sidewalk, gutters, asphalt concrete pavement, concrete or decorative pavers, or other surface improvements which are damaged by actions of the Contractor, shall be restored to same or better condition as their original condition to the satisfaction of the Engineer. It is expected that the Contractor will and can determine the existence of such improvements by a site visit and video prior to the commencement of work. Accordingly there shall be no additional payments whatsoever for the required restoration of any such improvements.

102-19. Protection of Existing Installations

The Contractor is advised that he will be required to correct or replace, without delay, any and all damage to existing structures, utilities and equipment resulting from his operation. The Contractor is advised that existing utilities may be very close to the proposed sanitary sewer and that he is responsible for field verification of utility locations. Any required construction techniques performed by the Contractor to support such utilities shall be at no extra cost to the County.

Compensation for this task shall be included in the unit cost per linear foot for respective bid items for sanitary sewer pipe replacement, and no additional compensation will be allowed therefor.

102-20. Project Record Drawings

Contractor shall maintain up to date record drawings during the course of sewer work and prior to final acceptance of the project. Contractor shall submit a complete set of redlined "as-built" record drawings. All reference dimensions, corrections to existing data shown on the plans and revisions to the constructed improvements, shall be shown on the record drawings. The "as-built" record drawings shall be legible.

Contractor is responsible for maintaining an accurate set of "as-built" drawings during the course of construction. **"As-built" drawings shall be reviewed as part of each progress payment. Payments will not be**

approved if such drawings are not marked with up to date record information as of the date of the progress payment submission.

Record drawings must be submitted and approved by the Engineer before the County releases retention on the project.

Compensation for this task shall be included in this item, "Construction Staking," and no additional compensation will be allowed therefore. Reference is made to Section 100-1, "As-built Drawings."

102-21. Cleaning Up

The Contractor shall not allow the site of the work to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction period. On or before the acceptance of the work, the Contractor shall carefully clean out all pits, chambers or conduits, shall tear down and remove all temporary structures built by him and shall remove rubbish of all kinds from any of the grounds which he occupied and leave them in an acceptable condition to the satisfaction of the Engineer.

The Contractor shall remove all construction debris within private property easements by the end of each working day.

Excess dirt or soil material and waste materials, including rubbish of any kind shall become the property of the Contractor and shall be disposed of outside of the public right-of-way in accordance with Section 5-11 of these Special Provisions. The Contractor shall pay for all disposal costs without any increase in the Contractor's bid price.

102-22. Documentation of Existing Conditions

Prior to the start of construction work, the Contractor shall thoroughly document and record the existing conditions throughout the project site with photographs and/or videotape. Recording shall include and show every detail of existing improvements, including the current condition of any features within the limits of work.

Recommended features to document are as follows, but are not limited to:

- Streets adjacent or nearby the work
- Easement areas where work is being performed or through which the Contractor will travel to access the area where work will be performed

- Driveways, Sidewalks, Pavers, Curbs, Valley Gutters, and other Surface Concrete
- Mailboxes
- Utility covers
- Poles
- Landscaping
- Fences
- Drainage Structures and Channels
- Sewer Manholes
- Trees
- Face of buildings nearby the work

Full compensation for conforming to the requirements of this Section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 103.
SANITARY SEWER REHABILITATION
PIPE BURSTING METHOD

The Contractor is advised that the sewer rehabilitation work is within public road right-of-way and utility easements. It is the Contractor's responsibility to restore access areas to their original or better conditions.

Sanitary sewer facilities not designated on the Plans or by the Engineer for removal shall remain in place. Damage to these facilities, as a result of the Contractor's operations, shall be repaired by the Contractor, all at the expense of the Contractor, to the satisfaction of the Engineer and no additional compensation will be allowed therefor.

The Contractor shall contact USA North811 (USA) service alert a minimum of forty-eight (48) hours in advance of any excavation or trenching work. USA may be contacted either on-line at usanorth811.org or by phone by dialing (800) 227-2600 or 811.

103-1. Scope

The work shall consist of furnishing all labor, materials, equipment, and supervision to perform all work necessary to replace certain sanitary sewer lines identified on the Plans, and in accordance with these Special Provisions. The required method of replacement is pipe bursting utilizing hydraulically pulled bursting devices. The pipe bursting work shall consist of, but not necessarily be limited to, performing the following tasks:

- a. Sewage flow bypassing during the pipe bursting operations.
- b. Location, disconnection and reconnection of all existing live laterals.
- c. Existing pipe bursting and new pipe pulling.
- d. Excavation and backfill of access pits.
- e. Sag repair.
- f. Point Repair.
- g. Testing.

It is CONTRACTOR's responsibility to determine the exact location and depth of all existing utilities, including service connections, which have been marked by the utility owners, which are shown on contract drawings, and which the CONTRACTOR believes maybe impacted by the Work.

The CONTRACTOR is cautioned that unknown utilities may be encountered or that the exact location of known utilities may be different than marked on the surface. If unknown utilities are encountered, work in that area must not proceed without County approval.

The CONTRACTOR shall take necessary precautions to prevent damage to existing structures, utilities, and hardscapes whether on the surface, aboveground, or underground.

After award of the Contract and before any products are delivered to the job site, the Contractor shall submit to the Engineer a complete list of all materials proposed to be furnished and installed. The list must show manufacturer's name and catalog number for each item, complete catalog cuts and technical data, and the manufacturer's recommendations as to method of installation.

103-2. Sewage Bypassing

Refer to Section 102-17, "Sanitary Sewer Bypass Pumping" .

103-3. High Density Polyethylene Pipe

High density polyethylene (HDPE) sewer pipe and fittings shall be Driscoplex 4100, SDR 17 or approved equal, consisting of virgin high molecular weight polyethylene, specified under ASTM D3350 as having a cell classification of PE345434C and soft white or gray interior surface (black color will not be allowed). Pipe shall have a manning "n" factor of 0.009 for gravity flow. Manhole adapter rings shall conform to recommendations of manufacturer of the HDPE pipe supplied.

103-4. Pipe Installation

1. Fitting and Joint

Pipe shall be butt welded in accordance with ASTM D 2657. The joints shall be leak proof thermal butt joints. All fusing shall be done using tools recommended by the pipe supplier and approved by the Engineer.

The fusing machine shall have hydraulic pressure control for fusing two (2)

pipe ends together. The ends of pipe shall be electrically heated and thermostatically controlled and shall contain a temperature gauge for monitoring temperature. The heating plate shall be subject to periodic inspection using a temperature stick to assure even heating.

The tensile strength of yield of the butt fusion joints shall not be less than the pipe. The Contractor shall test a specimen of pipe cut across the butt fusion joints in accordance with ASTM D638.

Any material may be rejected for failure to meet any of the requirements of these Special Provisions. The acceptance of any deviation from these Special Provisions shall be subject to the approval of the Engineer.

Joints between pipe sections shall be smooth on the inside and internal projection beads shall not be greater than 3/16 of an inch (5 mm).

The internal bead shall be removed with a tool specifically designed for that purpose during the fusing process.

A copy of the required butt fusion parameters listed below shall be kept at the job site so that the temperature and pressures of the jointing process are known and can be checked on site:

- a. The temperature at the surface of the heating plate (the fusion temperature);
- b. The pressure used to push the pipe against the heating plate;
- c. The time when the pipe ends are in contact with the heating plate but no pressure is being applied (soak time);
- d. The pressure used to push the pipe ends together after heating (the fusion pressure);
- e. The time of application of this butt fusion pressure (fusion cooling time);
- f. Allowable bead height and width range;
- g. Couplings shall not be used to connect HDPE pipe sections.

2. Method of Pipe Bursting

The method of pipe bursting shall be limited to hydraulically pulling a cone or hydraulically powered device or tool commonly known as a "mole" through the existing sewer pipes that are proposed for replacement. The mole is to be inserted in the sewer section to be replaced and shall be pulled by a pulling machine or a pulling winch located in a pulling manhole or pulling pit located along the alignment of the sewer section under consideration away from the mole insertion location. The mole shall pull behind the new sewer pipe to be placed along the same horizontal and vertical alignments of the existing sewer.

103-5. Pipe Bursting Equipment

1. Bursting Unit

The bursting unit or mole shall be made of steel and of a diameter that is adequate for forcing its way throughout the existing pipe bursting it as it progresses. The mole shall be equipped with proper attachments and/or ribs that allow for a steady pull in and bursting of the existing sewers without excessive displacement of the soils around the existing sewer, especially for shallow lines. The backside of the mole shall be of adequate size to allow for the proper pulling of the new sewer along the same vertical and horizontal alignments of the existing sewers.

- a. The design and shape of the mole shall be such that the existing pipe will be broken into many small fragments.
- b. The method of connection of the inserted pipe to the mole shall be so that stresses transmitted to the inserted pipe are not damaging to the pipe nor will they exceed the tensile capacity of the pipe.
- c. Provisions shall be made in the equipment to remotely start and stop the mole should it become necessary to temporarily cease moling operations.
- d. Measures shall be taken to ensure that the pipe does not become separated from the mole.

2. Winches or Pulling Unit

The winch or pulling unit shall be operated to provide constant pull to the bursting unit in order that it may operate in an efficient manner with

a minimum of recoil. It shall ensure directional stability in keeping the moling unit in line.

- a. The winch shall be of the constant load type but shall be fitted with a direct reading load gauge to measure the winching load. It shall also be fitted with a device to automatically disengage when loading exceeds a preset maximum load.
- b. Contractor shall supply sufficient cable in one (1) continuous length so that the pull may be continuous between winching points.
- c. The winch cable and cable drum shall be provided with safety cage and supports.
- d. The Contractor shall also provide a system of guide pulleys and bracing at each manhole to minimize contact of cable with the existing sewer between manholes.
- e. A nose cone shall be fixed to the first pipe or the head of the mole and shall be fitted with a swivel attachment to reduce the twist transmission between the winch cable and nose cone.
- f. Supports to the trench sheet in the insertion trench shall remain completely separate for the pipe support system and shall be so designed that neither the pipe nor the winch cable shall be in contact with them at any time.
- g. Proper clearance shall be provided below the existing pipe to allow for the proper use of winch.

103-6. Treatment of Pipe

1. At Intermediate Manholes

When the pipe passes through an intermediate manhole, it shall be cut in an approved manner so that 6" of pipe, as measured from the inside face of the manhole wall at the pipe penetration location, protrudes into the manhole or a top window cut out using the pipe as a trough. The invert of the manhole shall be broken out to a depth of 1-1/2" and rebenched using granolithic concrete. When the HDPE pipe is run through the manholes, the channel is formed by cutting out the top of the pipe using a small compressed air disc cutter. The repair of the base of the manhole is then completed by rebenching to the HDPE channel using granolithic concrete.

2. At Upstream and Downstream Manholes

At the upstream and downstream ends of the pipe, the pipe shall be cut in an approved manner so that 6" of pipe protrudes into the manhole. The invert of the manhole shall be suitably prepared such that a smooth transition shall be made from the existing pipe work to the new pipe. To construct a water tight seal of the HDPE pipe in the manholes at the entry and exit points, by installing manhole adapter rings, the ends of the pipe shall be surrounded by concrete, which forms part of the manhole base. There are additional methods for this operation, which may be employed such as mechanical anchoring system.

After pipe has been allowed to relax (approximately 48 hours), contractor shall trim off excess pipe inside manhole.

3. Pipe Insertion

- a. The installation forces on the pipe shall be kept to a minimum.
- b. Where a continuous length of pipeline is butt fused prior to insertion, the length of insertion pit shall be defined below:
 - (1) The bottom of the pit shall be horizontal and its length shall not be less than 12 times the diameter of the pipe to be inserted.
 - (2) The rear sloping face of the pit shall be not less than 27 times the diameter of the pipe.
 - (3) The radius of curvature of the inserted pipe shall not be less than 27 times the diameter of the pipe, or as recommended by the HDPE pipe manufacturer.
- c. Where a device is employed to exert force on the rear of the inserted pipe lengths, the force applied to the inserted pipe shall be evenly distributed around the wall of the pipe.
- d. Maximum force to be within stress limits of the pipe.
- e. Where lengths of pipe are jointed and a device is employed to exert force to the rear of the inserted pipe lengths, precautions shall be taken by the Contractor to ensure that no buckling, crushing or twisting of the pipe occurs.
- f. Where lengths of HDPE pipe are pushed, there is no relaxation time required to allow pipe to return to its original length.

103-7. Insertion and Pulling Pits

The size, location and method of excavation of all pits on site shall be determined prior to start of construction and documented in a "Pipe Bursting Work Plan". The "Pipe Bursting Work Plan" shall be submitted to the Engineer a minimum of 10 working days prior to the work. The plan shall include at a minimum: locations and sizes of insertion/retrieval pits and pipe laydown alignment (shown on a dimensioned plan view of the jobsite), lateral and other utility excavations, method of manhole connection(s), pipe pull force limits, and vibration monitoring plan.

The excavations are supported using trench sheets and speed shoring, or approved equivalent. The end of the launching pit on which the pusher forces are exerted is supported using 12"x12" timbers to allow these forces to be dissipated into the surrounding soil.

103-8. Excavations and Backfill

Trenches for sanitary sewer lateral connections shall be prepared and backfilled in accordance with sound engineering practices and according to ASTM D2774 and D2321.

In considering locations for access pits, the Contractor shall consider the size of the sewer, access to the work area, locations of obstructions and services, pulling distances, traffic conditions, and locations of utilities and sewer laterals. When possible, intermediate access excavations can coincide with building service connection excavations or critical obstructions in the sewer. The locations of the excavation points should be such as to minimize disruption.

Insertion pits shall provide a minimum bending radius of 27 times the outside diameter of the HDPE pipe or greater and a maximum 4:1 back slope (one way insertion only) and a pit floor length of 12 times the pipe diameter. Pit width shall be two (2) feet wider than the outside diameter of the pipe, and shall have a back slope of 1:1. The slopes given are maximum and may have to be lessened depending on soil type, water table, whether or not sheeting is used, and other working conditions. A roller or rub shoe shall be installed at pipe entry to prevent pipe shatter as the pipe enters the existing line.

At all points where the new sewer pipe has been exposed, such as access shafts, service connections, outside of manholes, etc., the Contractor shall use

the bedding and backfill materials and compaction requirements as shown on the Plans.

Where an unstable or running soil condition occurs, such as in excavations below groundwater, bedding material shall be used according to the trench section detail specified in the Plans and Specifications. It may be necessary to increase the trench width to obtain the desired lateral support for the pipe.

103-9. Manhole Connection

Work included involves connection of new sewer main to existing or new manholes and connection of existing laterals to new manholes.

New HDPE pipe can be connected to manholes in the following manner:

- 1) Cut opening in manhole wall and insert new pipe into manhole,
- 2) Connect to a new HDPE stub that has been installed in the manhole. Connection to a new HDPE stub is only allowed at one end of the new HDPE pipe. Stub shall be connected to new pipe using electrofusion coupling. Contractor shall not utilize Method 2 without written permission from the Engineer.

Execution of this item consists of the following step

1. Protect downstream sewer line from construction debris.
2. Prepare manhole opening for insertion of HDPE pipe.

Where new openings are required for connections to sanitary sewer manholes, cut an opening in the wall of the structure, insert a length of HDPE pipe into or passing HDPE pipe through the opening, fill around the pipe with Class 2 concrete, and trowel the inside and outside surfaces of the joint to a neat finish. Said opening shall not be greater than two inches (2") larger than the outside diameter of the pipe. Care shall be exercised in cutting these openings to prevent cracking or breaking of said sanitary sewer manhole. Pipe openings broken in a ragged and unworkmanlike manner, as determined by the Engineer, shall be rejected and either repaired or replaced, as directed by the

Engineer, all at the Contractor's sole expense, and no additional compensation will be allowed therefor.

All HDPE pipe entering or leaving a manhole shall have a manhole adapter or water stop, as supplied by the pipe manufacturer, firmly seated around the pipe exterior and perpendicular to the pipe axis. Said manhole adapter or water stop shall be cast into the structure base or near the structure wall center.

3. Insert sewer pipe; trim flush with interior manhole wall; place manhole adapters and grouting seal connection.
4. Prepare manhole opening for insertion of existing laterals for new manholes.
5. Disconnect existing lateral behind manhole wall; core drill manhole wall to a minimum diameter 1-inch larger than outside diameter of existing laterals, extend disconnected existing lateral by installing appropriate pipe coupling between the existing lateral pipe and new lateral pipe, insert lateral through manhole wall opening; trim lateral flush with interior manhole wall, install manhole adapter ring or rubber gasket at the manhole connection to act as water stop, and grout and seal annular space with non-shrink hydraulic grout to produce watertight connection. Note that drop lateral connections shall be installed at their existing elevations at the manhole connection.
6. Remove construction debris from manhole, fill excavated area and restore surface area.

103-10. Reconnect Sanitary Sewer Laterals (Pipe Bursting Method)

The Contractor is advised that the laterals shown on the project plans are for informational purposes and the County makes no guarantee as to the actual quantity of existing sanitary sewer laterals requiring connection. Duplicate laterals (inactive existing laterals) shown on the Plans need to be determined and plugged. The Contractor shall use his/her own methods to locate and verify all active and inactive laterals prior to performing sewer mainline replacement.

Work included is as follows:

- a. Location of service laterals
- b. Excavation and exposure of connection
- c. Disconnection and permanent reconnection
- d. Excavation Dewatering
- e. Plugging of inactive laterals
- f. Restoration of excavated area

1. Connection

For HDPE pipe, an electro-fused HDPE wye (SDR-17) Fitting or approved equal connection per manufacture's recommendations.

2. Installation

All lateral connections to the existing main shall be located by the Contractor, exposed at the connections, disconnected and then permanently reconnected to the new pipe. The finished connection shall be made flush with the new sewer main and shall provide a smooth transition to the existing lateral network. The existing lateral line shall be tied in with minimum number of bands or fittings and be connected to a section of structurally sound pipe. The Contractor shall expedite the reconnection of lateral services to minimize any inconvenience to the residents.

All in-service "live" laterals shall be connected to main and constructed of the same material as the new sewer pipe and installed in accordance with the manufacturer's written instructions. The lateral connection shall be watertight and shall have the same structural integrity as the new sewer pipe

Standard length of lateral reconnection shall be five (5) feet including angled fittings, tapping product, transition coupling, new lateral pipe, connections to the mainline pipe, and connections to the existing lateral pipe and will be measured from the centerline of the sewer main and paid for under the bid item for "Reconnect Sanitary Sewer Lateral (Pipe Bursting Method)".

If additional length of existing lateral requires removal and replacement to connect to competent pipe beyond the 5 feet standard length, it shall be paid for under the bid item "Replace Existing Sanitary Sewer Lateral".

In the event existing asbestos cement laterals are encountered, they shall be cut with a handsaw or a band saw only, and shall be paid under Section 15-3,

“Remove and Dispose Existing Abandoned Asbestos Cement Pipe)”. Contractor is to follow all safety procedures for the handling and disposal of asbestos cement laterals encountered.

Additional requirements for sanitary sewer lateral work:

- i. **The Contractor shall notify the Engineer and the affected property owner/resident not less than five (5) working days prior to start of any work that a disruption in service will occur. Notification shall include the date and estimated time of disruption.**
- ii. **The content, format and method of delivery of such notices shall be approved by the Engineer prior to distribution. The Contractor is advised that these notices shall not be placed in mailboxes, as it is a violation of federal postal regulations**
- iii. **Failure to distribute notices shall be sufficient cause for the Engineer to suspend the work until such notices are distributed.**

If connection of laterals requires removal and replacement of concrete sidewalk, driveway, curb, gutter and concrete chicanes, concrete work shall conform to Section 108, “Restoration of Paved Surfaces and Improvements.

103-11. Existing Inactive Sewer Lateral

Contractor shall identify and verify all inactive laterals (factory capped or abandoned). Contractor shall provide COUNTY location of each inactive lateral (pipe segment and station) and provide a copy of the video documentation or other methods that were used to determine that the lateral is inactive. Only laterals that are deemed to be inactive in writing by the COUNTY shall be abandoned in place and not reconnected to the new pipe.

103-12. Replace Existing Sewer Lateral

Replacing the existing sewer lateral consists of connection of the existing sewer lateral to the newly connected lateral pipe to the new sewer main that is beyond the standard five (5) feet lateral reconnection.

Reference is directed to Section 109, “Sanitary Sewer Lateral Replacement”.

103-13. Plug Inactive Laterals

All inactive laterals (factory capped or abandoned) shall be located, exposed, disconnected from existing sewer main, and plugged with concrete at the edge of the trench with Class 3 concrete, to a minimum length of one (1) foot. Contractor shall determine all inactive laterals. Contractor shall notify the County if unsure of laterals being inactive before plugging them. **Contractor shall not plug any laterals without the written permission of the Engineer.** Payment for plugging existing inactive sewer laterals shall be considered as included in the respective bids item for reconnecting existing sewer laterals to new sewer main, and no separate compensation will be allowed therefor.

103-15. Vibration Monitoring

The CONTRACTOR shall address the potential for vibration impacts to residences during construction activities by preparing a detailed monitoring and notification plan, subject to review and approval by the ENGINEER. The plan shall include, at a minimum, the following items:

Public Notification. The CONTRACTOR shall notify property owners and residents located within 25 feet of pipe bursting activities at least ten (10) calendar days prior to construction with a notification specific to the pipe bursting activities. This notification may be combined with the Primary Notification required by Section 11-1. A secondary notification is required two (2) working days prior to construction. This notification may be combined with the Secondary Notification required in Section 12. Content of each notification must be approved by the Engineer prior to distribution to property owners.

The CONTRACTOR shall perform vibration monitoring to establish the level produced by high impact activities during construction. Monitoring should be conducted continuously whenever pipe bursting is done within 25 feet of any structure. Monitoring shall be conducted using a portable vibration monitoring instrument that provides a calibrated record of local ground movement/accelerations. If construction vibration exceeds 2.0 in./sec. at the nearest exterior wall of a structure, construction activities shall immediately stop, and alternative work methods shall be used. The monitoring protocol, proposed structures to be monitored and all monitoring results shall be submitted to the ENGINEER for review and approval.

At least ten (10) calendar days prior to construction, the CONTRACTOR shall inspect and record a pre-construction crack survey on a USB or DVD any structures within 25 feet of the proposed pipe bursting alignments. The video shall document the existing building and exterior improvements (e.g. hardscaping) conditions. The preconstruction crack survey inspection shall be done inside and outside of buildings. All existing cracks in walls, floors, driveways, hardscaping and so forth shall be documented in sufficient detail so that a post-construction comparison and determination of damage can be made.

103-16. Ground Movement Monitoring and Site Survey

The CONTRACTOR shall address the potential for ground movement impacts to structures and hardscape during construction activities by preparing a detailed site survey and monitoring plan, subject to review and approval by the ENGINEER and the COUNTY. The plan shall include at a minimum the following items:

1. Mitigation measures to limit damage to surface features, such as saw cutting pavement above trench lines, constructing parallel relief trenches, etc.
2. Movement monitoring, which as a minimum shall include:

Prior to beginning of pipe bursting operation, the CONTRACTOR shall install a minimum of three (3) nail and shiner along the side of the proposed monitoring structures.

The nail and shiner can be on the house siding or in ground such that it is 1-foot above the house foundation. At a minimum, the CONTRACTOR shall install one nail and a shiner at two corners of the structure and additional nail and shiner approximately in the middle distance of the structure.

The nail and shiner can be installed such that it is visible to the CONTRACTOR and the ENGINEER for elevation survey. The survey shall be based on the NAVD 1988 datum.

CONTRACTOR shall survey and record the elevation at each nail and shiner prior to beginning of pipe bursting; every half-hour during pipe-bursting operations; and every ten (10) minutes when leading edge of bursting head advances in parallel with house foundation; and after the completion of pipe bursting operation.

All elevations shall be recorded and provided to the COUNTY and the ENGINEER.

CONTRACTOR shall immediately stop the operation when the change in elevation is measured to be 0.01 feet or more and notify the COUNTY and the ENGINEER.

103-18. Cleanup

Upon completion of all work, Contractor shall remove all surplus materials and rubbish, shall repair all damages caused by his workers and shall leave the premises in a clean and orderly condition.

103-19. Measurement and Payment

a. Pipe Burst Existing 6" VCP and Install 6" HDPE in Street

"Pipe Burst Existing 6" VCP and Install 6" HDPE in Street", will be measured for payment along the longitudinal axis of the pipe, as laid by the linear foot in public right of way. The measurement will be from the center of manholes, or where the sewer does not terminate in a manhole, it shall be measured to the end of the pipe as constructed.

Payment will be made at the unit price per linear foot for the respective items by the "Pipe Burst Existing 6" VCP and Install 6" HDPE in Street". Payment will include compensation for furnishing all labor, materials, tools, equipment and incidentals, supervision to perform all work necessary to replace certain sanitary sewer mains, as shown on the Plans and in accordance with these Specifications. The pipe bursting work shall consist of, but not necessarily be limited to, bypassing of sewage flow during the whole operation, bursting of the existing pipe and pulling of the new HDPE pipe, connection of HDPE main to manholes, pre and post site survey, pre and post crack and damage surveys, television inspection before and after pipe bursting, and testing of new pipe. Bid unit price also includes compensation for dewatering, pit excavation, locating and plugging inactive laterals, backfill including bedding material and imported backfill, aggregate base, compaction, disposal of material, replace or repair of damaged existing or nearby structures or surface improvements caused by the installation of the new pipe, and surface restoration complete in place.

No adjustment to the Contract bid prices will be made for any increase or decrease in the quantities for the respective bid items by the "Pipe Bursting" method. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to these items of work.

b. Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement

Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement", will be measured for payment along the longitudinal axis of the pipe, as laid by the linear foot in easement area. The measurement will be from the center of manholes, or where the sewer does not terminate in a manhole, it shall be measured to the end of the pipe as constructed.

Payment will be made at the unit price per linear foot for the respective items by the "Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement" as shown on the Plans and these Special Provisions, and as directed by the Engineer, and no additional compensation shall be allowed therefore. Payment will include compensation for furnishing all labor, materials, tools, equipment and incidentals, supervision to perform all work necessary to replace certain sanitary sewer mains, as shown on the Plans and in accordance with these Specifications. The pipe bursting work shall consist of, but not necessarily be limited to, bypassing of sewage flow during the whole operation, bursting of the existing pipe and pulling of the new HDPE pipe, connection of HDPE main to manholes, pre and post site survey, pre and post crack and damage surveys, television inspection before and after pipe bursting, and testing of new pipe. Bid unit price also includes compensation for dewatering, pit excavation, locating and plugging inactive laterals, backfill including bedding material and imported backfill, aggregate base, compaction, disposal of material, replace or repair of damaged existing or nearby structures or surface improvements caused by the installation of the new pipe, and surface restoration complete in place.

No adjustment to the Contract bid prices will be made for any increase or decrease in the quantities for the respective bid items by the "Pipe Bursting" method. The provisions of Section 9-1.06, "Changed

Quantity Payment Adjustments,” of the Standard Specifications shall not apply to these items of work.

c. Reconnect Sanitary Sewer Laterals (Pipe Bursting Method)

The Contract unit price paid per each for "Reconnect Sanitary Sewer Laterals (Pipe Bursting Method)" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work required to reconnect sanitary sewer laterals, complete in-place, including pavement restoration, and replacement of 5 feet of sanitary sewers laterals, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

No adjustment of the contract unit price per each will be made for any increase or decrease in the quantity of "Reconnect Sanitary Sewer Laterals (Pipe Bursting Method)". The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to these items.

d. Replace Existing Sewer Lateral

Replacing the existing sewer lateral consists of connection of the existing sewer lateral to the newly connected lateral pipe to the new sewer main that is beyond the standard five (5) feet lateral reconnection. Reference is directed to Section 109, "Sanitary Sewer Lateral Replacement".

END OF SECTION

SECTION 104.
SANITARY SEWER REHABILITATION
OPEN TRENCH METHOD

Except as provided for under Sections 106, "Manholes Construction," 108, "Restoration of Paved Surfaces and Improvements," and 110, "Sanitary Sewer Testing," the work performed under this Section 104, "Sanitary Sewer Replacement Open-Trench Method," shall consist of furnishing all labor, materials, tools, equipment and incidentals necessary for doing all work required to replace designated sanitary sewer lines by the open-trench method, including, but not limited to removal of existing sanitary sewer pipe and installation of new polyvinyl chloride (PVC) pipe, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

Reference is made to Sections 19, "Earthwork," 102-17, "Sanitary Sewer Bypass Pumping," 107, "Trench Safety, Trenching and Trench Backfill," 110, "Sanitary Sewer Testing," and 108, "Restoration of Paved Surfaces and Improvements," of these Special Provisions.

Plastic pipe shall conform to Section 64, "Pipes," of the Standard Specification and these Special Provisions. Section 4-1.106, "Differing Site Conditions (23 CFR 635.109)," of the Standard Specifications shall not apply to this item.

The work shall consist of furnishing all labor, materials, equipment, and supervision to perform all work necessary to remove and replace a section of existing 6" VCP sewer pipe with new 6" PVC sewer pipe.

Sanitary sewer facilities not designated on the Plans or by the Engineer for removal shall remain in place. Damage to these facilities, as a result of the Contractor's operations, shall be repaired by the Contractor, all at the expense of the Contractor, to the satisfaction of the Engineer and no additional compensation will be allowed therefor.

The Contractor shall contact USA North811 (USA) service alert a minimum of forty-eight (48) hours in advance of any excavation or

trenching work. USA may be contacted either on-line at usanorth811.org or by phone by dialing (800) 227-2600 or 811.

104-1. Scope

The work shall consist of furnishing all labor, materials, equipment, and supervision to perform all work necessary to replace certain sanitary sewer lines identified on the Plans, and in accordance with these Special Provisions. The required method of replacement is open trench. The open trench work shall consist of, but not necessarily be limited to, performing the following tasks:

- a. Sewage flow bypassing during the open trench operations.
- b. Location, disconnection and reconnection of all existing live laterals.
- c. Locate and plug all existing inactive laterals.
- d. Remove existing 6" VCP and install 6" HDPE.
- e. Testing.

It is CONTRACTOR's responsibility to determine the exact location and depth of all existing utilities, including service connections, which have been marked by the utility owners, which are shown on contract drawings, and which the CONTRACTOR believes maybe impacted by the Work.

The CONTRACTOR is cautioned that unknown utilities may be encountered or that the exact location of known utilities may be different than marked on the surface. If unknown utilities are encountered, work in that area must not proceed without County approval.

The CONTRACTOR shall take necessary precautions to prevent damage to existing structures, utilities, and hardscapes whether on the surface, aboveground, or underground.

After award of the Contract and before any products are delivered to the job site, the Contractor shall submit to the Engineer a complete list of all materials proposed to be furnished and installed. The list must show manufacturer's name and catalog number for each item, complete catalog cuts and technical data, and the manufacturer's recommendations as to method of installation.

104-2. Sewage Bypassing

Refer to Section 102-17, "Sanitary Sewer Bypass Pumping".

104-3. Polyvinyl Chloride (PVC) Pipe

Polyvinyl chloride (PVC) pipe shall conform to ASTM Specification D3034 (for 4" to 16" PVC sewer pipe), SDR 26, and to these Special Provisions, the Plans, and the directions of the Engineer.

PVC sanitary sewer pipe shall be Closed Profile smooth inside and outside, and shall be of the diameters shown on the Plans. The pipe and fittings shall be homogenous throughout and free from visible cracks, holes, foreign inclusions and other injurious defects. The pipe shall be as uniform as commercially practical in color, capacity, density, and other physical properties.

Joints shall be a bell and spigot assembly with elastomeric sealing gaskets. Sealing gaskets shall meet the requirements of ASTM Specification F477. Solvent joints will not be allowed.

Gaskets shall be factory installed and chemically bonded to the bell end of the pipe. Field installed gaskets and field cut beveled lengths of pipe shall be done in accordance with the manufacturer's instructions and recommendations. All PVC pipe gaskets and spigots shall be thoroughly cleaned and lubricated before assembly.

Where shown on the Plans, new PVC pipe entering or leaving sanitary sewer manholes shall have a water stop gasket attached to it. The water stop gasket shall conform to the pipe manufacturer's specifications. The water stop gasket shall be seated firmly around the pipe exterior and be cast into the concrete structure. The inside of the manhole barrel shall be neatly finished. Manhole bottom shall be re-channelized as necessary to provide smooth transitions with good hydraulic properties.

Trench backfill and bedding shall be as shown on the Plans (refer to the "Standard Trench Backfill and Bedding Detail for PVC Sewer Pipe"). Whenever the bottom of the trench is rocky, soft, yielding, or in the opinion of the Engineer is otherwise unsuitable as a foundation for the pipe, the unsuitable material shall be removed to a depth such that replacement with crushed rock will provide a stable and satisfactory foundation.

Trenches shall be kept free from water while the pipe is installed, concrete is setting and until backfill has progressed to a sufficient height to anchor the

work against possible flotation or leakage. When water is encountered in pipe trenches, the Contractor shall furnish, install and operate such pumps or other devices that may be necessary for removing the water.

New PVC pipe entering or leaving sanitary sewer manholes shall have a water stop gasket attached to it. The water stop gasket shall conform to the pipe manufacturer's specifications. The water stop gasket shall be seated firmly around the pipe exterior and be cast into the concrete structure. The inside of the manhole barrel shall be neatly finished. Manhole bottom shall be re-channelized as necessary to provide smooth transitions with good hydraulic properties. Any line to be connected to existing manhole, unless otherwise shown on the Plans, shall be installed by forming a new channel with the top invert of the newly installed pipe to the same elevation as the top invert of the existing main sewer.

In addition, the Contractor is advised to exercise caution in making his connections to existing manholes. The Contractor shall be responsible for damage to said structures caused by his operations, and shall repair or replace damaged structures at his own expense, according to the directions, and to the satisfaction of the Engineer, and no additional compensation will be allowed therefor.

104-4. Install 6" PVC by Open Trench Method

Installation shall be in accordance with these Special Provisions and the pipe manufacturer's installation guide. All applicable safety regulations shall be followed. The inside diameter of an installed section of PVC pipe shall not be allowed to deflect more than five percent (5%).

The Contractor's attention is directed to Section 104-4 (A), "Connection to Sanitary Sewer Manhole," of these Special Provisions for provisions governing all PVC pipes entering or leaving a sanitary sewer manhole.

Existing sanitary sewer pipe to be replaced shall be removed. Existing sanitary sewer pipe removed, as well as any other rubbish of any kind, shall be become the property of the Contractor and shall be disposed of properly outside the highway right of way in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

Before PVC sewer pipe is placed in position in the trench, the bottom and

sides of the trench shall be carefully prepared, the required bedding placed, and bracing and sheeting installed where required. The trench shall be excavated to the dimensions shown on the drawings. Each pipe shall be accurately placed to the line and grade called for on the Plans.

All pipe and fittings shall be inspected by the Engineer before being placed in the trench.

Trench bottoms found to be unsuitable for foundations after pipe laying operations have started shall be corrected and brought to grade with approved compacted materials.

Pipe trenches shall be kept free from water during pipe laying, joining or before sufficient backfill has been placed to prevent flotation of the pipe. The Contractor may use sump pumps or any other approved devices to remove water from the trench bottom. The Contractor shall provide ample means and devices to promptly remove and dispose of all water from any source entering the trench.

The Contractor shall comply with all the National Pollutant Discharge Elimination System (NPDES) regulations.

No connection shall be made where joint surfaces and joint materials have been soiled by earth until such surfaces are thoroughly cleaned.

As the work progresses, the interior of all pipes shall be kept clean. After each line of pipe has been laid, it shall be carefully inspected and all earth, trash, rags, and other foreign matter removed from the interior.

Backfilling of trenches shall be started immediately after the pipe is placed in the trench. Backfill material placed under the haunches shall be shovel sliced and/or compacted.

At end of each day the Contractor shall plate the end of the installed pipe.

The Contractor's attention is directed to Section 107, "Trench Safety, Trenching and Trench Backfill", for sewer pipe backfill requirements.

(A) Connection to Sanitary Sewer Manholes

Connection of PVC sewer pipe to existing sanitary sewer manholes shall be made by cutting an opening in the wall of the existing structure, inserting a length of PVC pipe into the opening and trimming flush with the interior the manhole wall, filling around the pipe with non-shrink grout, and troweling the inside and outside surfaces of the joint to a neat finish. Said

opening shall not be greater than two inches (2") larger than the outside diameter of the pipe. Care shall be exercised in cutting these openings to prevent cracking or breaking of said sanitary sewer manhole. Pipe openings broken in a ragged and unworkmanlike manner, as determined by the Engineer, shall be rejected and either repaired or replaced, as directed by the Engineer, all at the Contractor's sole expense, and no additional compensation will be allowed therefor.

All PVC pipe entering or leaving a manhole shall have a water stop gasket, as supplied by the pipe manufacturer, firmly seated around the pipe exterior and perpendicular to the pipe axis. Said water stop gasket shall be cast into the structure base or near the structure wall center as a water stop. Said water stop may also consist of a manhole coupling with rubber sealing rings cast into the structure base.

The bottom of the manhole shall be shaped to fit the invert of the sewer pipe.

New sanitary sewer manhole connections to poured in-place manholes shall be made with manhole adapters or water stops.

(B) Cleanup

After completing each section of the sewer line, the Contractor shall remove all debris, construction materials, and equipment from the site of the work, grade and smooth over the surface on both sides of the line and leave the entire right of way in a clean, neat and serviceable condition.

(C) Measurement and Payment

Installation of pipes by the open trench method shall be measured on the horizontal between the center to center of sanitary sewer manholes, including wyes installed along the sanitary sewer main, regardless of the amount of pipe ordered.

The Contract unit prices paid per linear foot for "Install 6" PVC by Open Trench Method" shall include full compensation for furnishing all labor, materials (including PVC sewer pipe), tools, equipment, and incidentals, and for doing all work involved in installing PVC sewer pipe (including connection to sanitary sewer manholes), including removal and disposal of existing pipe, which may be vitrified clay pipe (VCP), PVC

pipe, or ductile iron pipe (DIP), as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantity of sanitary sewer main required to be installed by open-trench. The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to the item of "Install 6" PVC by Open Trench Method".

Full compensation for sawcutting asphalt concrete or Portland concrete pavement, pipeline excavation and backfill, including bedding material and structural backfill material, disposal of surplus or unsuitable earth and pavement (including petromat), removal and disposal of existing sewer pipe, dewatering, cleaning, pipe with joints and all required fittings, and connections to manholes, locating and plugging inactive sewer laterals, complete in place, will be considered as included in the Contract linear foot price paid for "Install 6" PVC by Open Trench Method", and no separate payment will be made therefor.

Trench Safety and Restoration of Paved Surfaces and Improvements, will be paid as separate bid items.

Full compensation for Sanitary Sewer Testing (including television inspection) and Sanitary Sewer Bypass Pumping shall be considered as included in the various items of work.

104-5. Reconnect Sanitary Sewer Laterals (Open-Trench Method)

The Contractor's attention is directed to the fact that sanitary sewer laterals will be impacted by sanitary sewer replacement work. The Contractor is advised that the laterals shown on the project plans are for informational purposes and the County makes no guarantee as to the actual quantity of existing sanitary sewer laterals requiring connection. The Contractor shall use his/her own methods to locate and verify all active and inactive laterals prior to performing manhole replacement.

Work included is as follows:

1. Location of service laterals
2. Excavation and exposure of connection

3. Disconnection and permanent reconnection , including abandonment or extension of lateral to new sewer main if necessary
4. Excavation Dewatering
5. Plugging of inactive laterals
6. Restoration of excavated area

All lateral connections to the new main shall be located by the Contractor, exposed at the connections, disconnected and then permanently reconnected to the new pipe. The finished connection shall be made flush with the new sewer main and shall provide a smooth transition to the existing lateral network. The lateral line shall be tied in with minimum number of bands or fittings and be connected to a section of structurally sound pipe. The Contractor shall expedite the reconnection of lateral services to minimize any inconvenience to the residents.

Sanitary sewer lateral reconnections shall be made to the new PVC sewer pipe using PVC lateral wyes, all installed in accordance with the manufacturer's written instructions, the Plans, and as directed by the Engineer. **No tee installations will be allowed.**

The PVC lateral reconnections shall be watertight and shall have the same structural integrity as the new PVC sewer pipe.

All in-service "live" laterals shall be constructed of new SDR 26 PVC sewer pipe.

The standard length of sanitary sewer lateral reconnections shall be five feet (5'), including wyes or tapping product, angled fittings, transition coupling, new PVC lateral pipe, connections to the mainline pipe, and connections to the existing lateral pipe, and will be measured from the centerline of the sanitary sewer main. Any increase in this five-foot (5') length, to match field conditions, shall be approved by the Engineer.

Full compensation for such additional length of sanitary sewer lateral requiring replacement due to damage not caused by the Contractor's operations, as determined by the Engineer, shall be considered as included in the Contract unit price paid per each for "Sanitary Sewer Laterals Replacement" and no separate payment will be made therefor. Such additional length of sanitary

sewer lateral requiring replacement due to damage caused by the Contractor's operations, as determined by the Engineer, shall be replaced all at the Contractor's sole expense, and no additional compensation will be allowed therefor.

The Contractor shall connect the new (reconnected) sanitary sewer lateral pipe to the existing sanitary sewer lateral pipe by using a transition coupling, or approved alternative pipe connector, of suitable size and with an outer stainless steel shear ring. The existing sanitary sewer lateral shall be sawn to provide a neat and clean edge prior to installation of the transition coupling.

Additional requirements for sanitary sewer lateral work:

- i. The Contractor shall notify the Engineer and the affected property owner/resident not less than five (5) working days prior to start of any work that a disruption in service will occur. Notification shall include the date and estimated time of disruption.**
- ii. The content, format and method of delivery of such notices shall be approved by the Engineer prior to distribution. The Contractor is advised that these notices shall not be placed in mailboxes, as it is a violation of federal postal regulations**
- iii. Failure to distribute notices shall be sufficient cause for the Engineer to suspend the work until such notices are distributed.**

The Contract unit price paid per each for "Reconnect Sanitary Sewer Laterals (Open-Trench Method)" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work required to reconnect sanitary sewer laterals, complete in-place, including pavement restoration, extending existing sanitary sewer laterals, and replacement of 5 feet of existing sanitary sewer laterals, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantity of sanitary sewer laterals required to be reconnected.

The provisions in Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to the item of "Reconnect Sanitary Sewer Laterals (Open-Trench Method)".

104-6. Replacing Existing Sewer Lateral

Replacing the existing sewer lateral consists of connection of the existing sewer lateral to the newly connected lateral pipe to the new sewer main that is beyond the standard five (5) feet lateral reconnection.

Reference is directed to Section 109, "Sanitary Sewer Lateral Replacement".

104-7. Existing Inactive Sewer Lateral

Contractor shall identify and verify all inactive laterals (factory capped or abandoned). Contractor shall provide COUNTY location of each inactive lateral (pipe segment and station) and provide a copy of the video documentation or other methods that were used to determine that the lateral is inactive. Only laterals that are deemed to be inactive in writing by the COUNTY shall be abandoned in place and not reconnected to the new pipe.

104-8. Plug Inactive Laterals

All inactive laterals (factory capped or abandoned) shall be located, exposed, disconnected from existing sewer main, and plugged with concrete at the edge of the trench with Class 3 concrete, to a minimum length of one (1) foot. Contractor shall determine all inactive laterals. Contractor shall notify the County if unsure of laterals being inactive before plugging them. **Contractor shall not plug any laterals without the written permission of the Engineer.** Payment for plugging existing inactive sewer laterals shall be considered as included in the respective bids item for reconnecting existing sewer laterals to new sewer main, and no separate compensation will be allowed therefor.

104-9. Abandon Existing Sanitary Sewer Main and Manhole

Abandonment of Existing Sanitary Sewer Main and Manhole shall conform to the provisions of these Special Provisions, and shall consist of furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved in to either abandon or remove sanitary sewer pipes and/or manholes, as identified on the Plans.

The Contractor is advised that the existing sanitary sewer main is to be

abandoned in place and manhole is to be abandoned by complete removal, as shown on the Plans.

All materials removed, unless otherwise specified, shall become the property of the Contractor and shall be disposed of as specified in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

The existing sanitary sewer main shall be abandoned in place in accordance with the following requirements:

1. Securely close the ends using a tight-fitting plug that will not come loose with time and one foot (1') of concrete. The concrete shall have a minimum of four (4) sacks per cubic yard of concrete; and the tight-fitting plugs shall not allow the concrete to enter the pipe.
2. Prior to commencing work to abandon the sanitary sewer line, the Contractor shall submit to the Engineer for approval the type of permanent plugs to be used. The Contractor shall not commence abandonment work until written approval of said plugs is received from the Engineer.

The existing sanitary sewer manhole shall be abandoned by complete removal in accordance with the following requirements:

1. The existing manhole frames and covers considered to be in serviceable condition shall be salvaged and delivered to the County Corporation Yard. The Contractor is advised to inspect existing manhole frames and covers prior to removal, and to call to the attention of the Engineer any defects that may preclude their reuse.
2. Removal of existing sanitary sewer manhole shall be accomplished by removing the existing frame and cover, removing the existing concrete encasement, removing grade rings, removing the entire existing manhole including the existing base.
3. Completely fill the void from the removal of the manhole with structural backfill compacted to ninety-five percent (95%), with the top two-foot (2') layer compacted to ninety-five percent (95%) relative compaction.
4. Restore the surface to a condition to match existing pavement.

The Contract unit price for "Abandon Existing Sanitary Sewer Main", shall

include furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work required to abandon said existing sanitary sewer main, complete in-place, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

The Contract unit price paid per each for “Abandon and Remove Existing Sanitary Sewer Manhole”, shall include furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work required to remove said existing sanitary sewer manhole, complete in-place, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

The County reserves the right to eliminate these items, “Abandon Existing Sanitary Sewer Main,” and “Abandon and Remove Existing Sanitary Sewer Manhole,” from the Project completely. The Contractor shall request and receive written confirmation from the County as to the status of these items of work prior to incurring any costs. The Contractor shall not be entitled to any compensation under this item of work for any costs incurred should he proceed in advance of receiving written authorization from the County.

END OF SECTION

SECTION 105.**SAG REPAIR**

The work shall consist of furnishing all labor, materials, equipment and supervision to perform all work necessary to remove sags in newly installed sewer pipes. For open-trench constructed sewer pipes, no sag is allowed and any sag will be repaired at Contractor's expense. For pipe bursting installed pipes, a sag as defined below shall be repaired.

Sags requiring repair are defined as segments of pipe where one-half (1/2) of the diameter of the new or existing pipe is under water (3" or more for a 6" diameter pipe and 4" or more for an 8" diameter pipe, etc.). The Engineer may define the sags to be repaired as those having the entire closed circuit television camera lens, in its normal position (un-tilted), obstructed by localized increase in water level. Sag repair work shall consist of, but not be limited to, performing the following tasks where specified:

- a. Identifying location of sag
- b. Excavation and exposure
- c. Removal of sag
- d. Establishment of bedding or aggregate base for repair area
- e. Restoration of excavated area

Contractor is responsible for repairing all sags.

This section pertains to repair of major existing sags on sewer mains. **Contractor shall review his own preconstruction video inspections and notify the Engineer of other sags requiring repair prior to construction. The Contractor shall be responsible for verifying the exact locations and lengths of each pre-existing sag through his own preconstruction video inspection.** The Contractor shall confirm sag locations and lengths with the Engineer prior to repairing and/or removing the sag.

The sagging caused by the Contractor's installation mistakes shall be repaired by the Contractor at no cost to the County.

Reference is made to Section 103-19 "Pipe Burst Existing 6" VCP and Install 6" HDPE in Street", Section 103-19 "Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement", Section 107, "Trench Safety, Trenching and Trench Backfill," Section 102-17, "Sewage Bypassing During

Construction,” Section 108, “Restoration of Paved Surfaces and Improvements,” and Section 110, “Sanitary Sewer Testing,” of these Special Provisions.

105-1. Installation

The Contractor shall excavate the sag portions of the main and lift up the sewer main to the proper grade and alignment. The Contractor shall reinforce the section by encasing it with Controlled Low-Strength Material (CLSM). Extra care should be taken when encasing the pipe with CLSM. The Contractor shall avoid pipe flotation along the area encased with CLSM.

105-2. Measurement and Payment

The Contract unit price per linear feet for “Sag Repair”, shall include furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved in “Sag Repair,” for existing sags in segments using pipe bursting methods, complete in-place, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contractor bid price will be made for any increase or decrease in the quantities of this item, “Sag Repair,” required. The provisions of Section 9-1.06, “Changed Quantity Payment Adjustments” of the Standard Specifications shall not apply to this item of work.

The County reserves the right to eliminate this item, “Sag Repair,” from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

END OF SECTION

SECTION 106.
MANHOLE CONSTRUCTION

Sanitary sewer manholes shall conform to the provisions of the Standard Specifications, these Special Provisions, the Plans, and as directed by the Engineer.

Under this item of work, new sanitary sewer manholes shall be placed to the lines and elevations shown on the Plans and as directed by the Engineer and shall be installed in conformance with the details on the Plans. All work shall comply with the standards and specifications used by the County.

Sanitary sewer manhole removal shall be performed without damage to any portion of the sanitary sewer system that is to remain in place. Damage to these facilities as a result of the Contractor's operations, as determined by the Engineer, shall be repaired by the Contractor and to the satisfaction of the Engineer, all at the expense of the Contractor, and no additional compensation will be allowed therefor.

Debris shall be prevented from entering the sanitary sewer system and said protection system shall be inspected and approved of by the Engineer prior to proceeding with the removal and replacement of manholes. If debris does enter the system due to work done by the Contractor, Contractor shall remove such debris at his own expense, and as directed by the Engineer, and no additional compensation will be allowed therefor. If the Contractor does not properly protect the sanitary sewer system, as determined by the Engineer, then prior to final acceptance of the newly installed manhole, a manhole-to-manhole CCTV inspection of the sanitary sewer line must be performed by the Contractor. Said CCTV inspection shall be performed at the Contractor's sole expense, and no additional compensation will be allowed therefor, and shall conform to the provisions described in Section 110, "Sanitary Sewer Testing."

The Contractor is further advised that should any damage occur to either public or private facilities (due to, for example, a sanitary sewer mainline backup) as a result of the Contractor not properly protecting the system and maintaining sanitary sewer service, as described above, the Contractor will be responsible for all costs involved in repairing or

correcting said damage, and no additional compensation will be allowed therefore.

106-1. Concrete Manholes

All manholes shall be class 2 concrete unless otherwise specified on the Plans and shall conform in size, shape and details to those shown on the Plans. Pipe openings shall be built into the manholes as shown. The outer ends of all openings shall be sealed with a precast concrete plug made watertight with mastic compound or elastomeric gasket. All pipes shall be connected to new manholes with manhole adapter rings. The rings shall conform to recommendations of the manufacturer of the pipes. Precast concrete manholes shall conform in all respects to the specifications indicated on the Plans and submittal information shall be presented to the Engineer for approval prior to construction. Manholes shall be constructed as shown on the Plans. Foundations for new manholes shall be poured against a base, which is firm and dry. **Precast manhole base shall not be permitted.**

New manholes shall be provided with all new frames and covers. Existing manhole frames and covers in good condition as determined by the Engineer shall be salvaged and delivered to County Corporation Yard. The Contractor shall furnish and replace frames and covers at his own expense if damaged by the actions of the contractor.

Manhole covers shall be labeled in accordance with applicable standards and County requirements and shall be submitted to the Engineer for approval.

Pipe connections to existing or new manholes shall be made in such a manner that the finished work will conform to the applicable requirements specified and indicated for new manholes, including all necessary concrete work, cutting and shaping of the manhole base. Any sanitary sewer laterals that connect directly into the existing sanitary sewer manholes shall be reconnected at the time of new sanitary sewer manhole replacement. These sanitary sewer lateral connections shall be considered as included in the items of work, "Remove and Replace Sanitary Sewer Manholes to Grade," and no additional compensation will be allowed therefore.

Concrete mortar shaping within any manhole shall be as specified in the Standard Specifications. Backfill for manholes shall meet the same requirement

as those requirements for trench backfill as shown on the Plans and as directed by the Engineer.

Grade ring(s) (two maximum) shall be placed on the top of the manhole cone and the manhole frame will need to be adjusted to the finished grade of the existing roadway or surrounding grade.

106-2 Reconnection of Sewer Laterals

The Contractor's attention is directed to the fact that sanitary sewer laterals will be impacted by the sanitary sewer manhole work. The Contractor is advised that the laterals shown on the project plans are for informational purposes and the County makes no guarantee as to the actual quantity of existing sanitary sewer laterals requiring connection. The Contractor shall use his/her own methods to locate and verify all active and inactive laterals prior to performing manhole replacement.

Work included is as follows:

- a. Location of service laterals
- b. Excavation and exposure of connection
- c. Disconnection and permanent reconnection
- d. Restoration of excavated area

Connection

Connection shall be made using watertight seal recommended by pipe manufacturer.

Installation

All lateral connections to the existing manhole shall be located by the Contractor, disconnected and then permanently reconnected to the new manhole at the same location and elevation as the existing lateral. The existing lateral line shall be tied in with minimum number of bands or fittings and be connected to a section of structurally sound pipe. The Contractor shall expedite the reconnection of lateral services to minimize any inconvenience to the residents.

All in-service "live" laterals shall be connected to manhole and constructed of new SDR26 PVC sewer pipe and installed in accordance with the manufacturer's written instructions. The lateral connection shall be watertight.

In the event existing asbestos cement laterals are encountered, they shall be cut with a handsaw or a band saw only. Contractor is to follow all safety

procedures for the handling and disposal of asbestos cement laterals encountered. Measurement and payment for this work shall be per Section 15-3 under the bid item "Remove and Dispose Existing Abandoned Asbestos Cement Water Pipe or Sewer Lateral".

Standard length of new lateral reconnection shall be five (5) feet including angled fittings, tapping product, transition coupling, new lateral pipe, and connections to the existing lateral pipe and will be measured from the inside edge of the manhole.

In the event that additional length of existing lateral requires removal and replacement to connect to competent pipe beyond the 5 feet standard length, it shall be paid for per Section 109 under the bid item "Sanitary Sewer Lateral Replacement (beyond 5 feet)".

Connection of laterals may require removal and replacement of concrete sidewalk, driveway, curb, gutter and other features. Concrete work shall conform to Section 108, "Restoration of Paved Surfaces and Improvements," of these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidental necessary for doing all the work involved in "Reconnection of Sewer Laterals," shall be considered as included in the unit prices paid for, and no additional compensation will be allowed therefore.

106-3. Sanitary Sewer Manhole Testing

After completion of installation, each newly installed manhole shall be tested for leakage. The Contractor shall furnish all labor, tools and equipment necessary to perform manhole tests and conduct any work incidental thereto. The Contractor, at his/her own expense, shall correct any excess leakage and repair any damage to the pipe and its appurtenances or to any manhole resulting from or caused by these tests.

For manhole testing, the Contractor at his own discretion may use either water or vacuum testing method.

1. Water Testing

Each manhole shall be tested by inserting inflatable plugs in all sewer inlets and outlets of the manhole, and filling the manhole with water to a point six (6) inches below the base of the manhole frame.

The manhole shall be filled at least one (1) hour in advance of the official test period to allow time for absorption. The loss of water may be determined by measuring additions of water required to maintain the specified water level, but the level shall not be allowed to fall more than 25% of the manhole depth.

Each manhole shall be tested for a minimum of fifteen (15) minutes, and the allowable leakage shall be determined by the following formula:

$$E_m = 0.0002 \times L \times \text{square root } H$$

Where E_m = amount of allowable leakage in gallons per minute

L = depth of manhole from top to bottom (feet)

H = head of water in feet, as measured from the sewer line invert or from prevailing ground water against outside of manhole barrel, to a point six (6) inches below the base of the manhole frame, with the lesser height governing.

As an alternative to the above procedure, the Contractor may fill the manhole with water prior to backfill and repair all visible leaks provided there is no ground water above the manhole base. Any visible leaks into or out of a manhole shall be repaired

2. Vacuum Testing

Vacuum test procedures and requirements shall be as follows:

1. After completion of the manhole barrels but prior to backfilling, sealing of liner seams and installing grade rings, all openings in the manhole are sealed with plugs and a rubber ring "donut" type plug inserted inside the opening of the cone.
2. A small vacuum pump is attached to a hose connected to the plug and four (4) psi (8 inches Hg) of vacuum applied.
3. The vacuum is permitted to stabilize at 3.5 psi (7 inches Hg) for one (1) minute; then the test is begun.
4. The manhole must maintain vacuum such that no greater than 0.50 Psi (1 inch Hg) of vacuum is lost during the specified test period. The specified test period is as follows.

Manhole depth (feet)	Test period (minutes)
0-5	4.5
5-10	5.5

5. Manholes that fail the test shall be corrected as required and retested.
6. A vacuum regulator shall be provided on the vacuum pump such that no greater than 10 psi (20 inches Hg) can be applied to the manhole during the test. All manholes that do not meet the leakage test, or are unsatisfactory from visual inspection, shall be repaired to the satisfaction of the Engineer.

Where the actual leakage in a manhole exceeds the allowable, Contractor shall discover the cause, remedy it and retest the manhole before the manhole is accepted. If the leakage is less than allowable and leaks are observed, such leaks shall be repaired.

106-4. Adjust Sanitary Sewer Manhole to Grade

Existing sanitary sewer manholes shall be adjusted to grade in conformance with the provisions in Section 71.503, "Reconstruction," and Section 71.503B, "Frame, Covers, Grates and Manholes," of the Standard Specifications, the detail in the Plans, these Special Provisions, and the directions of the Engineer.

All sanitary sewer manholes to be adjusted to grade shall reuse manhole frames and covers. The Contractor is advised to inspect existing sanitary sewer manholes, grade rings, and cone sections prior to removal, and to call to the attention of the Engineer any defects that may preclude their reuse. Damage, as a result of the Contractor's operations, to grade rings and cone sections, shall be sufficient cause for the Engineer to require new rings and/or cone sections, to be provided and installed at the Contractor's expense, and no additional compensation will be allowed therefore. The existing manhole cone sections and grade rings are considered to be in a serviceable condition, and shall be salvaged and reused, and no additional compensation will be allowed therefore.

The Engineer, or designated representative, must be present during operations to adjust sanitary sewer manholes to grade. **The Contractor shall request for the Engineer to contact and coordinate with the District with not less than two (2) working days prior notice for adjusting sanitary sewer manholes to grade to ensure conformance with the District's requirements.**

Sanitary sewer manholes shall not be adjusted to final grade until the adjacent surfacing has been completed and approved of, in writing, by the Engineer.

Adjustment of sanitary sewer manholes shall be accomplished by removing the existing frame, cover, and concrete encasement, and adding as many grade rings as necessary to raise the sanitary sewer manhole cover to the adjacent final surface grade or per details shown on the plans, pouring a new concrete encasement with reinforcing steel, resetting the existing frame and cover, and then placing asphalt concrete as necessary.

The sanitary sewer manhole base shall be covered during the entire operation to prevent debris from entering the sanitary sewer system, and said protection system shall be inspected and approved by the Engineer prior to proceeding with this item of work. If debris does fall into the sanitary sewer system due to work performed by the Contractor, the Contractor shall remove such debris, all at his/her own expense and as directed by the Engineer, and no additional compensation will be allowed therefore.

If the Contractor does not properly cover the sanitary sewer manhole in conformance with the preceding paragraph, then prior to final acceptance of the sanitary sewer manhole adjustment, a manhole-to-manhole closed circuit television (CCTV) inspection of the sanitary sewer lines must be performed by the Contractor. Said CCTV inspection shall conform to the provisions of Section 110 "Sanitary Sewer Testing," except that said CCTV inspection shall be performed at the Contractor's sole expense, and no additional compensation will be allowed therefore.

The existing surface to receive a new grade ring or upon which the new frame will be placed is to be cleaned and all cracks and chips are to be filled with cement mortar to form a clean, neat surface equivalent to the surface of a new component.

Concrete removal shall be performed without damage to any portion of the sanitary sewer manhole that is to remain in place. All existing concrete that is to remain and, in the Engineer's judgment, is damaged by the Contractor's operations shall be repaired with a cement mortar mix to a condition equal to that of a new manhole. If, in the Engineer's judgment, the repaired manhole is not equivalent to or better than a reconstructed manhole, the Contractor shall remove the damaged part and all parts above it and shall reconstruct the manhole. The cost of repairing and/or replacing existing concrete that, in the Engineer's judgment, was damaged by the Contractor's operations shall be at the Contractor's expense, and no additional compensation will be allowed therefore.

All materials removed during adjustment, including the existing frame and cover, shall become the property of the Contractor and shall be disposed of as specified in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

The Contractor is advised that there are approximately **one (1)** sanitary sewer manholes to be adjusted. Quantities for adjusting manholes to grade will be determined as units from actual count.

The Contract unit price paid per each for the item, "Adjust Existing Sanitary Sewer Manhole to Grade," shall include, but not be limited to, full compensation for furnishing all labor, tools, materials and incidentals necessary for doing all work involved to adjust sanitary sewer manholes to grade, complete in place, as shown on the Plans and as directed by the Engineer, including, but not limited to, all excavation and backfill, furnishing and installing new manhole covers and frames, delivery of salvaged manhole frames and covers to County Corporation Yard, repair or replacement of facilities damaged by the Contractor, and removing debris which falls into manholes as a result of Contractor's operations, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

Any sanitary sewer manhole or part of a sanitary sewer manhole, whether required to be adjusted or not, that may be damaged, altered, removed, lost, or otherwise rendered useless or impaired due to the Contractor's operation, shall

be repaired or restored to prior condition by the Contractor, all at the Contractor's expense.

The County reserves the right to eliminate this item, "Adjust Existing Sanitary Sewer Manhole to Grade," from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

106-5. Remove and Replace Existing Sanitary Sewer Manhole

Existing sanitary sewer manholes to be removed and replaced shall be removed and replaced in conformance with the provisions of the Standard Specifications, these Special Provisions, the Plans and the directions of the Engineer.

Under this item of work, new sanitary sewer manholes shall be placed to the lines and elevations shown on the Plans and as directed by the Engineer, and shall be installed in conformance with the details on the Plans. All work shall comply with the standards and specifications used by the Fair Oaks Sewer Maintenance District.

All sanitary sewer manholes to be removed and replaced shall include new manhole frames and covers. The existing manhole frames and covers considered to be in serviceable condition shall be salvaged and delivered to the County Corporation Yard.

The Contractor is advised to inspect existing manhole frames and covers prior to removal, and to call to the attention of the Engineer any defects that may preclude their reuse. Damage, as a result of the Contractor's operations, to frames and covers shall be sufficient cause for the Engineer to require new frames and/or covers, to be provided at the Contractor's expense, and no additional compensation will be allowed therefore.

Removal and replacement of existing sanitary sewer manholes shall be accomplished by removing the existing frame and cover, removing the existing concrete encasement, removing grade rings, removing the existing entire manhole including removing the existing base. A new sanitary sewer manhole

shall then be constructed at the same location by pouring in place a new manhole base, and installing a pre-fabricated manhole barrel where necessary, cone section, and grade rings as necessary, pouring a new concrete encasement with reinforcing steel (concrete collar), and setting the new frame and cover. The Reference is made to the Section, "Concrete Manholes". The Contractor is advised that prefabricated manhole bases are not allowed.

Any sanitary sewer laterals that connect directly into the existing sanitary sewer manholes shall be reconnected at the time of new sanitary sewer manhole replacement. These sanitary sewer lateral connections shall be considered as included in the items of work, "Remove and Replace Sanitary Sewer Manholes to Grade" and no additional compensation will be allowed therefore.

Sanitary sewer manhole removal shall be performed without damage to any portion of the sanitary sewer system that is to remain in place. Damage to these facilities as a result of the Contractor's operations, as determined by the Engineer, shall be repaired by the Contractor and to the satisfaction of the Engineer, all at the expense of the Contractor, and no additional compensation will be allowed therefore.

All materials removed during removal, except the existing frame and cover to be salvaged, shall become the property of the Contractor and shall be disposed of as specified in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions. Unsuitable frames and covers shall become the property of the Contractor and shall be disposed of as provided above. The cost of replacing salvageable frames and covers that, in the Engineer's judgment, were damaged by the Contractor's operations shall be at the Contractor's expense, and no additional compensation will be allowed therefore.

Debris shall be prevented from entering the sanitary sewer system, and said protection system shall be inspected and approved of by the Engineer prior to proceeding with the removal and replacement of manholes. If debris does enter the system due to work done by the Contractor, the Contractor shall remove such debris, all at his/her own expense and as directed by the Engineer, and no additional compensation will be allowed therefore.

If the Contractor does not properly protect the sanitary sewer system in conformance with the preceding paragraph, then prior to final acceptance of the newly installed sanitary sewer manhole, a manhole-to-manhole closed circuit television (CCTV) inspection of the sanitary sewer lines must be performed by the Contractor. Said CCTV inspection shall conform to the provisions of Section 110 "Sanitary Sewer Testing," except that said CCTV inspection shall be performed at the Contractor's sole expense, and no additional compensation will be allowed therefore.

The Contractor is further advised that should any damage occur to either public or private facilities (due to, for example, a sanitary sewer mainline backup) as a result of the Contractor not properly protecting the system and maintaining sanitary sewer service, as described above, the Contractor will be responsible for all costs involved in repairing or correcting said damage, and no additional compensation will be allowed therefore.

The surface to receive a new grade ring or upon which the existing frame will be placed shall be cleaned and, if necessary, all cracks and chips filled with cement mortar to form a clean, neat surface. If adjustment of newly installed sanitary sewer manholes to final grade is necessary, such adjustment shall not be made until the adjacent surfacing has been completed and approved of, in writing, by the Engineer.

The Contractor is advised that there are approximately **six (6)** sanitary sewer manholes to be removed and replaced. Quantities for sanitary sewer manholes to be removed and replaced will be determined as units from actual count.

The Contract unit price paid per each for the items, "Remove and Replace Existing Sanitary Sewer Manhole" shall include, but not be limited to, full compensation for furnishing all labor, tools, materials, equipment and incidentals necessary for doing all work involved to remove and replace sanitary sewer manholes, complete in place, as shown on the Plans and as directed by the Engineer, including, but not limited to, removal of existing manhole, disposal of material outside the highway right of way, excavation and backfill, trench safety, excavation dewatering, sewage bypassing, construction and installation of new

sanitary sewer manhole, furnishing and installing new covers and frames, delivery of salvaged frames and covers to County Corporation Yard, manhole testing, repair or replacement of facilities damaged by the Contractor, and removing debris which enters into the sanitary sewer system as a result of Contractor's operations, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contractor bid price will be made for any increase or decrease in the quantities of this item, "Remove and Replace Existing Sanitary Sewer Manhole" required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments" of the Standard Specifications shall not apply to this item of work.

106-6. New Sanitary Sewer Manhole Construction

New sanitary sewer manhole shall conform to the provisions of the Standard Specifications and these Special Provisions, the Plans, and the directions of the Engineer. Contractor shall identify and expose all utilities necessary for the construction of the new sanitary sewer manhole at the new location to ensure no conflicts and shall notify the Engineer any conflicts immediately.

All manholes shall be class 2 concrete and shall conform in size, shape and details to those shown on the Plans. Pipe openings shall be built into the manholes as shown. The outer ends of all openings shall be sealed with a precast concrete plug made watertight with mastic compound or elastomeric gasket.

Pre-cast concrete manhole sections shall conform in all respects to the specifications indicated on the Plans and submittal information shall be presented to the Engineer for approval prior to construction.

Foundations for new manholes shall be poured against a base, which is firm and dry. Pipe connections to existing or new manholes shall be made in such a manner that the finished work will conform to the applicable requirements specified and indicated for new manholes, including all necessary concrete work, cutting and shaping of the manhole base. Concrete mortar shaping within any manhole shall be as specified in the Standard Specifications.

Backfill for manholes shall meet the same requirement as those requirements for trench backfill, as shown on the Plans and as directed by the Engineer.

Manhole covers shall be labeled in accordance with applicable standards and County requirements and shall be submitted to the Engineer for approval.

The Contract unit price paid per each for the items, "New Sanitary Sewer Manhole Construction" shall include, but not be limited to, full compensation for furnishing all labor, tools, materials, equipment and incidentals necessary for doing all work involved to construct new sanitary sewer manholes, complete in place, as shown on the Plans and as directed by the Engineer, including, but not limited to, disposal of material outside the highway right of way, excavation and backfill, trench safety, excavation dewatering, sewage bypassing, construction and installation of new sanitary sewer manhole, furnishing and installing new covers and frames, manhole testing, repair or replacement of facilities damaged by the Contractor, and removing debris which enters into the sanitary sewer system as a result of Contractor's operations, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment to the Contract bid price will be made for any increase or decrease in the quantities of the items, "New Sanitary Sewer Manhole Construction" required. The provisions of Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to these items of work.

END OF SECTION

SECTION 107.**TRENCH SAFETY, TRENCHING AND TRENCH BACKFILL****107-1. Sheeting and Shoring**

Trench Safety, Trenching and Trench Backfill shall conform to these Special Provisions and the directions of the Engineer. Attention is directed to Section 7-1.02K(6)(b), "Excavation Safety," of the Standard Specifications, and these Special Provisions.

The Contractor shall prepare and submit to the Engineer for approval a detailed Trench Excavation Safety Plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during excavation. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

Where sheet piling, shoring, sheeting, bracing or other supports are necessary, they shall be furnished, placed, maintained and, except as shown or specified otherwise, removed by the Contractor.

The design, planning, installation and removal, if required, of all sheeting, shoring, sheet piling, lagging and bracing shall be accomplished in such a manner as to maintain the required excavation or trench section and to maintain the undisturbed state of the soils below and adjacent to the excavation.

The use of horizontal strutting below a pipe barrel or the use of the pipe as support for trench bracing will not be permitted.

When the construction sequence of structures, pipe laying, etc. requires the transfer of bracing, shoring or other means of support to complete portions of any structure, pipe laying, etc., the Contractor shall secure written acceptance from the Engineer prior to the installation of such bracing.

California Labor Code Section 6705 and all applicable Construction Safety Orders and shoring system standards with respect to excavation and construction shall be strictly observed at all times.

107-2. Trenching and Trench Backfill

Full compensation for conforming to the following subsections of this Section 107-2, "Trenching and Trench Backfill," of these Special Provisions shall

be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

The Contractor is advised the County makes no guarantee as to the suitability of native material for use as trench backfill. Therefore:

- (1) All existing trench excavation material determined to be unsuitable for trench backfill by the Engineer shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions of 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions and in conformance with local agency requirements; and
- (2) All existing structure excavation material determined to be suitable for trench backfill material by the Engineer may be used in conformance with the Plans and these Special Provisions, and the directions of the Engineer.
- (3) Manhole Safety:

The Contractor shall comply with all applicable occupational safety and health (OSHA) standards, rules, regulations and orders established by Federal and State Agencies.

The atmospheric condition in manholes shall be tested for possible oxygen deficiency and the presence of poisonous, toxic or explosive gases before entering. Sufficient ventilation shall be provided to ensure the safety of workers working in the manhole. The Contractor is required to provide all safety equipment for manhole entry and appropriate attire is required for those who are working in the manhole.

The minimum crew shall be three (3) workers, or two (2) workers and a safety winch: the worker who will go into the hole, the lifeline attendant, and an assistant (or safety winch) on the surface.

Specific attention is directed to OSHA safety rules, regulations and precautions to be taken by the Contractor before entering sanitary sewer manholes, and other sanitation structures with respect to physical and chemical hazards that may be present

107-3. Trench Dewatering

Refer to Section 19-4, "Excavation Dewatering ," of these Special Provisions.

107-4. Compaction

Refer to Section 19-2.3, "Percent Compaction," of these Special Provisions

107-5. Pipeline Backfill

1. Bedding

Unless otherwise indicated, all pipes shall have a minimum of four inches (4") of bedding material below the barrel of the pipe. Bedding shall be placed and compacted as specified for initial trench backfill and shall be shaped around the barrel of the pipe. Bedding material shall be as designated on the Plans. The size of gradation shall fall within the limits designated on the Plans.

Where, in the opinion of the Engineer, stabilization of the undisturbed foundation below the bedding, or over excavation beyond the depth shown is required because of soft, spongy or unstable condition, additional bedding ordered by the Engineer shall be placed in the trench bottom. The quantity and placement of such material will be paid for as extra work, except if the over-excavation is noted at specified locations in the Contract documents.

2. Initial Backfill

After the pipe has been properly laid and inspected, bedding material shall be placed from pipe horizontal centerline to a level not less than twelve inches (12") over the pipe unless otherwise shown. The backfill material shall be hand-placed in horizontal layers not exceeding eight inches (8") in loose depth and compacted by power-operated tampers, rollers or vibratory equipment to a dry density equal to ninety-five percent (95%) of maximum.

Each layer shall be compacted to the specified density prior to placing subsequent layers. Compaction by flooding or jetting methods will not be permitted. No further backfilling will be permitted until the initial backfill has been accepted by the County.

3. Subsequent Trench Backfill

Backfill shall be structure backfill material, as designated on the Plans and specified in these Special Provisions, placed in horizontal layers not exceeding

eight inches (8") in loose depth. Fill material shall have a moisture content such that the required degree of compaction may be obtained. Each layer shall be compacted by power-operated tampers, rollers, or other suitable equipment to a dry density equal to the surrounding material but not less than ninety-five percent (95%) relative compaction. Each layer shall be compacted to the specified density prior to placing subsequent layers.

The finishing of the roadway (aggregate base and asphalt concrete) shall match the existing finishing and be constructed to the requirements of the County of San Mateo. Reference is made to Section 108, "Restoration of Paved Surfaces and Improvements," of these Special Provisions.

107-6. Measurement and Payment

The Contract lump sum price paid for this item, "Trench Safety, Trenching and Trench Backfill," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary for doing all the work involved performing trench safety, including, but not limited to, preparing a detailed Trench Excavation Safety Plan, trench dewatering, and providing, constructing, installing and maintaining sheeting, shoring, and bracing, as shown on the Trench Excavation Safety Plan, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Full compensation for all trenching work other than sheeting, shoring, and bracing as provided above shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be made therefor.

Progress payments will be based upon the ratio of the installed sanitary sewer pipe to the total of sanitary sewer pipe to be installed.

END OF SECTION

SECTION 108.
RESTORATION OF PAVED SURFACES AND IMPROVEMENTS

108-1. General

The Contractor shall replace "in kind" any structures, surfaces, landscaping, irrigation, cobbles, decorative pavers, or improvements which are impacted by construction operations. Full compensation for restoration of structures and surfaces, if not otherwise provided for as a Contract bid item, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

Replacement paved surfaces and structures, including concrete, stamped concrete, pavers, and rock walls shall match the **color, finish, size, and pattern** of the existing surface to the satisfaction of the Engineer. The Contractor shall remove and replace concrete surfaces to the nearest score line past the trench limits, to the satisfaction of the Engineer. The Contractor may salvage and reset existing pavers, but any pavers damaged by the Contractor's operations shall be replaced at no additional expense. Prior to the start of work, the Contractor shall thoroughly document the existing conditions, as described in Section 102-22, "Documentation of Existing Conditions", of these Special Provisions.

The Contractor's attention is directed to Section 51, "Concrete Structures," of these Special Provisions for requirements regarding restoration of concrete surfaces. The Contractor's attention is also directed to Section 15, "Existing Highway Facilities," for relocation, removal, or reconstruction of existing facilities in conflict with the work.

The Contractor's attention is directed to the fact that, prior to restoration of paved surfaces, all sewer replacement, manhole replacement, sewer repair work, and Closed Circuit Television (CCTV) inspection of sanitary sewer lines shall be completed, as stipulated in this Special Provision and as directed by the Engineer.

Whenever any of the work is accomplished on or through property other than the road right of way, the Contractor shall furnish the County, before its final acceptance of the work, a written release from the property owner, or proper

authority acting for the property affected, stating that the restoration of structures and surfaces has been satisfactorily accomplished.

All removal and restoration costs shall be borne by the Contractor. Material removed and not to be incorporated in the contract work shall become property of the Contractor and shall be disposed of outside of the public right of way in accordance with Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions at no additional cost to the County and/or affected property owner.

All cultivated areas, either landscaping, natural vegetation areas, irrigation lines, concrete sidewalk, gutters, decorative pavers, or other surface improvements which are damaged by actions of the Contractor, shall be restored to same or better condition as their original condition to the satisfaction of the Engineer.

It is expected that the Contractor will and can determine the existence of such improvements by a site visit.

Restoration of Paved Surfaces and Improvements shall include all labor, materials, tools, equipment, and incidentals necessary for doing all work required to restore surfaces over trenches to original conditions, complete in-place, as specified in these Special Provisions, as shown on the Plans, and as directed by the Engineer.

Aggregate base (Class 2), asphalt concrete (HMA Type A), and asphaltic emulsion (prime coat and paint binder) shall be placed where shown on the Plans and as directed by the Engineer. Reference is made to Section 26, "Aggregate Base (Class 2)," Section 39-1, "Asphalt Concrete (Type A HMA, 1/2" Maximum)" and Section 94-1, "Asphaltic Emulsion (Prime Coat and Paint Binder)," of the Standard Specifications.

The completed asphalt concrete surfacing shall be thoroughly compacted, smooth, and free from ruts, humps, depressions, or irregularities. Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete, as determined by the Engineer, by blading or other equipment shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations, or other objectionable marks in the surface of the asphalt

concrete shall discontinue, and the Contractor shall furnish acceptable equipment, all at the Contractor's sole expense.

When a straightedge twelve-foot (12') long is laid on the finished surface and parallel with the centerline of the pipe, the surface shall not vary more than one-one hundredths of a foot (0.01') from the lower edge of the straightedge. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than two-one hundredths of a foot (0.02') are present when tested with a straightedge twelve feet (12') long laid in a direction transverse to the centerline of the pipe and extending from edge to edge of a twelve-foot (12') traffic lane.

Any settlement or damage to existing surfaces adjacent to the Contractor's work, which, in the Engineer's opinion was caused by the Contractor's operations, shall be repaired by properly cutting, digging out and replacing the damaged surface, all at the Contractor's expense.

A drop-off of more than eight hundredths of a foot (0.08') will not be allowed at any time within pavement open to public traffic. If asphalt concrete has not been placed to the level of existing pavement before pavement is to be opened to public traffic a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a 30: 1 slope or flatter to the level of the ground and plugged areas. Tapers shall be removed prior to placement of final asphalt concrete surfacing.

108-2. Sawcut Asphalt Concrete and Portland Cement Concrete

Sawcut Asphalt Concrete and Portland Cement Concrete shall conform to these Special Provisions, the Plans, and as directed by the Engineer. Reference is made to Section 39-6, "Sawcut Asphalt Concrete and Portland Cement Concrete".

108-3. Remove Geotextile Fabric

Removal of geotextile fabric shall be in accordance with Section 15, "Existing Highway Facilities," of the Standard Specifications, the Plans, these Special Provisions, and as directed by the Engineer.

Nothing in these Special Provisions shall relieve the Contractor from his responsibilities as provided in Section 7-1.04, "Public Safety," of the Standard Specifications.

Full compensation for removal of geotextile fabric, including, but not limited to disposal of geotextile fabric material in accordance with the provisions in Section 5-11, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions, as well as such other work as may be required by the Engineer to complete the work, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be made therefor.

108-4. Compaction Tests

The subgrade of the roadway along pipeline trenches shall be a true surface varying not more than five hundredths of a foot (0.05') above or below the grade established on the Plans for the construction of the roadway base along the trenches. The subgrade, as shown on the Details on the Plans, shall be compacted to ninety-five percent (95%) of relative density, per ASTM specifications.

Following compaction, the Contractor shall notify the Engineer that he desires to have density tests made at certain locations. The Engineer will designate the exact locations to be tested, and an independent soil laboratory hired by the County will conduct the testing. The County will pay for this testing only. If tests fail to meet the requirements of the Specifications, the Contractor shall recompact those areas failing to comply with the compaction requirements. Following recompaction, the Contractor shall request that the areas be retested. The cost for recompaction and retesting, as well as any subsequent recompaction and retesting, if necessary, shall be at the Contractor's expense, and no additional compensation will be allowed therefor.

108-5. Correction of Restored Pavement During Warranty Period

The Contractor shall repair any restored paved surfaces during the warranty period where the surface settles more than the tolerance allowed. Such repair shall be done by removing the existing pavement and base material as needed to ensure proper recompaction and to provide for the placement of no less than the thickness of the asphalt concrete shown on the Plans and Details.

108-6. Measurement and Payment

The Contract lump sum price paid for "Restoration of Paved Surfaces and Improvements" shall include full compensation for furnishing all labor, materials (including, but not limited to aggregate base, asphalt concrete and asphaltic emulsion, concrete), tools, equipment, and incidentals, and for doing all work required to restore paved surfaces to original conditions, including placement of Aggregate Base (Class 2), Asphalt Concrete (Type A HMA 1/2", Maximum), and Asphaltic Emulsion (Prime Coat, Curing Seal or Tack Coat), pavers, flagstones, rock, and concrete, complete in-place, as specified in the Standard Specifications, these Special Provisions, and the Plans, and as directed by the Engineer, and no additional compensation will be allowed therefor.

Asphalt concrete used for temporary surface restoration shall be considered as included in unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantity of paved surfaces, structures, or other improvements to be restored. The provisions in Section Section 9-1.06, "Changed Quantity Payment Adjustments," of the Standard Specifications shall not apply to the item of Restoration of Paved Surfaces and Improvements.

Full compensation of removal and replacement in kind of pavement markers, traffic stripes, and pavement markings disturbed by construction of sanitary sewer pipe, including, but not limited to, disposal of grinding material in accordance with the provisions in Section 5-11, "Disposal of Material Outside the Highway Right of Way" of these Special Provisions, shall be considered as included in the lump sum price paid for "Restoration of Paved Surfaces and Improvements", and no separate payment will be made therefor.

Full compensation for restoring existing landscape and damaged structures, and other incidentals related to the completion of this Project, including, but not limited to, protection and/or necessary replacement and restoration in kind to the satisfaction of the Engineer of landscape and hardscape features including but not limited to landscaping, shrubs, plants, trees, irrigation, cobbles, decorative pavers, and structures, shall be considered as included in

the lump sum price paid for "Restoration of Paved Surfaces and Improvements", and no separate payment will be made therefor.

END OF SECTION

SECTION 109.
SANITARY SEWER LATERAL REPLACEMENT

Sanitary sewer lateral replacement shall conform to these Special Provisions and the directions of the Engineer.

The Contractor's attention is directed to the fact that a quantity of **two hundred linear feet (200 LF)** of sanitary sewer lateral replacement herein is provided for estimating purposes only, and the County makes no guarantee as to the actual quantity of sanitary sewer lateral requiring replacement.

Under this item of work, those sanitary sewer laterals found by the Engineer to be shallow and in need of replacement, or need to be replaced due to reconnection to the new sewer main and manhole beyond 5 feet in length, shall be replaced to the lines and elevations established by the Engineer, and shall be installed in conformance with the details on the Plans. All work shall comply with the standards and specifications used by the District.

The Contractor shall notify the Engineer not less than two (2) days prior that an impending replacement is to be made, and the affected property owner shall be informed, by door hangars or flyers, that a disruption of service will occur.

Sanitary sewer service shall be restored to all properties on the same day that it is disrupted.

Before each new length of pipe is placed, the interior of the preceding pipe shall be carefully cleaned of all dirt and debris.

Replaced sanitary sewer laterals shall be the same material as existing laterals and shall conform to these Special Provisions, the Plans, and the directions of the Engineer.

For PVC pipes, joints shall be a bell and spigot assembly with elastomeric sealing gaskets. Sealing gaskets shall meet the requirements of ASTM Specification D1869. Solvent joints will not be allowed. Pipe joints shall be made using manufactured PVC couplings. Band-type compression couplings will not be allowed.

In addition, the Contractor is advised to exercise caution in making his connections to existing sanitary sewer lines. Damage to existing sanitary sewer facilities to remain as a result of the Contractor's operations, as determined by the Engineer, shall be repaired by the Contractor, all at Contractor's sole expense and to the satisfaction of the Engineer, and no additional compensation will be allowed therefore.

Where new pipe connects to existing sanitary sewer lines, it is the responsibility of the Contractor to determine the exact location and depth of the existing sanitary sewer lines prior to the laying of any sanitary sewer lateral pipe.

The Contractor is advised to exercise caution in making his connections to existing sanitary sewer lines. The Contractor shall be responsible for any damage to said sanitary sewer pipe caused by his operations, and shall replace damaged pipe at his own expense, according to the directions and to the satisfaction of the Engineer, and no additional compensation will be allowed therefore. Before each new length of pipe is placed, the interior of the preceding pipe shall be carefully cleaned of all dirt and debris.

After the pipes have been properly laid, the space between them and the sides of the trench shall be filled with structure backfill, in conformance with Detail in the Plans, and carefully tamped with small tampers so as not to disturb the pipe, but no backfilling shall be done until the work is inspected and approved.

The remainder of the trench shall be backfilled in multiple lifts. In conformance with Section 19-3.02C, "Structure Backfill," of the Standard Specifications, each lift shall not exceed 0.67-foot before compaction, and shall be compacted to ninety-five percent (95%) relative compaction. Testing method shall be at the discretion of the Engineer. No tamping shall be undertaken except under the direct supervision of the Engineer.

Sanitary sewer laterals that are removed by the Contractor and any surplus excavated material or debris resulting from this operation shall become the property of the Contractor and shall be disposed of outside of the highway right of way in accordance with Section 5-11, "Disposal of Material Outside of the Highway Right of Way," of these Special Provisions.

Fencing, landscaping, and any other improvements that must be removed or relocated shall be evaluated on a case-by-case basis, and shall be paid as extra work in accordance with provisions of Section 4-1.05 "Changes and Extra Work" of the Standard Specifications.

Measurement per linear foot for this item, "Sanitary Sewer Lateral Replacement," shall be made along the centerline between the centers of the two joints for making the replacement.

The Contract unit price paid per linear foot for this item, "Sanitary Sewer Lateral Replacement (Beyond 5 feet)," shall include full compensation for providing all the necessary labor, materials, tools, equipment and incidentals, and for doing all the work involved in sanitary sewer lateral replacement, including, but not limited to, excavation and backfill, trench safety, excavation dewatering, sewage bypassing, saw-cutting, new lateral pipe and couplings, removal and disposal of existing sanitary sewer lateral and excavated material, and incidental work necessary to restore service, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

No adjustment of the Contractor bid price will be made for any increase or decrease in the quantity of this item, "Sanitary Sewer Lateral Replacement," required. The provision of the Section 4-1.05 "Changes and Extra Work" of the Standard Specifications shall not apply to this item.

The County reserves the right to eliminate this item, "Sanitary Sewer Lateral Replacement," from the Project completely. **The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.**

END OF SECTION

SECTION 110.
SANITARY SEWER TESTING

110-1. General

The Contractor shall clean, CCTV, and test pipes per San Mateo County Sewer and Sanitation Districts Standard Specifications - Pipe Testing Requirements, which is included on the Plans. In case of conflict with this section, defer to the requirements set forth on the Plans..

All sanitary sewer mains that have been replaced or rehabilitated, regardless of replacement method, rehabilitation method, or pipe material used, shall be tested in accordance with these Special Provisions and as directed by the Engineer.

All required cleaning and testing shall be done in the presence of the Engineer.

Prior to testing, all sanitary sewer mains shall be cleaned by means of a high-speed jet rodder, and reconnection of sanitary sewer laterals completed.

Testing shall be performed prior to placement of asphalt concrete pavement, with Air Testing and Deflection Testing performed prior to Video Inspection. Furthermore, for pipe replacement performed using the Open-Trench Method, all testing shall be performed after trench has been backfilled and compacted, except as provided for in item 110-2.1 below, "Optional Initial Air Test for Open-Trench Method."

110-2. Air Pressure Test

The Contractor shall furnish all materials, tools, equipment and labor required to perform the air test. Air test equipment shall be approved by the Engineer. A written record of the air test shall be submitted to the Engineer by the Contractor.

1. Optional Initial Air Test for Open-Trench Method

The Contractor is advised that, for the Open-Trench Method of pipe replacement, the Contractor may conduct an initial air test of the sanitary sewer main after compaction of the backfill, but prior to installation of the house connection sewers for existing "live" house connections. Such tests will be considered for the Contractor's convenience and, as such,

need not be performed in the presence of the Engineer. Furthermore, such tests will be considered as included in the Contract bid price paid for the item "Sanitary Sewer Testing," and no additional compensation will be allowed therefor.

2. Initial Air Tests

Each section of sanitary sewer main shall be tested between successive sanitary sewer manholes by plugging and bracing all openings in the sanitary sewer main line and the upper ends of the sanitary sewer laterals.

The entire length of the sanitary sewer lateral need not be connected for air tests; at least one (1) length of lateral pipe must be connected to the sanitary sewer main, with the final lateral connections being made, complete in place, after successful completion of the final air test.

If any leaks are found, the air pressure test shall be released, the leaks eliminated, and the test procedure started over again.

3. Final Air Test

The final leakage test of the sanitary sewer main shall be conducted in the presence of the Engineer in the following manner:

- i. When all necessary test equipment is in place, a compressed air supply shall be attached to the air fitting on the test equipment and the air pressure within the line increased to four pounds per square inch (4 psi).
- ii. After the air supply is turned off or disconnected, there shall be a two (2) minute waiting period to allow stabilization of the air within the sanitary sewer line before the actual test period begins. In no case shall the air pressure within the sanitary sewer line be less than three and one-half pounds per square inch (3.5 psi) at the beginning of the test period.

4. Duration of Air Test: Fifteen (15) minutes

5. Maximum Allowable Air Pressure Loss: One Pound per Square Inch (1.0 psi)

110-3. Deflection Testing of Polyvinyl Chloride (PVC) Mains

Deflection testing of PVC sanitary sewer mains shall be performed after the placement of all trench backfill. Pipe deflection shall be tested by pulling by hand a go/no-go mandrel through the installed sections of sanitary sewer main.

The mandrel used shall have a minimum length equal to its diameter. The mandrel shall be constructed with a minimum of nine (9) ribs fabricated parallel to its longitudinal axis. Both the design of the mandrel and the fabricated mandrel itself shall be inspected and approved by the Engineer well in advance of the deflection test.

The mandrel diameter shall be ninety-five percent (95%) of the pipe's average inside diameter, as defined by ASTM specifications D3034

110-4. Closed Circuit Television (CCTV) Inspection of Sanitary Sewer Lines

Prior to beginning sanitary sewer work and after completing work, the Contractor shall perform a closed circuit television (CCTV) inspection of the sanitary sewer mains in conformance with the following provisions and as directed by the Engineer:

- (1) Prior to beginning sanitary sewer work and after completing work, the Contractor shall perform a closed circuit television (CCTV) inspection of the sanitary sewer mains in conformance with the following provisions and as directed by the Engineer. Post construction CCTV shall be performed per NASSCO PACP and the manhole numbers on the plans shall be used.
- (2) Prior to CCTV inspection, the Contractor shall remove all debris and foreign objects inside the sanitary sewer lines and manholes where work was performed, and then flush and clean all parts of the system, and remove all accumulated construction debris, gravel, silt and other foreign material from the sanitary sewer system at or near the closest downstream manhole using mechanical rodding, flushing, or bucketing equipment, if necessary.
- (3) The Contractor shall furnish all materials, tools, equipment and labor required to perform CCTV inspection; and CCTV inspection equipment shall be approved by the Engineer.
- (4) Video equipment shall include a television camera in color format specifically designed and constructed for operation in connection with

sewer inspection and for operation in sewers under 100% humidity conditions. Lighting and camera quality shall produce a clear, in-focus picture of the entire periphery of the pipe for a minimum distance of six feet (6'). The camera shall be moved through the line, preferably in the direction of the sewage flow, at a moderate rate. In no case shall the television camera be operated at a speed greater than 30 feet per minute. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line.

- (5) The CCTV inspection videos and inspection reports shall be provided on a USB or DVD. All USBs or DVDs shall become the property of the County. If, in the opinion of the Engineer, the submitted videos are of poor quality such that the Engineer is unable to evaluate the condition of the sewer lines, the Engineer may reject the videos and require the CCTV inspection to be repeated and new videos and inspection reports submitted to the Engineer for review and acceptance.
- (6) Submitted USBs or DVDs, when replayed on a monitor, shall be clear and in focus, and shall include a continuous on-screen display containing, at a minimum, the date of video inspection and identification of the sanitary sewer line and segment (street location, upstream and downstream manhole numbers) of the line being viewed, and footage. The number designations for existing sanitary sewer manholes (SSMH#) shall be as shown on the Plans.
- (7) If, upon the Engineer's review of the CCTV inspection, any debris or foreign matter is still present in the sanitary sewer system, the Contractor shall re-flush and clean, and re-CCTV inspect those sections and portions of the sanitary sewer lines and manholes, as required and as directed by the Engineer. This process shall be repeated until CCTV inspection indicates that the sanitary sewer lines have been satisfactorily cleaned.
- (8) Any damage to the existing sanitary sewer main caused by the Contractor's operations shall be repaired by the Contractor, to the

satisfaction of the Engineer, all at the Contractor's sole expense, and no additional compensation will be allowed therefor.

- (9) Any damage to either public or private facilities (due to, for example, a sanitary sewer mainline backup) as a result of the Contractor's CCTV inspection operations, as described above, shall be repaired or corrected by the Contractor to the satisfaction of the Engineer, all at the Contractor's sole expense, and no additional compensation will be allowed therefor.
- (10) Upon completion of CCTV inspection operations, the Contractor shall submit the USBs or DVDs, as described above, to the Engineer. All submitted USBs or DVDs will become the property of the County.
- (11) Approximately **five (5) to ten (10) days** from date of submittal of the USBs or DVDs, as described above, to the Engineer, the Engineer will provide the Contractor with the locations of defects in the newly installed sanitary sewer main, if any, requiring repair.

110-5. Repair of Defects in New Sanitary Sewer Main

Breaks, leaks at joints and sags in the pipe will not be permitted, and shall be repaired in accordance with the Plans, these Special Provisions and as directed by the Engineer.

After completion of repairs, if any, the Contractor shall re-inspect the line by television inspection to the satisfaction of the Engineer.

110-6. Measurement and Payment

Full compensation for closed circuit television (CCTV) inspection of sanitary sewer lines, including, but not limited to, doing all work involved to perform a closed circuit television (CCTV) inspection of sanitary sewer lines, including, but not limited to, submittal of videos and inspection reports, before and after sanitary sewer work, as specified in these Special Provisions and as directed by the Engineer, shall be considered as included in the unit prices paid for the various items of Section 103-19 "Pipe Burst Existing 6" VCP and Install 6" HDPE in Street", Section 103-19 "Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement" and Section 104-4 "Remove Existing 6" VCP and Install 6" PVC by Open Trench Method" and no additional compensation will be made therefor.

Any repair work, re-testing and/or re-inspection required shall be at the Contractor's sole expense, and no additional compensation will be allowed therefor.

Full compensation for sanitary sewer testing not otherwise provided above (air pressure, deflection testing), including furnishing all labor, materials, tools, equipment, and incidentals, shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 111.
WATER BARRIER

Installation of water barrier shall conform to the provisions in these Special Provisions, the Plans and as directed by the Engineer.

Water barrier shall be 80 mil HDPE or approved equal. Width of water barrier shall be wider than the drainage inlet and extend to 6 inches deeper than the sewer main and be installed per manufacturer's specifications.

Full compensation for this item, "Water Barrier" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 112.
DRAINAGE INLET FILTER

Installation of drainage inlet filter shall conform to the provisions in these Special Provisions, the Plans and as directed by the Engineer.

Drainage inlet filter shall be "BIO-GRATE-KMF 24-40-24" filter with the flange cut to 36 inches or approved equal and be installed per manufacturer's specifications.

The Contract unit price paid per each for this item, "Drainage Inlet Filter," as required by the Plans and these Special Provisions, shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and placing drainage inlet filter, complete in place, as specified herein and as directed by the Engineer, and no additional compensation will be allowed therefor.

The County reserves the right to eliminate this item, "Drainage Inlet Filter," from the project completely. The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any cost. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.

No adjustment of the Contract bid price will be made for any increase or decrease in the quantity of "Drainage Inlet Filter" required. The provisions of Section 9-1.06, "Changed Quantity Payment," of the Standard Specifications shall not apply to this item.

END OF SECTION

Appendix A

County of San Mateo Waste Management Plan Form

Waste Management Daily Transport Report



County of San Mateo WASTE MANAGEMENT PLAN

Case/group number(s):

BLD _____ - _____

Project address:

Street: _____

City: _____

Zip Code: _____

Green Halo number(s):

WMP required because project is a:

- Residential Demolition
 Nonresidential New Construction
 Addition

Submit to:

County of San Mateo
Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063

Information and support: 888-442-2666

www.smcsustainability.org/waste-reduction/construction-demolition

Section One: Permit Application

This Waste Management Plan (WMP) must be completed, submitted for review, and approved to obtain a permit. Separate WMPs are required for demolition and construction at the same site unless the Building Department requires only one permit. Need for a WMP is at the discretion of the Building Official or designee.

Applicant's Name: _____ Owner's Name: _____

Phone Number: _____ Email: _____

Applicant is (please check one): Owner Architect Builder Owner/Builder Other _____

Contractor (if applicable): _____ Contact Phone Number: _____

Project Description: _____

Project Square Footage: _____ Estimated Completion Date: _____

Waste Management Requirements:

You are required to recycle or re-use all inert solids (asphalt, brick, concrete, dirt, fines, rock, sand, and stone) and 65% of all construction and demolition debris.

I understand that I am required by San Mateo County Building Regulations Section 9210 - Adoption Of 2016 California Green Building Standards Code (Building Regulations) to salvage, reuse, or recycle **all inert solids** (asphalt, brick, concrete, dirt, fines, rock, sand, and stone) and a **minimum of 65%** of all construction and demolition debris (C&D). _____ (Initial)

I understand that failure to meet the requirements of the Building Regulations shall constitute a misdemeanor, and shall be punishable by imprisonment in the county jail for up to 6 months and/or a fine of up to \$1,000, calculated as a percentage of the required 65% diversion of C&D debris, and that the fine must be paid as a condition of final approval. _____ (Initial)

At the completion of this project, or more frequently if required, all weight tags or other equivalent documentation from salvage, recycling and waste facilities will be provided and I understand that I may not be issued my final inspection unless all original receipts and documentation are submitted to the County of San Mateo Department of Public Works. _____ (Initial)

Recycling and waste facilities ask for the correct origin of the materials generated as they come through the scale house. These tons are reported to the State of California. I understand that I need to advise my debris box company, waste haulers, and my drivers that the materials generated on this project originated in Unincorporated County of San Mateo. _____ (Initial)

1) Deconstruction/salvage/reuse:

What materials will be salvaged/reused? _____

Deconstruction or salvage company (if applicable): _____

What materials will be reused on site? _____

How will this be documented? _____

2) Material transportation:

Will you be using a hauling company, debris box company or hauling the material yourself?

Hauler Debris Box Self-haul

If using a hauling or debris box company, which company? _____

Have they been notified that the diversion of 65% mixed debris and all inert solids is required? Yes No

3) Waste management plan:

Check the materials you anticipate generating and fill in the facilities that you plan to use.

Category	Material	√	Reuse, Recycling or Disposal Facility
Mixed C&D	Mixed Debris		
Inerts	Asphalt		
	Bricks		
	Concrete		
	Dirt		
	Other inert solids		
Source Separated	Cardboard		
	Metals		
	Wood		
	Roofing		
	Carpet		
	Drywall		
	Yard trimmings		
	Other		
Disposal	Waste		

The undersigned hereby agrees to comply with the Waste Management Plan as submitted and is the owner or authorized agent to sign for the owner of this project.

Applicant Signature _____ **Date** _____

County Approval: <input type="checkbox"/> Approved <input type="checkbox"/> Approved with comments <input type="checkbox"/> Denied All receipts, weight tags and documentation for salvage, recycling, and disposal must be submitted: <input type="checkbox"/> On completion of project <input type="checkbox"/> Other _____ Office of Sustainability Approval: _____ Date: _____



County of San Mateo WASTE MANAGEMENT PLAN

Case/Group Number(s):

BLD _____ - _____

Project Address:

Street: _____

City: _____

Section Two: Final Report Approval

Please complete, submit, and get this section approved by the Department of Public Works, prior to obtaining final approval by the Department of Public Works no later than 30 days after completion of the demolition or construction project. Please provide weight of materials in **tons**. If needed, please use the conversion table on the next page to convert cubic yards to tons.

This section must be completed and signed, and all receipts or other supporting documentation must be attached in order to receive final project approval.

Category	Date	Material/items	Name of facility debris was hauled to	Weight (Tons)	Volume (CU. YD.)
Mixed C&D					
Salvage/Reuse					
Inerts Asphalt, bricks, concrete, dirt, rock, sand, soil, stone					
Source Separated Cardboard, wood, metal, sheetrock, wire, carpet, yard trimmings					
Disposal (Waste)					

All receipts or equivalent documentation for salvage, recycling, and disposal are hereby attached.

This project has recycled all of the inert solids and at least 65% of all debris generated.

Applicant Signature _____ Date _____

County Approval: Approved Approved with Comments Fine Payment Required

Comments:

Fine Calculation: $1 - (\text{C\&D Diversion \% Achieved} \text{ } / 65\%) \times \$1000 = \$$ _____

Office of Sustainability Approval: _____ Date: _____



County of San Mateo WASTE MANAGEMENT PLAN

Cubic Yards to Tons Conversion Table

Category	Material	Cubic Yards	Pounds	Tons
Mixed C&D	Mixed load C&D	1	500	0.25
Inerts	Asphalt	1	1380	0.69
	Bricks	1	3000	1.5
	Concrete	1	1860	0.93
	Dirt	1	2000	1
	Other inert solids	1	1240	0.62
Source Separated	Cardboard	1	100	0.05
	Metals	1	900	0.45
	Wood	1	300	0.15
	Asphalt roofing	1	1188	0.59
	Carpet	1	600	0.3
	Drywall	1	400	0.2
	Green waste	1	300	0.15
	Gravel	1	2600	1.3
Disposal	Waste	1	300	0.15

WASTE MANAGEMENT DAILY TRANSPORT REPORT				
Date :		Day :		Multiple Pages : Yes ___ No ___
Project :			Contractor Representative :	
			County Inspector :	
	Transport Vehicle Type	Vehicle License/I.D.	Load Destination	
			Inert Material	Non-Inert Material
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Note : Inert material shall be as defined in the Construction Waste Management Section of these specifications.

Comments :

Appendix B

Sanitary Sewer Monitoring and Reporting Requirements:

**State Water Resources Control Board
Order No. WQ 2013-0058-EXE**

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

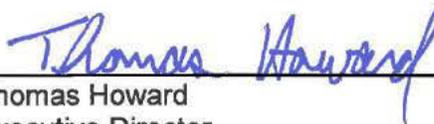
IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on 07/26/2013.

Date

7/30/13

Thomas Howard
Executive Director



³ California Integrated Water Quality System (CIWQS) publicly available at <http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/ssr/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none"> • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> • Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> • Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-6, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
 Division of Water Quality
 Attn: SSO Program Manager
 1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13

Date



Jeanine Townsend
Clerk to the Board

Appendix C

Sample “Payment Bond” Form

Sample “Performance Bond” Form

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That **WHEREAS**, the County of San Mateo hereinafter designated as the "County," has awarded to _____, hereinafter designated
(Contractor's Name)
 as the "Principal," a contract dated _____, hereinafter designated
(Contract Award Date)
 as the "Contract," which Contract is by this reference made a part hereof, for the work described as _____.
(Project Name, Location & Number)

And WHEREAS, pursuant to law, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the Contract is awarded to secure the claims to which reference is made in Sections 9550 to 9566 and 9100 to 9364 both inclusive, of the Civil Code of California.

NOW THEREFORE, THESE PRESENTS WITNESSETH:

That the said Principal and the undersigned, _____
(Surety's Name)
 as corporate Surety, are held and firmly bound unto all laborers, material men and other persons referred to in said statutes in the sum of _____ Dollars (\$ _____)
 lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The condition of this obligation is that if the above bonded Principal, contractor, person, company or corporation, or his or its sub-contractor, fails to pay any claimant name in Section 9100 of the Civil Code of the State of California, or amounts due under the Unemployment Insurance Code, with respect to work or labor performed by any such claimant, that the Surety on this bond will pay the same, in an amount not exceeding the aggregate sum specified in this bond, and also, in case suit is brought upon this bond, a reasonable attorney's fee, which shall be awarded by the court to the prevailing party in said suit, and attorney's fees to be taxed as costs in said suit.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Section 9100 to 9364 of the Civil Code, so as to give a right of action to them or

their assigns in any suit brought upon this bond.

This bond is executed and filed to comply with the provisions of the act of Legislature of the State of California as designated in the Civil Code, Sections 9550-9566 inclusive, and all amendments thereto.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change will be made which increases the total Contract price more than twenty percent (20%) in excess of the original Contract price without notice to the Surety, then, this obligation to be void, otherwise to remain in full force and virtue.

Correspondence relating to this bond shall be sent to the Surety at the address set forth below.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 20____.

Principal

Surety

Signature

Signature

Printed Name

Printed Name

Address for Notices:

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS, the County of San Mateo hereinafter designated as the "County," has awarded to _____, hereinafter designated
(Contractor's Name)
 as the "Principal," a contract dated _____, hereinafter designated
(Contract Award Date)
 as the "Contract," which Contract is by this reference made a part hereof, for the work described as _____.
(Project Name, Location & Number)

And WHEREAS, Principal is required to furnish a bond in connection with the Contract, guaranteeing the faithful performance thereof.

NOW THEREFORE, THESE PRESENTS WITNESSETH:

That the said Principal and the undersigned, _____,
(Surety's Name)
 as corporate Surety, are held and firmly bound unto the County in the sum of _____ Dollars (\$ _____)
 lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bonded Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term of said Contract and any extensions thereof that may be granted by the County, with or without notice to the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, except that no change will be made which increases the total

Contract price more than twenty percent (20%) in excess of the original Contract price without notice to the Surety, then, this obligation to be void, otherwise to remain in full force and virtue.

Correspondence relating to this bond shall be sent to the Surety at the address set forth below.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 20____.

Principal

Surety

Signature

Signature

Printed Name

Printed Name

Address for Notices:

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

Appendix D

Daily Personnel and Equipment Log

DAILY PERSONNEL AND EQUIPMENT LOG

Using as many copies of this form necessary, the Contractor shall provide the Engineer with a list of all personnel and their title and, if applicable, equipment said employee is operating. This information is required of the Prime and their Subcontractors.

This form, if used in lieu of Contractor's Daily Dispatch Report, shall be submitted to the Engineer by the start of the first working day subsequent to the performance of the work, or Contractor may incur task-specific liquidated damages in the amount of \$500 per day for every day hence until submittal is made. Reference is made to Section 7-4.1., "Payroll Records," of the Project Special Provisions.

Date: _____ Project No.: RW935

Project: RECONSTRUCTION OF ENCINA AVENUE FROM MIDDLEFIELD ROAD
TO END

Contractor: _____

Is this log for Subcontractor? Yes No

If yes, Name of Subcontractor: _____

Personnel		Equipment			
Name	Title/ Trade	No.	Type	Make	Model

Notes:

Appendix E

**Public Contract Code
Sections 9204 and 20104 et seq.**

Public Contract Code Section 9204 et seq.**9204.**

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.

SEC. 2.

The Legislature finds and declares that it is of statewide concern to require a charter city, charter county, or charter city and county to follow a prescribed claims resolution process to ensure there are uniform and equitable procurement practices.

SEC. 3.

If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

Public Contract Code Section 20104 et seq.**20104.**

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

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b) (1) "Public work" means "public works contract" as defined in Section 1101 but does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) "Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

(Amended by Stats. 2010, Ch. 697, Sec. 47. Effective January 1, 2011. Operative July 1, 2012, by Sec. 105 of Ch. 697.)

20104.2.

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

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

(b) (1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.

(c) (1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

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

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

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

(Added by Stats. 1994, Ch. 726, Sec. 22. Effective September 22, 1994.)

20104.4.

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

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b) (1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act (Title 4 (commencing with Section 2016.010) of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and

reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

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

(Amended by Stats. 2004, Ch. 182, Sec. 54. Effective January 1, 2005. Operative July 1, 2005, by Sec. 64 of Ch. 182.)

20104.6.

(a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

(Added by Stats. 1994, Ch. 726, Sec. 22. Effective September 22, 1994.)

PROPOSAL SECTION

Contractor's Check-Off List:

1. Complete **Bidder's Information Sheet**..... 1
2. Complete **Bid Proposal Sheet** 5-8
3. Check off for **Bidder's Security** (cash, cashier's check, certified check, or bidder's bond) 10
4. Complete **Principal(s) and Title(s) Sheet** 12
5. Complete **State Contractor's License No. and Department of Industrial Relations Registration No. Sheet** 13
6. Complete **Subcontractor List Sheets** 14-15
7. Complete **Certification of Intent Sheet** 19
8. **Equal Employment Opportunity Sheets:**
 - i. Complete **Questionnaire for Bidder Sheet** 20-22
 - ii. Complete **Contractor Report Form** 23
9. Complete **Equal Benefits Compliance Declaration Form** 29
10. Complete **Employee Jury Service Compliance Declaration Form** 33
11. Complete **Non-Collusion Declaration Form** 34

**PROPOSAL TO THE COUNTY OF SAN MATEO
STATE OF CALIFORNIA**

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END**

**TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

**COUNTY PROJECT NO. RW935
PROJECT FILE NO. E5044000**

NAME OF BIDDER: _____
STREET ADDRESS: _____
MAILING ADDRESS: _____
TELEPHONE NUMBER: (_____) _____
FAX NUMBER: (_____) _____
EMAIL FOR OFFICIAL NOTIFICATIONS: _____

The work for which this proposal is submitted is for construction in accordance with the Special Provisions and Agreement annexed hereto, the project plans described below, and the Department of Transportation Standard Plans, Revised Standard Plans, Standard Specifications, Revised Standard Specifications, 2018 edition, the Labor Surcharge and Equipment Rental Rates and the General Prevailing Wage Rates in effect on the date the work is accomplished.

It is the Contractor's obligation and responsibility to ensure that all work associated with this Project complies with all current Orders of the Health Officer of the County of San Mateo related to the Novel Coronavirus Disease 2019 (COVID-19). The County of San Mateo assumes no responsibility for work performed by Contractor that is not in compliance with all current Orders. The Contractor is advised to review the Orders of the Health Officer of the County of San Mateo, which can be found at the following link:

<https://www.smchealth.org/post/health-officer-statements-and-orders>

LOCATION OF WORK

The work will be done in accordance with the Special Provisions and Agreement annexed hereto, and in accordance with the Standard Specifications of the County of San Mateo.

The location and details of said work are further shown on the Plans titled **“Reconstruction of Encina Avenue from Middlefield Road to End,”** File E5044000 in the Department of Public Works.

**TO THE BOARD OF SUPERVISORS
COUNTY OF SAN MATEO
STATE OF CALIFORNIA**

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; that he has carefully examined the location of the proposed work, the annexed proposed form of Agreement, and the Plans and Specifications therein referred to; that he proposes, and agrees if this Proposal is accepted, that he will contract with the County of San Mateo, in the form of the copy of the Agreement 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 accept in full payment therefor the following unit prices, to wit:

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PROPOSAL TO THE COUNTY OF SAN MATEO

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END**

**TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description	Item Price (In Figures)	Total (In Figures)
1	10	1	LS	Develop and Apply Water	\$	\$
2	11	1	LS	Mobilization	\$	\$
3	12	1	LS	Maintaining Traffic	\$	\$
4	13	1	LS	Water Pollution Control	\$	\$
5	14	1	LS	Construction Waste Management	\$	\$
6	15-1	20	EA	Pothole and Protect Existing Utilities	\$	\$
7	15-2	1	EA	Adjust Water Valve Box to Grade (Cal Water)	\$	\$
8	15-3	200	LF	Remove and Dispose Existing Abandoned Asbestos Cement Water Pipe or Sewer Lateral	\$	\$
9	15-4	1	EA	Remove and Reset Mailboxes	\$	\$
10	15-5	3	EA	Adjust Gas Valve to Grade (PG&E)	\$	\$
11	17	1	LS	Clearing and Grubbing	\$	\$
12	19-1	660	CY	Roadway Excavation (Road Work)	\$	\$
13	22	1	LS	Finishing Roadway	\$	\$
14	26	400	CY	Aggregate Base (Class 2)	\$	\$

Proposal - Continued on Next Page

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END
(Engineer's Estimate – Continued from Previous Page)**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description	Item Price (In Figures)	Total (In Figures)
15	27 (S)	3,150	SY	Cement Treatment	\$	\$
16	27-1	17	TON	Sand Cover	\$	\$
17	39-1	675	TON	Asphalt Concrete (Type A HMA, 1/2" Maximum)	\$	\$
18	39-3	115	SY	Deep Lift Areas (0.50' Deep Asphalt Concrete)	\$	\$
19	39-4	350	SY	Place Asphalt Concrete (Miscellaneous Areas)	\$	\$
20	39-5	975	LF	Header Boards	\$	\$
21	39-7	175	SY	Plane Asphalt Concrete Pavement (Full Width)	\$	\$
22	51-1	80	CY	Class 3 Concrete	\$	\$
23	51-2 (S)	4	EA	Drainage Junction Box (Class 2 Concrete)	\$	\$
24	51-2 (S)	8	EA	Drainage Inlet (Class 2 Concrete)	\$	\$
25	56-1	9	EA	Remove and Reset Existing Roadside Signs	\$	\$
26	56-2	1	EA	Install Object Markers	\$	\$
27	64-1	115	LF	Install 12" HDPE Storm Drain Pipe	\$	\$
28	68-1	1,140	SF	Subsurface Drain Gallery 1	\$	\$
29	68-1	485	SF	Subsurface Drain Gallery 2	\$	\$
30	68-1	365	SF	Subsurface Drain Gallery 3	\$	\$
31	68-1	215	SF	Subsurface Drain Gallery 4	\$	\$

Proposal - Continued on Next Page

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END
(Engineer's Estimate – Continued from Previous Page)**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description	Item Price (In Figures)	Total (In Figures)
32	81 (S)	5	EA	Pavement Marker (Blue Reflective, Fire Hydrant Markers)	\$	\$
33	81 (S)	18	EA	Pavement Marker (Type D Two-Way, Yellow, Retroreflective)	\$	\$
34	84-1 (S)	100	SF	Thermoplastic Pavement Markings	\$	\$
35	90 (S)	70	TON	Portland Cement	\$	\$
36	94-1	5	TON	Asphaltic Emulsion	\$	\$
37	100 (S)	1	LS	Construction Staking	\$	\$
38	101	725	LF	Root Control	\$	\$
39	103	2,000	LF	Pipe Burst Existing 6" VCP and Install 6" HDPE in Street	\$	\$
40	103	120	LF	Pipe Burst Existing 6" VCP and Install 6" HDPE in Easement	\$	\$
41	103-10	51	EA	Reconnect Sanitary Sewer Laterals (Pipe Bursting Method)	\$	\$
42	104-4	170	LF	Install 6" PVC by Open Trench Method	\$	\$

Proposal - Continued on Next Page

**RECONSTRUCTION OF ENCINA AVENUE
FROM MIDDLEFIELD ROAD TO END
(Engineer's Estimate – Continued from Previous Page)**

Item No.	Section No.	Estimated Quantity	Unit of Measure	Item Description	Item Price (In Figures)	Total (In Figures)
43	104-5	6	EA	Reconnect Sanitary Sewer Laterals (Open-Trench Method)	\$	\$
44	104-9	1	LS	Abandon Existing Sanitary Sewer Main	\$	\$
45	104-9	1	EA	Abandon and Remove Existing Sanitary Sewer Manhole	\$	\$
46	105	20	LF	Sag Repair	\$	\$
47	106-4	1	EA	Adjust Sanitary Sewer Manhole to Grade	\$	\$
48	106-5	6	EA	Remove and Replace Existing Sanitary Sewer Manhole	\$	\$
49	106-6	3	EA	New Sanitary Sewer Manhole Construction		
50	107	1	LS	Trench Safety, Trenching and Trench Backfill		
51	108	1	LS	Restoration of Paved Surfaces and Improvements	\$	\$
52	109	200	LF	Sanitary Sewer Lateral Replacement (Beyond 5 feet)	\$	\$
53	112	8	EA	Drainage Inlet Filter	\$	\$
TOTAL						\$

Notes: (S) Specialty Items - As defined in Section 8-1.01, "Subcontracting," of the Standard Specifications.

Bids are required 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 bid on the basis of the estimated quantity set forth for the item.

The Bidder shall set forth 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.

After acceptance of this Proposal and award of the Contract, if the undersigned should fail to contract as aforesaid or should fail to give the "Performance" Surety Bond in the sum of one hundred percent (100%) of the Contract bid, the "Payment" Surety Bond in the sum of one hundred percent (100%) of the Contract bid, the Certificate of Insurance covering public liability and property damage in the amounts specified in the Agreement portion of these Contract documents, and the Certificate of Insurance covering Workmen's Compensation Insurance, within **TEN (10) WORKING DAYS** after award of the Contract, the County may, at its option, determine that the bidder has abandoned the Contract, 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 become the property of the County of San Mateo, State of California.

Accompanying this Proposal is:

- Cash
- A Cashier's Check (made payable to the "County of San Mateo")
- A Certified Check (made payable to the "County of San Mateo")
- A Bidder's Bond executed by an admitted surety insurer (made payable to the "County of San Mateo") in the amount equal to at least ten percent (10%) of the total bid.

Bidders must, upon request, furnish evidence of their financial responsibility and ability to perform the work herein described.

PROVISIONS OF LABOR CODE

The Contractor shall be required to comply with all the payroll and apprenticeship provisions of Chapter 1, Division 2, Section 1776 and 1777.5 of the California Labor Code.

**BIDDER'S FINANCIAL RESPONSIBILITY
TECHNICAL ABILITY & EXPERIENCE**

THE LOW BIDDER MUST, UPON REQUEST, FURNISH EVIDENCE OF FINANCIAL RESPONSIBILITY AND ABILITY TO PERFORM THE WORK INCLUDED IN THIS PROPOSED CONTRACT. SUCH EVIDENCE MAY INCLUDE, BUT NOT BE LIMITED TO, A FINANCIAL STATEMENT AS OF THE DATE OF BID; A STATEMENT, WITH REFERENCES, OF COMPLETED WORK OF A SIMILAR CHARACTER TO THAT INCLUDED HEREIN; A STATEMENT OF THE LAST TWO PROJECTS PERFORMED REGARDLESS OF THEIR CHARACTER; AND SUCH OTHER INFORMATION WHICH WILL ENABLE THE DIRECTOR OF PUBLIC WORKS TO JUDGE THE BIDDER'S RESPONSIBILITY, EXPERIENCE, SKILL AND BUSINESS STANDING.

The names of all persons interested in the foregoing Proposal as principals are as follows:

(Name of Corporation, Co-partnership, Individual)	
(Name and Title)	(Name and Title)
(Name and Title)	(Name and Title)
(Authorized Signature of Bidder)	(Authorized Signature of Bidder)

***(NOTICE:** If the Bidder is a corporation, the legal name of the corporation and the names of the president, secretary, treasurer, and manager thereof shall be set forth together with the signature of the officer or officers authorized to sign Contracts in behalf of the corporation; if the Bidder is a co-partnership, the true name of the firm and the names of the principal partners shall be set forth together with the signature of the partner or partners authorized to sign Contracts in behalf of the co-partnership; and, if the Bidder is an individual, his full name shall be set forth and his signature shall be as the authorized officer. If the signature is by an agent, other than by an officer of a corporation or a member of a partnership, a Power of Attorney must be on file with the County prior to opening of bids or submitted with the bid; otherwise, the bid will be disregarded as irregular and unauthorized.)

Corporations must, upon request, furnish certification attesting to corporate existence and authority of officers to sign contracts and other documents.

The undersigned is licensed by the Contractor's State License Board of the State of California to perform the work hereinafter described, which State Contractor's License No. is:

State Contractor's License No.: _____

(Expires: _____ **)**

Pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015, No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

Department of Industrial Relations Registration No.: _____

(Expires: _____ **)**

LICENSEE: _____
(Please print)

ADDRESS: _____

CITY AND STATE: _____

Date of Proposal

Signature

SUBCONTRACTORS

DESIGNATION OF SUBCONTRACTORS: Each Bidder shall set forth below the name, business address and telephone number of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these Contract Documents. The Bidder shall also list the proposal item number(s) to be done, in whole or in part, by each subcontractor and the total amount of each subcontractor's work in dollars and as a percentage of the total bid amount. The Bidder's attention is directed to Section 5-1.13, "Subcontracting", of the Standard Specifications.

SUBCONTRACTORS

1. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

2. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

3. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

4. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

SUBCONTRACTORS

(Continued)

5. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
6. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
7. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
8. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
9. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
10. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

**SAN MATEO COUNTY
EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

CONTRACT COMPLIANCE PROGRAM

The purpose of the **Contract Compliance Program** is two-fold:

- 1. To prohibit and eliminate employment discrimination; and**
- 2. To further the opportunities for minority persons to be gainfully employed in County construction contracts.**

The program requires equal employment opportunity efforts by Contractors to employ minority workers on the County's construction projects. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex. The Contractor will take equal employment opportunity actions to ensure that applicants are employed, and that employees are treated, during employment, without regard to their race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex; with the goal that the ethnic composition of the Contractor's work force will approximate the ethnic composition of the population of San Mateo County. Such action shall include, but not be limited to, employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship training and on-the-job training.

The **San Mateo County Equal Employment Opportunity Program** requires the Contractor to make two certifications. The first assures compliance with laws prohibiting discrimination. The second concerns the intent to develop and implement an equal employment opportunity program.

The Contractor is further required to:

1. Post "**EQUAL EMPLOYMENT OPPORTUNITY NOTICE(S)**", including the statement: "**AN EQUAL OPPORTUNITY EMPLOYER**", in all announcements of job openings;
2. Permit access by County and State compliance officials to his employment records; and
3. File monthly reports on prescribed forms:
 - A. **Monthly Manpower-Utilization Report**

- B. **Weekly payroll Form WH-347** (which form can be found on the U.S. Department of Labor, Wage & Hour Division website, which website is addressed as <http://www.dir.ca.gov/dlsr/PWD/Northern.html>)
- C. **Statement of Compliance** (which form is on the back of payroll form WH-347 or separate form WH-348, as requested by the County's contract compliance representative)
- D. Assign an equal opportunity officer full time or as additional duty.

Union employees are to be recruited according to applicable labor agreements. If non-union employees are recruited for the project, the Contractor shall make use of minority-oriented news media and referral sources. The Contractor shall inform all subcontractors hired by him on the project(s) of their obligations under this program; and Contractor **will be responsible for the compliance with these regulations by his subcontractors.**

For failure to comply with the non-discrimination section, the Contractor is subject to a penalty of **two percent (2%) of the total amount payable for each working day during which he was found to be in non-compliance, or the cancellation of the contract in part or whole.**

The County's Contract Compliance Program is monitored by the San Mateo County Department of Public Works, 555 County Center, 5th Floor, Redwood City, California, 94063-1665, telephone (650) 363-4100.

Information and necessary forms are available at the **Department of Public Works**. In addition to evaluating Contractors' and subcontractors' equal opportunity efforts, the **Department of Public Works** will assist Contractors and subcontractors toward meeting these obligations.

**CERTIFICATION OF COMPLIANCE
WITH LAWS PROHIBITING DISCRIMINATION**

We are in compliance with the **EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENT OF THE EXECUTIVE ORDER 11246, TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE CALIFORNIA FAIR EMPLOYMENT AND HOUSING ACT**, any other Federal or State laws relating to equal employment opportunity and the provisions of **Title 2, Chapter 2.50 of the San Mateo County Ordinance Code** and the Board established guidelines implementing them.

We will not discriminate against any employee or applicant for employment based on **race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex**. This pertains to the areas of **recruitment, hiring, training, upgrading, transfer, compensation and termination**.

CERTIFICATION OF INTENT

We will maintain or develop and implement, during the course of the work concerned, an **Equal Employment Opportunity Program** of hiring and employment conducted without regard to **race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex** of the applicants. With this Certification we shall submit any and all information that may be required by the County in connection with this program.

We certify that we have read and understood the County of San Mateo's **GENERAL EQUAL EMPLOYMENT OPPORTUNITY STATEMENT SECTION III-A**, which is included in the proposal section of the Specifications.

As a private Contractor, working under contracts with the County of San Mateo, we understand that these policies are the requirements of said County employment and we will, in our recruitment, training and staffing, work to implement this Section as applicable.

Signature and Title of Authorized Representative or Bidder

Date

**SAN MATEO COUNTY
EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

QUESTIONNAIRE FOR BIDDER

THIS REPORT MUST BE COMPLETED IN FULL BY AN OFFICIAL OF THE COMPANY AND SUBMITTED WITH THE BID.

PROJECT: _____

NAME OF FIRM: _____

ADDRESS: _____

CITY/ZIP: _____

TELEPHONE: (____)_____ DATE OF SUBMITTAL: _____

OFFICIAL FOR COMPANY: _____

1. _____ Yes _____ No Have you read and are you acquainted with the **Equal Employment Opportunity Requirement** of the Executive Order 11246, Title VII of the **Civil Rights Act of 1964**, the California Fair Employment Practices Act and **Title 2, Chapter 2.50** of the San Mateo County Ordinance Code?

2. _____ Yes _____ No Does your employment advertising state that you are an Equal Opportunity Employer?

3. _____ Yes _____ No Have all recruitment sources been advised that all qualified applicants will be considered for employment without regard to race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex?

4. _____ Yes _____ No Were any employees hired by means other than the union hiring hall in the past year?

How many? _____

What positions? _____

5. If non-union personnel are employed by the company, or if a position cannot be filled by the union hall, specify the advertisement and recruitment sources that are used. (For example, State HRD, newspapers, high schools, vocational schools, referral agencies/organizations, community groups.)

6. How many apprentices do you employ? _____
How many of these are minorities? _____

7. _____ Yes _____ No Do you have a program for upgrading and counseling present employees?

Describe: _____

8. _____ Yes _____ No Do you have a collective bargaining agreement with a labor union or other organization?

Please list these groups _____

9. What percentage of your work force is covered by union agreement? _____

10. _____ Yes _____ No Have you advised the labor union and/or worker organizations of your company's responsibility under the Equal Employment Opportunity Program?

11. _____ Yes _____ No Does your company's collective bargaining agreement include a provision for non-discrimination in employment?

12. Describe any previous experience with Equal Employment Opportunity Programs:

If your company has a written Equal Employment Opportunity Program now in effect, please attach a copy.

**COUNTY OF SAN MATEO
EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

**CONTRACTOR REPORT FORM
(To Be Submitted with Original Bid)**

PROJECT: _____ DATE: _____

NAME OF BIDDER: _____

NAME OF PERSON SUBMITTING REPORT: _____

RACIAL/ETHNIC MAKEUP OF THE COMPANY

Be sure to include the total of all employees in each classification in the first column. Report the number of employees enrolled in formal on-the-job (apprenticeship) training programs in parenthesis () for each classification.

Minority Employees										
Job Classification	Total (All Employee s)	Ethnicity								
		American- Indian or Native Alaskan	Asian	Native Hawaiian or Pacific Islander	Black American or African American	Caucasian	Filipino	Hispani c or Latino (1)	Other (2)	Unidentifie d (3)
Total (s)										

Notes: (1) "Hispanic" includes all persons of Mexican, South and Central American, Puerto Rican, Cuban or Spanish ancestry.
 (2) "Other" includes all others whose origin consists of two or more races other than Hispanic or Latino.
 (3) Use this category for employees who have chosen not to identify any race or ethnicity, including "Other".

**SECTION III-A. GENERAL EQUAL EMPLOYMENT
OPPORTUNITY POLICY STATEMENT**

The Board of Supervisors of the County of San Mateo takes this opportunity to express its commitment to one of its highest priorities in the area of employment. This priority is assuring that all employees and applicants for employment are provided equal access to, and enjoyment of employment opportunities, and that they are not subjected to discrimination because of age (over 40), ancestry, creed, color, disability, marital status, medical condition, national origin, political or religious affiliation, race, sex, or sexual orientation.

The Board of Supervisors is committed to ensuring compliance with all applicable non-discrimination laws and regulations in order to attain a work environment that is free of discrimination so all County employees can provide quality public service.

The County will take positive measures toward eliminating artificial barriers to employment and achieving equal opportunity through its continued implementation and coordination of the County's Equal Employment Opportunity Program and through its review and evaluation of hiring and promotional policies and procedures.

It is the belief of the Board of Supervisors that equal employment opportunity is consistent with the basic merit system principle that all persons be afforded equal access to positions in public service based on their ability to do the job. Employment decisions shall be made on the basis of merit and in conformity with the principles of equal opportunity action.

Through adoption of the Equal Employment Opportunity Program, the Board of Supervisors commits the County, the operating departments, the Equal Employment Opportunity Coordinator, and all employees to a results-oriented Equal Employment Opportunity Program aimed at attaining a balanced workforce at all levels of County employment and achieving equal opportunity in County service.

EQUAL BENEFITS COMPLIANCE ORDINANCE NO. 04026**CHAPTER 2.84**ORDINANCE NO 04026

AN ORDINANCE OF THE SAN MATEO COUNTY ORDINANCE CODE (TITLE 2, ADMINISTRATION), REQUIRING SPECIFIED COUNTY CONTRACTORS TO PROVIDE FOR NON-DISCRIMINATION BY COUNTY CONTRACTORS IN THE PROVISION OF EMPLOYEE BENEFITS

WHEREAS, employee benefits routinely comprise a significant proportion of total employee compensation; and

WHEREAS, discrimination in the provision of employee benefits between employees with domestic partners and employees with spouses results in unequal pay for equal work; and

WHEREAS, County of San Mateo law prohibits discrimination based on marital status and/or sexual orientation; and

WHEREAS, it is the County's intent, through the contracting practices outlined herein, to equalize the total compensation between similarly situated employees with spouses and employees with domestic partners;

Section 1. The Board of Supervisors of the County of San Mateo, State of California, **ORDAINS** as follows:

Chapter 2.84 CONTRACTS – EQUAL BENEFITS**2.84.010 Definitions.**

For the purposes of this chapter,

- A. “Contract” means a legal agreement between the County and a contractor for public works, consulting, or other services, or for purchase of supplies, material or equipment for which the consideration is in excess of \$5,000.
- B. “Contractor” means a party who enters into a contract with the County.
- C. “Contract Awarding Authority” means the Board of Supervisors or the individual authorized by the Board of Supervisors to enter into contracts on behalf of the County.
- D. “Domestic Partner” means any person who is registered as a domestic partner with the Secretary of State, State of California registry or the registry of the state in which the employee is a resident.

- E. "Employee Benefits" means the provision of any benefit other than pension and retirement benefits provided to spouses of employees or provided to an employee on account of the employee's having a spouse, including but not limited to bereavement leave; disability, life, and other types of insurance; family medical leave; health benefits; membership or membership discounts; moving expenses; vacation; travel benefits; and any other benefits given to employees, provided that it does not include benefits to the extent that the application of the requirements of this chapter to such benefits may be preempted by federal or state law.
(Ord. 4324, 08/15/06)

2.84.020 Discrimination in the provision of benefits prohibited.

(a) No contractor on a County contract shall discriminate in the provision of employee benefits between an employee with a domestic partner and an employee with a spouse, subject to the following conditions:

1. In the event that the contractor's actual cost of providing a particular benefit for the domestic partner of an employee exceeds that of providing it for the spouse of an employee, or the contractor's actual cost of providing a particular benefit to the spouse of an employee exceeds that of providing it for the domestic partner of an employee, the contractor shall not be deemed to discriminate in the provision of employee benefits if the contractor conditions providing such benefit upon the employee's agreement to pay the excess costs.
2. The contractor shall not be deemed to discriminate in the provision of employee benefits if, despite taking reasonable measures to do so, the contractor is unable to extend a particular employee benefit to domestic partners, so long as the contractor provides the employee with a cash payment equal to the contractor's cost of providing the benefit to an employee's spouse.

(b) The Board of Supervisors may waive the requirements of this chapter when it determines that it is in the best interests of the County. The County Manager may waive the requirements of this chapter for contracts not needing the approval of the Board of Supervisors where waiver would be in the best interests of the County for such reasons as follows:

1. Award of a contract or amendment is necessary to respond to an emergency;
2. The contractor is a sole source;
3. No compliant contractors are capable of providing goods or services that respond to the County's requirements;

4. The requirements are inconsistent with a grant, subvention or agreement with a public agency;
5. The County is purchasing through a cooperative or joint purchasing agreement;

(c) Contractors should submit requests for waivers of the terms of this chapter to the Contract Awarding Authority for that contract, or in the case of Contracts approved by the Board, the County Manager.

(d) The Contract Awarding Authority, or in the case of contracts approved by the Board, the County Manager, may reject an entity's bid or proposals, or terminate a contract, if the Contract Awarding Authority determines that the entity was set up, or is being used, for the purpose of evading the intent of this chapter.

(e) No Contract Awarding Authority shall execute a contract with a contractor unless such contractor has agreed that the contractor will not discriminate in the provision of employee benefits as provided for in this chapter. (Ord. 4324, 08/15/06)

2.84.030 Application of Chapter.

The requirements of this chapter shall only apply to those portions of a contractor's operations that occur (i) within the County; (ii) on real property outside of the County if the property is owned by the County or if the County has a right to occupy the property, and if the contractor's presence at that location is connected to a Contract with the County; and (iii) elsewhere in the United States where work related to a County Contract is being performed. The requirements of this Chapter shall not apply to subcontracts or subcontractors of any contract or contractor. (Ord. 4324, 08/15/06)

2.84.040 Powers and duties of the County Manager.

The County Manager's office shall have the authority to:

(a) Adopt rules and regulations, in accordance with this chapter and the Ordinance Code of the County of San Mateo, establishing standards and procedures for effectively carrying out this chapter.

(b) Receive notification from employees of contractors regarding violations of this chapter.

(c) Determine and recommend to the Board of Supervisors for final decision the imposition of appropriate sanctions for violation of this chapter by contractors including, but not limited to:

1. Disqualification of the contractor from bidding on or being awarded a County contract for a period of up to 5 years; and
2. Contractual remedies, including, but not limited to termination of contract.

3. Liquidated damages in the amount of \$2,500.
- (d) Examine contractors' benefit programs covered by this chapter;
 - (e) Impose other appropriate contractual and civil remedies and sanctions for violations of this chapter;
 - (f) Allow for remedial action after a finding of non-compliance, as specified by rule;
 - (g) Perform such other duties as may be required or which are necessary to implement the purposes of this chapter. (Ord. 4324, 08/15/06)

2.84.050 Date of Application.

The provisions of this chapter shall apply to any contract awarded or amended on or after July 01, 2001, provided that if the contractor is then signatory to a collective bargaining agreement, this chapter shall only apply to any contract with that contractor which is awarded or amended after the effective date of the next collective bargaining agreement. (Ord. 4324, 08/15/06)

Section 2. Severability – The provisions of this ordinance are declared to be separate and severable. If a court of competent jurisdiction, all appeals having been exhausted or all appeal periods having run, finds any provision of this ordinance to be invalid or unenforceable as to any person or circumstance, such offending provision shall, if feasible, be deemed to be modified to be within the limits of enforceability or validity. However, if the offending provision cannot be so modified, it shall be null and void with respect to the particular person or circumstance, and all other provisions of this ordinance in all other respects, and the offending provision with respect to all other persons and all other circumstances, shall remain valid and enforceable.

COUNTY OF SAN MATEO
Equal Benefits Compliance Declaration Form
 (To Be Submitted with Proposal)

I Vendor Identification

Name of Contractor: _____
 Contact Person: _____
 Address: _____
 Phone Number: _____ Fax Number: _____

II Employees

Does the Contractor have any employees? _____ Yes _____ No
 Does the Contractor provide benefits to spouses of employees? _____ Yes _____
 _____ No

*If the answer to one or both of the above is no, please skip to Section IV. *

III Equal Benefits Compliance (Check One)

- Yes, the Contractor complies by offering equal benefits, as defined by Chapter 2.84, to its employees with spouses and its employees with domestic partners.
- Yes, the Contractor complies by offering a cash equivalent payment to eligible employees in lieu of equal benefits.
- No, the Contractor does not comply.
- (NOTE: **DO NOT CHECK THIS BOX** unless the said agreement was executed/renewed on or before July 1, 2001. If checked, a copy of the collective bargaining agreement shall be submitted with Proposal.)
 The Contractor is under a collective bargaining agreement which began **on or before July 1, 2001** and expires on _____ (date). (Section 2.84.050)

IV Declaration

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am authorized to bind this entity contractually.

Executed this _____ day of _____, 20__ at _____, _____.
 (City) (State)

 Signature

 Name (Please Print)

 Title

 Contractor Tax Identification Number

CONTRACTOR EMPLOYEE JURY SERVICE ORDINANCE NO. 04269**CHAPTER 2.85**ORDINANCE NO 04269

AN ORDINANCE OF THE SAN MATEO COUNTY ORDINANCE CODE (TITLE 2,
ADMINISTRATION), REQUIRING SPECIFIED COUNTY CONTRACTORS
TO PROVIDE PAID JURY SERVICE TO FULL-TIME EMPLOYEES

The Board of Supervisors of the County of San Mateo, State of California,
ORDAINS as follows:

Chapter 2.85 CONTRACTOR EMPLOYEE JURY SERVICE**2.85.010 Definitions**

For the purposes of this chapter,

- (a) "Contract" means a legal agreement between the County and a contractor for public works, consulting, or other services, or for purchase of supplies, material or equipment.
- (b) "Contractor" means a party who enters into a contract with the County for which the contractor receives consideration of \$100,000 or more.
- (c) "Contract Authority" means the Board of Supervisors or the head of the department or agency presenting the proposed contract to the Board of Supervisors.
- (d) "Employee " means any California resident who is a full-time employee of a contractor under the laws of California.
- (e) "Full time " means 40 hours or more worked per week, or a lesser number of hours if (1) the lesser number is a recognized industry standard as determined by the County Manager, or (2) the contractor has a long standing practice that defines the lesser number of hours as full time. (Ord. 4324, 08/15/06)

2.85.020 Contractor jury service policy

- (a) A contractor shall have and adhere to a written policy that provides that its employees shall receive from the contractor, on an annual basis, no less than five days of regular pay for actual jury service in San Mateo County. The policy may provide that employees deposit any fees received for such jury service with the contractor or that the contractor deduct from the employees' regular pay the fees received for jury service.

- (b) At the time of seeking a contract, a contractor shall certify to the County that it has and adheres to a policy consistent with this chapter or will have and adhere to such a policy prior to award of the contract.
- (c) The Board of Supervisors may waive the requirements of this chapter when it determines that it is in the best interests of the County for such reasons as follows:
 - (1) Award of a contract or amendment is necessary to respond to an emergency;
 - (2) The contractor is a sole source;
 - (3) No compliant contractors are capable of providing goods or services that respond to the County's requirements;
 - (4) The requirements are inconsistent with a grant, subvention or agreement with a public agency;
 - (5) The County is purchasing through a cooperative or joint purchasing agreement.
- (d) Contractors should submit requests for waivers of the terms of this chapter to the Contract Authority or the County Manager.
- (e) The County Manager may reject a contractor's bid or proposal, or terminate a contract, if he determines that the contractor is in violation of the requirements of this chapter or was established, or is being used, for the purpose of evading the intent of this chapter.
- (f) No contract shall be executed with a contractor unless such contractor is in compliance with this chapter. (Ord. 4324, 08/15/06)

2.85.030 Powers and duties of the County Manager

The County Manager's office shall have the authority to:

- (a) Adopt rules and regulations, in accordance with this chapter and the Ordinance Code of the County of San Mateo, establishing standards and procedures for effectively carrying out this chapter.
- (b) Receive notification from employees of contractors regarding violations of this chapter.
- (c) Determine and recommend to the Board of Supervisors for final decision the imposition of appropriate sanctions for violation of this chapter by contractors including, but not limited to:
 - (1) Disqualification of the contractor from bidding on or being awarded a County contract for a period of up to 5 years; and

- (2) Contractual remedies, including, but not limited to termination of contract.
- (d) Impose other appropriate contractual sanctions for violations of this chapter;
- (e) Allow for remedial action after a finding of non-compliance;
- (f) Perform such other duties as may be required or which are necessary to implement the purposes of this chapter. (Ord. 4324, 08/15/06)

2.85.040 Date of Application

The provisions of this chapter shall apply to any contract awarded or amended on or after September 01, 2005, provided that if the contractor is then signatory to a collective bargaining agreement, this chapter shall only apply to any contract with that contractor which is awarded or amended after the effective date of the next collective bargaining agreement. (Ord. 4324, 08/15/06)

NON-COLLUSION DECLARATION FORM**THIS FORM SHALL BE EXECUTED BY BIDDER AND SUBMITTED WITH BID.**

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

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

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

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

“Contractor”

(Print)

(Signature)

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 2022, by and between the COUNTY OF SAN MATEO, State of California, hereinafter called the "County" and _____, hereinafter called the "Contractor,"

W I T N E S S E T H:

THAT, for and in consideration of the mutual covenants and agreements hereinafter contained, the parties hereto agree as follows:

I. **Services to be performed by Contractor:** The Contractor will at his own proper cost and expense, do all the work and furnish all the labor, materials, equipment and utilities necessary to perform and complete in good workmanlike and substantial manner, and to the satisfaction of the Director of Public Works of the County of San Mateo, hereinafter called "Engineer," for the project

RECONSTRUCTION OF ENCINA AVENUE FROM MIDDLEFIELD ROAD TO END

TOTAL PROJECT APPROXIMATELY 0.33 IN LENGTH WITH APPURTENANT WORK THERETO IN SAN MATEO COUNTY

**COUNTY PROJECT NO. RW935
PROJECT FILE NO. E5044000**

and all in strict accordance with the Plans, Specifications, Notice to Contractors, Special Provisions and Proposal on file in the office of the Director of Public Works, which said Plans, Specifications, Notice to Contractors, Special Provisions and Proposal are hereby specifically referred to and by such reference made a part thereto.

II. **Payments:** The Contractor will receive and accept and the County will pay the prices specified in the Contractor's Proposal, dated _____, 2022, on file in the office of the Director of Public Works of the County of San Mateo and by

reference made a part of this Agreement, as full compensation for furnishing all labor, materials and equipment for doing all the work contemplated and embraced in this Agreement; the Contractor assumes any and 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 County, and for all risks of every description connected with the work, and also assumes any and 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 to the Plans, Specifications and Special Provisions and requirements of the Engineer hereunder. The Contractor shall guarantee all materials and workmanship for a period of one (1) year from date of acceptance of the project by the Director of Public Works. Any defects due to faulty materials, method of installation or workmanship within that period shall be repaired by the Contractor promptly upon notice by the Engineer, at the expense of the Contractor.

It is distinctly understood that the estimate set forth in the Notice to Contractors is only an approximation of the amount of work to be done and the County does not expressly or by implication agree that the actual amount of work will correspond with the amount set forth therein, and payment shall be made to the Contractor as above set forth.

Payment to the Contractor shall be made progressively by the County for the work and materials furnished under this Agreement in accordance with the provisions of Section 9 of the Special Provisions portion of these Contract documents.

III. Term: Time is of the essence in the Agreement, and the work to be performed hereunder shall be completed within

SIXTY (60) WORKING DAYS

from the date of commencement of the work, which commencement shall be within **TEN (10) CALENDAR DAYS** after receiving Notice to Proceed from the Engineer.

IV. Termination: This Contract is subject to termination as provided by Section 4410 and Section 4411 of the Government Code of the State of California, being portions of the Emergency Termination of Public Contracts Act of 1949. In the event that the Contract is terminated pursuant to said sections, compensation to the

Contractor shall be determined on the basis of the reasonable value of the work done, including preparatory work. As an exception to the foregoing, in the case of any fully completed separate item or portion of the work for which there is a separate Contract price, the Contract price shall control.

V. Relationship of Parties: Contractor agrees and understands that the work/services performed under this Agreement are performed as independent contractor and not as an employee of the County and that Contractor acquires none of the rights, privileges, powers, or advantages of County employees.

VI. Merger Clause: This Agreement, together with the Notice to Contractors, the Contractor's Proposal, the Plans, Specifications and Special Provisions and the Payment and Performance Bonds form the Contract, and said documents incorporated herein by reference become as fully a part of the Contract as if hereto attached or herein set forth in full. The Standard Specifications of the County of San Mateo, State of California, which, except as specifically noted in the County Contract documents and specifications, are identical with the Standard Specifications of the State of California, Department of Transportation, 2018 edition, and are on file with the County Executive/Clerk of the Board of Supervisors, County of San Mateo, are incorporated herein by reference as a part of the Contract documents and shall apply to this project except where the terms of this Agreement or other Contract documents are inconsistent therewith, in which case the provisions of this Contract shall prevail.

This Agreement constitutes the sole Agreement of the parties hereto and correctly states the rights, duties, and obligations of each party as of this document's date. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications shall be in writing and signed by the parties.

VII. Surety Bonds: The performance of this Contract is secured by a "Payment" Surety Bond in the sum of one hundred percent (100%) of the Contract bid, and a "Performance" Surety Bond in the sum of one hundred percent (100%) of the Contract bid. "Payment" and "Performance" Surety Bonds have been approved as to form by County Counsel, of which samples of same are attached as Appendix C in the Special Provisions.

VIII. Insurance: The Contractor shall not commence work under this Contract until he has obtained all insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained. The Contractor shall furnish County with certificates of insurance evidencing the required coverage, and there shall be a specific contractual liability endorsement extending the Contractor's coverage to include the contractual liability assumed by the Contractor pursuant to this Contract. Certificates of Insurance shall be filed with the County within **TEN (10) WORKING DAYS** after award of the contract. These certificates shall specify or be endorsed to provide that **THIRTY (30) CALENDAR DAYS'** notice must be given, in writing, to County of any pending change in the limits of liability or of any cancellation or modifications of the policy.

A. Worker's Compensation and Employer's Liability Insurance

The Contractor shall have in effect during the entire life of this Contract, Worker's Compensation and Employer's Liability Insurance providing full statutory coverage; and in case any work is sublet, the Contractor shall require all subcontractors similarly to provide Worker's Compensation and Employer's Liability Insurance to full statutory limits. In signing this Contract, the Contractor makes the following certifications, required by Section 1861 of the Labor Code:

“I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the code, and I will comply with such provisions before commencing the performance of the work of this Contract.”

B. Liability Insurance

The Contractor shall take out and maintain during the life of this Contract such Bodily Injury Liability and Property Damage Liability Insurance as shall comply with Section 7-1.05, “Indemnification,” and Section 7-1.06, “Insurance,” of the Standard Specifications and protect him/her and any subcontractor performing work covered by this Contract, from claims for damages for bodily injury, including accidental death, as well as from claims for property damage including third party property damage, to include coverage on property in the care, custody and control of the Contractor, and also including coverage for what

are commonly known as the "X, C and U" exclusions (having to do with blasting, collapse and underground property damage), which may arise from the Contractor's operations under this Contract, whether such operations be by himself/herself or by any subcontractor or by anyone directly or indirectly employed by either of them and the amounts of such insurance shall be **ONE MILLION DOLLARS (\$1,000,000)** combined single bodily injury and property damage for each occurrence. The County of San Mateo, Fair Oaks Sewer Maintenance District, Town of Atherton, California Water Service Company (Calwater) , Pacific Gas and Electric Company (PG&E), and their officers, agents, servants and employees, shall be named as additional insureds on any such policies of insurance, which shall also contain a provision stating that the insurance afforded thereby to the County of San Mateo, Fair Oaks Sewer Maintenance District, Town of Atherton, California Water Service Company (Calwater) , Pacific Gas and Electric Company (PG&E), and their officers, agents, servants and employees, shall be primary insurance to the full limits of liability of the policy, and that if the County of San Mateo, Fair Oaks Sewer Maintenance District, Town of Atherton, California Water Service Company (Calwater) , Pacific Gas and Electric Company (PG&E), or their officers and employees, have other insurance against a loss covered by such policy, such other insurance shall be excess insurance only.

Such statements, mentioned above, shall be included on a separate endorsement to be submitted to the County with the Certificate of Insurance.

Such insurance shall include:

1) Comprehensive General Liability \$1,000,000

2) Motor Vehicle Liability Insurance \$1,000,000

C. In case of the breach of any provision of this Article, the County, at its option, may take out and maintain at the expense of the Contractor, or subcontractor, such insurance as the County may deem proper and may deduct the cost of taking out and maintaining such insurance from any sums which may be due, or become due, to the Contractor, under this Contract.

D. Hold Harmless

The Contractor's attention is directed to Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications.

The provisions contained in Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications of the State of California, Department of Transportation, shall be applicable with the understanding that where said provisions specifically refer to the State of California, a department or division of the State or an official, officer or employee of the State, said provision shall be interpreted to refer to the County of San Mateo, Fair Oaks Sewer Maintenance District, Town of Atherton, California Water Service Company (Calwater) , Pacific Gas and Electric Company (PG&E), and all officers, agents, servants and employees thereof connected with the work, including but not limited to the Director of Public Works, their duly authorized representatives, other appropriate department, division, official, officer or employee of the County of San Mateo, Fair Oaks Sewer Maintenance District, Town of Atherton, California Water Service Company (Calwater), Pacific Gas and Electric Company (PG&E).

The provisions of Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications are superseded by the following:

"To the full extent permitted by law, Contractor shall indemnify and save harmless the County, its officers, employees, and servants from all claims, suits, or actions of every name, kind, and description, brought for, or on account of:

1. Injuries to or death of any person, including Contractor, its officers, employees and servants, or
2. Damage to any property of any kind whatsoever and to whomsoever belonging, or
3. Any sanctions, penalties or claims of damages resulting from Contractor's failure to comply with applicable laws, or
4. Any other loss or cost resulting from the contractor's negligent or reckless acts or omissions or willful misconduct in connection with the performance of any work required of Contractor or payments made pursuant to this Agreement, provided that this shall not apply to injuries or damages for which the County has been found in a court of competent jurisdiction to be liable by reason of its own negligence or willful misconduct.

The duty of Contractor to indemnify and save harmless, as set forth herein, shall include the duty to defend, as set forth in Section 2778 of the California Civil Code.

The obligations set forth in this Section shall continue beyond the term of this Agreement as to any act or omission which occurred during or under this Agreement.”

E. Compensation

All insurance required by the paragraphs of this section shall be obtained and maintained by the Contractor at Contractor’s own expense and County shall not compensate Contractor for said insurance expenses other than as they are included in the Contract prices the County pays for the various items of work.

F. Nothing herein contained shall be construed as limiting in anyway the extent to which the Contractor may be held responsible for payments of damages resulting from his operation.

IX. Prevailing Wages: Contractor hereby agrees to pay not less than prevailing rates of wages, which are effective on the date the Notice to Contractors is issued for each craft or type of workman or mechanic needed to execute the Contract as provided for by the County for the performance of public work., and be responsible for compliance with all the provisions of the California Labor Code, Article 2-Wages, Chapter 1, Part 7, Division 2, Section 1770 et seq. and Section 1810 et seq., and particularly Section 1775 and 1776(a) thereof. A copy of the prevailing wage scale established by the Department of Industrial Relations is on file in the office of the Director of Public Works, and available at www.dir.ca.gov/DLSR or by phone at 415-703-4774. California Labor Code Section 1776(a) requires each contractor and subcontractor to keep accurate payroll records of trades workers on all public works projects and to submit copies of certified payroll records upon request.

Additionally, pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015:

- No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) 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 (awarded on or after April 1, 2015) 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.

X. California Labor Code: The Contractor expressly covenants and agrees to comply with all the provisions of the Labor Code of the State of California limiting the hours of labor on public works to eight (8) hours during any one calendar day, and forty (40) hours in any one calendar week, requiring the payment of not less than the prevailing wage rates, and further agrees to the forfeitures provided for in said Labor Code and as set forth in Section 7, "Legal Relations and Responsibility to the Public," of the Standard Specifications and all amendments thereto, in the event of a violation of any of the provisions thereof during the course of execution of this Contract.

The Contractor expressly agrees to be responsible for compliance with all the provisions of Sections 1776 and 1777.5 of the California Labor Code.

XI. Non-Discrimination and Other Requirements:

a. General Non-discrimination:

No person shall be excluded from participation in, denied benefits of, or be subject to discrimination under this Agreement on the basis of their race, color, religion, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy, childbirth or related conditions), medical condition (including cancer-related), military service, or genetic information. Contractor shall ensure full compliance with Federal, state and local laws, directives and executive orders regarding non-discrimination for all employees and Subcontractors under this Agreement.

b. Equal Employment Opportunity:

Contractor shall ensure equal employment opportunity based on objective standards of recruitment, classification, selection, promotion, compensation, performance evaluation, and management relations for all employees under this Agreement. Contractor's equal employment policies shall be made available to County upon request.

c. Section 504 of the Rehabilitation Act of 1973:

Contractor shall comply with Section 504 of the Rehabilitation Act of 1973, as amended, which provides that no otherwise qualified individual with a disability shall, solely by reason of a disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in the performance of any services this Agreement. This Section applies only to contractors who are providing services to members of the public under this Agreement.

d. Compliance with County's Equal Benefits Ordinance:

Contractor shall comply with all laws relating to the provision of benefits to its employees and their spouses or domestic partners, including, but not limited to, such laws prohibiting discrimination in the provision of such benefits on the basis that the spouse or domestic partner of the Contractor's employee is of the same or opposite sex as the employee.

e. Discrimination Against Individuals with Disabilities:

The nondiscrimination requirements of 41 C.F.R. 60-741.5(a) are incorporated into this Agreement as if fully set forth here, and Contractor and any subcontractor shall abide by the requirements of 41 C.F.R. 60-741.5(a). This regulation prohibits discrimination against qualified individuals on the basis of disability and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified individuals with disabilities.

f. History of Discrimination:

Contractor certifies that no finding of discrimination has been issued in the past 365 days against Contractor by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other investigative entity. If any finding(s) of discrimination have been issued against Contractor within the past 365 days by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or other investigative entity, Contractor shall provide County with a written explanation of the outcome(s) or remedy for the discrimination prior to execution of this Agreement. Failure to comply with this Section shall constitute a material breach of this Agreement and subjects the Agreement to immediate termination at the sole option of the County.

g. Reporting; Violation of Non-discrimination Provisions:

Contractor shall report to the County Executive the filing in any court or with any administrative agency of any complaint or allegation of discrimination on any of the bases prohibited by this Section of the Agreement or the Section titled "Compliance with Laws". Such duty shall include reporting of the filing of any and all charges with the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other entity charged with the investigation or adjudication of allegations covered by this subsection within 30 days of such filing, provided that within such 30 days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include a general description of the circumstances involved and a general description of the kind of discrimination alleged (for example, gender-, sexual orientation-, religion-, or race-based discrimination).

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to be determined by the County Executive, including but not limited to:

- i) Termination of this Agreement;
- ii) Disqualification of the Contractor from bidding on or being awarded a County contract for a period of up to 3 years;
- iii) Liquidated damages of \$2,500 per violation; and/or
- iv) Imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Executive.

To effectuate the provisions of this paragraph, the County Executive shall have the authority to:

- i) Examine Contractor's employment records with respect to compliance with this paragraph;
- ii) Offset all or any portion of the amount described in this paragraph against amounts due to Contractor under the Contract or any other Contract between Contractor and County.

Contractor shall report to the County Executive the filing by any person in any court of any complaint of discrimination or the filing by any person of any and all charges with the Equal Employment Opportunity Commission, the Fair Employment and

Housing Commission or any other entity charged with the investigation of allegations within 30 days of such filing, provided that within such 30 days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include the name of the complainant, a copy of such complaint and a description of the circumstance. Contractor shall provide County with a copy of its response to the Complaint when filed.

Compliance with Equal Benefits Ordinance. With respect to the provisions of employee benefits, Contractor shall comply with the County Ordinance which prohibits contractors from discriminating in the provision of employee benefits between an employee with a domestic partner and an employee with a spouse.

XII. Compliance with County Employee Jury Service Ordinance:

Contractor shall comply with Chapter 2.85 of the County's Ordinance Code, which states that Contractor shall have and adhere to a written policy providing that its employees, to the extent they are full-time employees and live in San Mateo County, shall receive from the Contractor, on an annual basis, no fewer than five days of regular pay for jury service in San Mateo County, with jury pay being provided only for each day of actual jury service. The policy may provide that such employees deposit any fees received for such jury service with Contractor or that the Contractor may deduct from an employee's regular pay the fees received for jury service in San Mateo County. By signing this Agreement, Contractor certifies that it has and adheres to a policy consistent with Chapter 2.85. For purposes of this Section, if Contractor has no employees in San Mateo County, it is sufficient for Contractor to provide the following written statement to County: "For purposes of San Mateo County's jury service ordinance, Contractor certifies that it has no full-time employees who live in San Mateo County. To the extent that it hires any such employees during the term of its Agreement with San Mateo County, Contractor shall adopt a policy that complies with Chapter 2.85 of the County's Ordinance Code." The requirements of Chapter 2.85 do not apply if this Agreement's total value listed in the Section 16 is less than one-hundred thousand dollars (\$100,000), but Contractor acknowledges that Chapter 2.85's requirements will apply if this Agreement is amended such that its total value meets or exceeds that threshold amount.

XIII. Termination of Agreement: The Contract may be terminated by the County in the event the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he or any of his subcontractors should violate any of the provisions of the Contract, or if he should persistently or repeatedly refuse, or should fail, except in cases where extension of time is provided, to furnish enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to subcontractors, or for materials or labor, or persistently disregard laws, ordinances, or the instructions of the Engineer. In the event of any of the foregoing conditions, the Engineer is authorized and directed to serve written notice upon the Contractor and his Surety of its intention to terminate the Contract, such notice to contain the reasons for action and unless within **TWO (2) CALENDAR DAYS** after serving of such notice such conditions shall be remedied and satisfactory arrangements for continuation be made, the Contract shall, upon expiration of **TWO (2) CALENDAR DAYS**, cease and terminate. In the event of any such termination, the Engineer may take over the work and prosecute the same to completion by Contract or by any other method he may deem advisable, and at the expense of the Contractor, and the Contractor and his Surety shall be liable to the County for any excess cost occasioned thereby, and in such event, the County may without liability to so doing take possession of and utilize such materials, appliances, plant and other property belonging to the Contractor as may be on the site of the work, and necessary therefore. In such cases, the Contractor shall not be entitled to receive any further payment until the work is completed.

XIV. Compliance with Laws: The Contractor shall comply with all existing and future State and Federal and regulating laws and all ordinances and regulations of the County of San Mateo 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.

Controlling Law: The validity of this Agreement and of its terms or provisions, as well as the rights and duties of the parties hereunder, the interpretation, and performance of this Agreement shall be governed by the laws of the State of California.

XV. Contract Assignability: Neither party to the Contract shall assign the Contract or sublet it as a whole without written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder without the previous written consent of the County. The Contractor shall neither mortgage nor convey title to equipment or material to be used in this work, without the written permission of the County.

XVI. COVID-19: This Provision relates to issues associated with the Novel Coronavirus Disease 2019 (COVID-19) and shall supersede any other conflicting sections or provisions of this Contract and its attachments. The ongoing COVID-19 pandemic may impact the County's ability to proceed with this Project.

Although this Project is proceeding as an Essential Infrastructure Project as determined by the County Board of Supervisors/County Executive, this determination could change in the future based on Health Orders issued by the San Mateo County Health Officer or State of California, or future determinations of the County Board of Supervisors/County Executive. Should future Health Orders or the County Board of Supervisors/County Executive directives preclude the Project from proceeding as scheduled, the County reserves the right to:

- Cancel the Project, terminate the Contractor's work once the Contractor has safely secured the work area, and compensate the Contractor for work completed and materials purchased prior to cancellation of the Project and labor and materials, as approved by the Engineer, required to safely secure the work area such that work can be discontinued on the Project; **or**
- The County and Contractor may reach a mutually agreeable extension for completion of the Project such that the work can resume after being halted provided it complies with all Health Orders issued by the Health Officer of the County of San Mateo or the State of California and as approved by the County Board of Supervisors/County Executive.

It is the Contractor's obligation and responsibility to ensure that all work associated with this Project complies with all current Orders of the Health Officer of the County of San Mateo related to the Novel Coronavirus Disease 2019 (COVID-19). The County of San Mateo assumes no responsibility for work performed by Contractor that is not in compliance with all current Orders. The Contractor is advised to review the

Orders of the Health Officer of the County of San Mateo, which can be found at the following link:

<https://www.smchealth.org/post/health-officer-statements-and-orders>

XVII. Contract Materials: The County hereby promises and agrees with the said Contractor to employ and does hereby employ the said Contractor to provide the materials, unless otherwise specified, and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid 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.

XVIII. Retention of Records, Right to Monitor and Audit:

- A.** CONTRACTOR shall maintain all required records for three (3) years after the COUNTY makes final payment and all other pending matters are closed, and shall be subject to the examination and/or audit of the County, a Federal grantor agency, and the State of California.
- B.** Reporting and Record Keeping: CONTRACTOR shall comply with all program and fiscal reporting requirements set forth by appropriate Federal, State and local agencies and as required by the COUNTY.
- C.** CONTRACTOR agrees upon reasonable notice to provide to COUNTY, to any Federal or State department having monitoring or review authority, to COUNTY's authorized representatives, and/or their appropriate audit agencies upon reasonable notice, access to and the right to examine all records and documents necessary to determine compliance with relevant Federal, State, and local statutes, rules and regulations, and this Agreement, and to evaluate the quality, appropriateness and timeliness of services performed.

XIX. Notices: Any notice, request, demand or other communication required or permitted hereunder shall be deemed to be properly given when both: (1) transmitted via email to the email address listed below or transmitted via facsimile, if available, to the number listed below; and (2) sent to the physical address listed below by either

being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of County, to:

Ann M. Stillman, Interim Deputy Director of Public Works
 County of San Mateo
 555 County Center, 5th Floor
 Redwood City, CA 94063-1665
 Facsimile: 650-361-8220
 Email: astillman@smcgov.org

In the case of Contractor, to:

(Contractor Name)
 (Contractor Address)
 (City, State Zip)
 Facsimile:
 Email:

XX. Contract Amount and Change Orders:

A. Contract Amount

The amount payable to Contractor under the terms of this agreement is _____ DOLLARS (\$_____).

B. Change Orders

The Board of Supervisors has authorized the Director of Public Works to execute change orders to modify the scope of work provided under this agreement, and to increase the County's maximum fiscal obligation to correspond to those changes. The Board of Supervisors has directed that in the event of change orders, the County's maximum fiscal obligation shall not exceed _____ DOLLARS (\$_____). Any payments in excess of the amount authorized by the Board of Supervisors will require additional approval of the Board of Supervisors.

XXI. Proprietary Rights and Confidentiality: The requirements of this Agreement pertaining to the protection of proprietary rights and confidentiality shall survive termination of this Agreement.

XXII. Electronic Signature: Both County and Contractor wish to permit this

Agreement and future documents relating to this Agreement to be digitally signed in accordance with California law and County's Electronic and Facsimile Signatures Administrative Memo (B-29). Any party to this Agreement may revoke such agreement to permit electronic signatures at any time in relation to all future documents by providing notice pursuant to this Agreement.

IN WITNESS WHEREOF, the parties to these presents have hereunto set their hands the year and date first above written.

“County”

COUNTY OF SAN MATEO
State of California

BY: _____
**President, Board of Supervisors
County of San Mateo**

ATTEST:

Michael Callagy, County Executive/
Clerk of the Board of Supervisors

“Contractor”

Name of Contractor

BY: _____
(Authorized Signature and Seal of Bidder)