



BOARD OF DIRECTORS MEETING

AGENDA

March 2, 2023, Regular Meeting
Monte Rio Community Center
20488 Highway 116
Monte Rio, CA 95462
6:30 p.m.

NOTICE TO PERSONS WITH DISABILITIES: It is the policy of the Sweetwater Springs Water District to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including those with disabilities. Upon request made at least 48 hours in advance of the need for assistance, this Agenda will be made available in appropriate alternative formats to persons with disabilities. This notice is in compliance with the Americans with Disabilities Act (28 CFR, 35.102-35.104 ADA Title II).

Any person who has any questions concerning any agenda item may call the General Manager or Assistant Clerk of the Board to make inquiry concerning the nature of the item described on the agenda; copies of staff reports or other written documentation for each item of business are on file in the District Office and available for public inspection. All items listed are for Board discussion and action except for public comment items. In accordance with Section 5020.40 et seq. of the District Policies & Procedures, each speaker should limit their comments on any Agenda item to five (5) minutes or less. A maximum of twenty (20) minutes of public comment is allowed for each subject matter on the Agenda unless the Board President allows additional time.

I. CALL TO ORDER *(Est. time: 2 min.)*

- A. Board members Present
- B. Board members Absent
- C. Others in Attendance

II. CHANGES TO AGENDA and DECLARATIONS OF CONFLICT *(Est. time: 2 min.)*

III. CONSENT CALENDAR *(Est. time: 5 min.)*

(Note: Items appearing on the Consent Calendar are deemed to be routine and non-controversial. A Board member may request that any item be removed from the Consent Calendar and added as an "Administrative" agenda item for the purposes of discussing the item(s)).

- A. Approval of the following Minutes of the January 12, 2023 Regular Board Meeting

- B. Approval of Operations Warrants/Online payments/EFT payments
- C. Receipt of Item(s) of Correspondence.
Note: Correspondence received regarding an item on the Administrative Agenda is not itemized here, but will be attached as back-up to that item in the Board packet and addressed with that item during the Board meeting.

IV. PUBLIC COMMENT: The District invites public participation regarding the affairs of the District. This time is made available for members of the public to address the Board regarding matters which do not appear on the Agenda, but are related to business of the District. Pursuant to the Brown Act, however, the Board of Directors may not conduct discussions or take action on items presented under public comment. Board members may ask questions of a speaker for purposes of clarification.

V. ADMINISTRATIVE

- A. Discussion/Action re Approval of Resolution 23-02, Authorizing the General Manager to Accept the Fiscal Year 2021 Capital Improvement Project and Approve the Recorded Notice of Completion (Est. time 10 min.)
- B. Discussion/Action re Moscow Road project (Est. time 15 min.)
- C. Discussion/Action County of Sonoma Willow Road/Bay Lane Drainage Improvement Project. (Est. time 15 min.)
- D. Discussion/Action re Contract Meter Reader (Est. time 10 min.)
- E. Discussion/Action re New billing system (Est. time 15 min.)
- F. Discussion/Action re FY 2022-23 Budget (Est. time 15 min.)
- G. Discussion/Action re Board Subcommittee Reports (standing item) (Est. time 5 min.)
Subcommittees: General Manager Transition
Website/Billing System
- H. Discussion/Action re SDRMA Nominations for three (3) open SDRMA Director and CSDA Nominations for Seat C (Est. time 15 min.)

VI. GENERAL MANAGER'S REPORT

- 1. Laboratory Testing/Regulatory Compliance
- 2. Water Production and Sales
- 3. Leaks
- 4. In-House Construction Projects
- 5. CIP 2020-21 Old River Road/Woodland Drive
- 6. Grants

VII. BOARD MEMBERS' ANNOUNCEMENTS

VIII. ITEMS FOR NEXT AGENDA

IX. CLOSED SESSION

- A. Conference with Labor Negotiator (pursuant to Gov. Code Section 54957.6):
District negotiator: Eric Schanz
Employee Organization: Stationary Engineers Local 39

ADJOURN

Sweetwater Springs Water District Mission and Goals

The mission of the Sweetwater Springs Water District (SSWD) is to provide its customers with quality water and service in an open, accountable, and cost-effective manner and to manage District resources for the benefit of the community and environment. The District provides water distribution and maintenance services to five townships adjacent to the Russian River:

- Guerneville
- Rio Nido
- Guernewood Park
- Villa Grande
- Monte Rio

GOAL 1: IMPLEMENT SOUND FINANCIAL PRACTICES TO ENSURE EFFECTIVE UTILIZATION OF DISTRICT RESOURCES

GOAL 2: PROVIDE RELIABLE AND HIGH QUALITY POTABLE WATER WITH FACILITIES THAT ARE PROPERLY CONSTRUCTED, MANAGED AND MAINTAINED TO ASSURE SYSTEM RELIABILITY

GOAL 3: HAVE UPDATED EMERGENCY PREPAREDNESS PLANS FOR ALL REASONABLE, FORESEEABLE SITUATIONS

GOAL 4: DEVELOP AND MAINTAIN A QUALITY WORKFORCE

GOAL 5: PROVIDE EXCELLENT PUBLIC OUTREACH, INFORMATION AND EDUCATION

GOAL 6: ENHANCE BOARD COMMUNICATIONS AND INFORMATION

5087364.1



BOARD MEETING MINUTES*

Meeting Date: February 2, 2023

(*In order discussed)

February 2, 2023
6:30 p.m.

Board Members Present:

Tim Lipinski
Larry Spillane
Sukey Robb-Wilder
Gaylord Schaap
Richard Holmer

Board Members Absent:

(None.)

Staff in Attendance:

Eric Schanz, General Manager
Julie Kenny, Secretary to the Board

Others in Attendance:

Jordyn Bishop, Legal Counsel
Erica Gonzalez, Meyers Nave et al.
Mark O'Flynn

I. CALL TO ORDER (6:40 p.m.)

The properly agendized meeting was called to Order by President Lipinski at 6:30 p.m.

II. CHANGES TO AGENDA and DECLARATION OF CONFLICT (6:32 p.m.)

(None.)

III. CONSENT CALENDAR (6:32 p.m.)

President Lipinski reviewed the items on the Consent Calendar. Director Robb-Wilder moved to approve the Consent Calendar. Director Spillane seconded. Discussion ensued. Motion carried 5-0 on the following items, except that Director Holmer and Director Schaap abstained from voting on Item III-A (Minutes of the January 12 meeting) because they were absent at that meeting:

- A. Approval of the following Minutes of the January 12, 2023 Regular Board Meeting
- B. Approval of Operations Warrants/Online payments/EFT
- C. Receipt of items of Correspondence.

- (1) Letter dated January 18, 2023 from SDRMA regarding nominations for three
- (3) open SDRMA Director seats

IV. PUBLIC COMMENT (6:35 p.m.)

Public comment was made by Legal Counsel Jordyn Bishop. Discussion ensued.
Public comment was made by Meyers Nave et al. attorney Erica Gonzalez.

V. ADMINISTRATIVE (6:40 p.m.) *

**in the order discussed*

- V-A. (6:40 p.m.) Discussion/Action re Actual v. Budgeted Report – FY 2022-23 2Q.** The GM provided an overview of this item. Discussion ensued. No action was taken.
- V-B. (6:50 p.m.) Discussion/Action re Contract Meter Reader.** The GM provided an overview of this item. No action was taken.
- V-C. (6:53 p.m.) Discussion/Action re Monte Rio Community Center as an in-person meeting site.** The GM provided an overview of this item. Discussion ensued. Public comment was made by Erica Gonzalez. Further discussion ensued. No formal action was taken.
- V-D. (7 p.m.) Discussion/Action re New billing system.** Administrative Manager Julie Kenny provided an overview of this item. Board discussion ensued. No formal action was taken.
- V-E. (7:05 p.m.) Discussion/Action re Board Subcommittee Reports (standing item).**
Subcommittees: General Manager Transition
Website/Billing System

Director Holmer and Director Schaap provided a brief report. Brief discussion ensued.
Director Robb-Wilder and Director Spillane provided a brief report. Brief discussion ensued.

VI. GENERAL MANAGER’S REPORT (7:13 p.m.)

The GM provided a report on the following items:

1. Laboratory testing / Regulatory Compliance
2. Water production and sales
3. Leaks
4. In-House Construction Projects
5. CIP 2020-21 Old River Road/Woodland Drive
6. Grants
7. Moscow Slide

Discussion ensued.

VII. BOARD MEMBERS’ ANNOUNCEMENTS/COMMENTS (7:53 p.m.)

Director Lipinski announced a County meeting at Guerneville School on Saturday regarding incorporation and other options for West County governance.

Director Holmer announced he likely won the LAFCO Board election.

Director Robb-Wilder announced a Lower Russian River MAC meeting in February.

Director Robb-Wilder announced Board-required Ethics and Sexual Harassment classes and Form 700 requirements.

VIII. ITEMS FOR THE NEXT AGENDA (8:03 p.m.)

- 1. Contract Meter Reader
- 2. Billing system
- 3. Subcommittee reports
- 4. Moscow Road slide
- 5. SDRMA nominations
- 6. Appoint Budget Committee

IX. CLOSED SESSION (8:08 p.m.)

At 8:08 p.m. President Lipinski announced the items in Closed Session. There was no public comment.

At 8:10 p.m. the Board took a brief recess

At 8:17 p.m. the meeting reconvened and the Board went into Closed Session. At 9:03 p.m. the meeting reconvened from Closed Session and the following action was announced:

A. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to paragraph (2) or (3) of subdivision (d) of Section 54956.9: Two (2) cases

Facts and circumstances:

- (1) Letter from Joseph R. Serpico, Esq. to Sweetwater Springs Water District, dated December 27, 2022**
- (2) Letter from Joel E. Fleck, Esq. to Sweetwater Springs Water District, dated December 21, 2022**

No action was taken.

ADJOURN

The meeting adjourned at 9:05 p.m.

Respectfully submitted,

Julie Kenny
Clerk to the Board of Directors

APPROVED:

Gaylord Schaap: _____
 Sukey Robb-Wilder: _____
 Tim Lipinski: _____
 Rich Holmer _____
 Larry Spillane _____

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-A

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

SUBJECT: NOTICE OF COMPLETION FOR THE FISCAL YEAR 2021 CIP

RECOMMENDED ACTION: Approve Resolution 23-02 which authorizes the General Manager to accept the Fiscal Year (FY) 2021 Capital Improvement Project (CIP as substantially complete.

FISCAL IMPACT: None

DISCUSSION:

The FY 2021 CIP, which is the replacement of 3,425 ft of existing mainline and 35 services along Old River Road and 1,870 ft of mainline and 28 services on Woodland Drive, is complete. The Project Engineers, Coastland Engineering (Coastland), have communicated that Piazza Construction has satisfactorily completed all elements of the project. As such it is appropriate for the Board to approve Resolution 23-02 which authorizes the General Manager to accept the Project as substantially complete, and to file the recorded Notice of Completion.

Sweetwater Springs Water District entered into a contract with Piazza Construction (Piazza) for construction of the FY 2021 CIP on February 18, 2022, for a contract price of \$1,353,421, plus up to \$135,000 in possible change orders.

The ending project cost was \$1,413,144.56 which is \$59,723.56 over the bid amount. Net total change orders for the project were the exact amount of the total cost overage of 59,723.56. An increase in the amount of asphalt required to meet paving requirements and additional surcharges added to the cost of the material were the largest cost increase factors for the project.

The work done by Piazza has been good and District customers in the affected areas are seeing better water quality, more reliable service, and better fire protection. The completed project will also reduce system water losses and the affected customers will have fewer service interruptions due to repair of the leaks. The neighborhoods served by this project have received real, long-lasting improvements.

Resolution No. 23-02

A RESOLUTION OF THE SWEETWATER SPRINGS WATER DISTRICT BOARD OF DIRECTORS AUTHORIZING THE GENERAL MANAGER TO ACCEPT THE FISCAL YEAR 2021 CAPITAL IMPROVEMENT PROJECT AND APPROVE THE RECORDED NOTICE OF COMPLETION

WHEREAS, Sweetwater Springs Water District (“District”), entered into a construction contract with Piazza Construction (“Contractor”) on February 18, 2022, for the construction of the District’s Fiscal Year 2021 Capital Improvement Project (CIP) (“Project”), which is replacement 3,425 ft of existing mainline, 35 services and 6 fire Hydrants along Old River Road and the replacement of 1,870 ft of existing mainline, 28 services and 5 fire hydrants along Woodland Drive.

WHEREAS, the Project has been overseen by Coastland Engineering (Coastland), who provided engineering services for the District on this project; and

WHEREAS, Coastland informed the District on December 21, 2022, that the Project has been substantially completed; and

WHEREAS, Coastland has recommended that the District sign and record a Notice of Completion for the project.

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE DISTRICT AS FOLLOWS:

1. The General Manager is hereby authorized to accept the improvements constructed as part of the Project.
2. The District Approves the General Managers signed and recorded Notice of Completion.

I hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted and passed by the Board of Directors of the SWEETWATER SPRINGS WATER DISTRICT, Sonoma County, California, at a meeting held on March 2, 2023, by the following vote:

| Director | Aye | No |
|-------------------|------------|-----------|
| Sukey Robb-Wilder | _____ | _____ |
| Tim Lipinski | _____ | _____ |
| Gaylord Schaap | _____ | _____ |
| Richard Holmer | _____ | _____ |
| Larry Spillane | _____ | _____ |

Tim Lipinski
President of the Board of Directors

Attest: Julie A. Kenny
Clerk of the Board of Directors

2023006038

Official Records Of Sonoma County
Deva Marie Proto

02/14/2023 10:44 AM

Fee: \$ 91.00 1 Pages



CONFORMED COPY
Not Compared with Original

RECORDING REQUESTED BY:
Sweetwater Springs Water District
WHEN RECORDED MAIL TO:
Sweetwater Springs Water District, General Manager
P.O. Box 48
Guerneville, CA 95446

NOTICE OF COMPLETION

OWNER: Sweetwater Springs Water District

PROJECT TITLE: 2021 Capital Improvement Project

PROJECT LOCATION & DESCRIPTION:

This project is located along portions of Old River Road, Bonita Avenue, Palo Alto Drive, and Woodland Drive.

The work in general consists of replacing approximately 5500 LF of old and undersized water mains via open trench and directional boring methods, main connections, water services, fire hydrants and asphalt resurfacing.

CONTRACTOR: Piazza Construction, PO Box 573, Penngrove, CA. 94951

COMPLETION/ACCEPTANCE DATE: December 21, 2022

NATURE OF OWNER'S INTEREST IS: Owner of the water mains, fire hydrants and public side of the water services and meters at the time of the commencement of the work.

Authorized representatives of the District and the Contractor have inspected the work performed under this contract and the Project is hereby declared to be completed/accepted on the above date.


On the above date, construction of improvements on the Project has been sufficiently completed, in accordance with the contract documents and change orders, if any, so that the District can utilize the Project for the use for which it was intended.

The Contractor's one year warranty period begins as of the above-referenced completion date.

The District accepts the project as complete.

This notice is given pursuant to Section 3094 and 3129 of the Civil Code of the State of California.

I declare under penalty of perjury of laws of the State of California that the foregoing is true and correct.


Eric Schanz
General Manager
Sweetwater Springs Water District

2/14/2023
Date

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-B

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

Subject: Moscow Road Slide Repair

RECOMMENDED ACTION:

The General Manger will provide an update on the Moscow Road slide repair. Attached to the staff report is the preliminary engineers estimate for the Moscow Road Slide Repair.

FISCAL IMPACT:

Total Combined District Hazard Mitigation Cost and FEMA Funding: \$199,640.00

DISCUSSION:

On January 20, 2023, FEMA, CAL OES, Sonoma County Roads Department and Sweetwater Springs Water District met at the slide. Also in attendance were the County's Engineer and our Engineer (Coastland).

On January 26, 2023, a virtual meeting was held with Sonoma County, Coastland Engineering and Sweetwater Springs Water District to discuss the repair plan for the eight-inch water main.

Coastland has prepared cost estimates and is design plans. All documentation has been sent to the County for funding and planning coordination.

Current discussion is to have the district perform the repair to the water main first as there is the urgency to have adequate water and fire flow. A soils analysis has been performed by the County. Based on the results of the analysis the District can proceed with the repair project.

Sweetwater Springs Water District
Preliminary Engineer's Estimate
for
Moscow Road Slide Repair - Jan. 2023 Flooding

| Item No. | Item Description | Estimated Participating Quantity | Hazard Mitigation Quantity | Estimated Total Quantity | Unit of Measure | Unit Cost | Participating Cost | Hazard Mitigation Cost | Item Total |
|-----------------|--|----------------------------------|----------------------------|--------------------------|-----------------|------------|--------------------------------|------------------------|------------------|
| 1 | Mobilization | 1 | | 1 | LS | \$6,240.00 | \$6,240.00 | \$0.00 | \$6,240 |
| 2 | Traffic Control | 1 | | 1 | LS | \$5,000.00 | \$5,000.00 | \$0.00 | \$5,000 |
| 3 | Asphalt Concrete Trench Paving (Permanent) | 15 | 45 | 60 | TON | \$350.00 | \$5,250.00 | \$15,750.00 | \$21,000 |
| 4 | 8" PVC Water Main | 150 | 475 | 625 | LF | \$130.00 | \$19,500.00 | \$61,750.00 | \$81,250 |
| 5 | 8" Gate Valve | 2 | | 2 | EA | \$2,000.00 | \$4,000.00 | \$0.00 | \$4,000 |
| 6 | Temporary Blow Off | 2 | | 2 | EA | \$1,250.00 | \$2,500.00 | \$0.00 | \$2,500 |
| 7 | Water Main Tie In | 2 | | 2 | EA | \$3,500.00 | \$7,000.00 | \$0.00 | \$7,000 |
| 8 | Trench Bracing and Shoring | 1 | | 1 | LS | \$2,500.00 | \$2,500.00 | \$0.00 | \$2,500 |
| 9 | Abandon Water Main and Appurtenances | 1 | | 1 | LS | \$1,500.00 | \$1,500.00 | \$0.00 | \$1,500 |
| Subtotal | | | | | | | \$53,490 | \$77,500 | \$130,990 |
| | | | | | | | Contingency (20%) | | \$26,200 |
| | | | | | | | Total Construction Cost | | \$157,190 |
| | | | | | | | Design Engineering (12%) | | \$18,870 |
| | | | | | | | CM & Inspection (15%) | | \$23,580 |
| | | | | | | | Total Cost | | \$199,640 |

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-C

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

Subject: Sonoma County Willow Road/Bay Lane Drainage Mitigation Project

RECOMMENDED ACTION:

The County of Sonoma originally contacted the District about a fully funded Mitigation Project to fix a drainage issue at the intersection of Willow Road and Bay Lane. Included in the project was the abandonment and relocation of a District water line and the relocation of two water services. The County recently contacted the District and now says that the project is being done in house and that the District will be required to relocate the water line. Staff is seeking direction and input from the Board.

FISCAL IMPACT:

Estimated Project Cost with Upgrades:

| | |
|------------------|-----------------|
| 300 Ft 6" C900 | \$45,000 |
| 1 Fire Hydrant | \$10,000 |
| 2 Water Services | \$ 6,000 |
| <u>Paving</u> | <u>\$20,000</u> |
| Total | \$81,000 |

DISCUSSION:

The County of Sonoma originally contacted the District about a mitigation project to fix a drainage issue at the intersection of Willow Road and Bay Lane in Rio Nido. The project was to be completely grant funded and the work was to be completed by the county contractor. To complete the project, it required a 2-inch water line and 2 water services to be moved to fit the existing drainage plan. Recently the District was contacted by the County Engineer and told that the project was now being done in house by the County Road Department and that the District would now be responsible for abandoning and moving the water line and water services.

Funding for the project was not planned and is not part of our current CIP. However, there is sufficient CIP money available in the budget based on currently planned projects for FY 2022-23.



**COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS**

<http://www.sonoma-county.org/tpw>

**NOTICE TO BIDDERS
AND
SPECIAL PROVISIONS
FOR CONSTRUCTION OF

RIO NIDO
CULVERT INSTALLATIONS FLOOD
MITIGATION PROJECT
(PROJECT C20012)**

PM Yoash Tilles, PE

**COUNTY PROJECT NO. C20012
FEMA PROJECT NO. HMGP DR-4434-708-10R**

FOR USE IN CONNECTION WITH CALTRANS STANDARD SPECIFICATIONS DATED 2018, STANDARD PLANS DATED 2018, CURRENT GENERAL PREVAILING WAGE RATES AND LABOR SURCHARGE AND EQUIPMENT RENTAL RATES.

BID OPENING DATE: 2:00 P.M., MONTH, DAY, YEAR

ADDENDUM NO. 0 1 2 3 4 5

MONTH, YEAR

SPECIAL NOTICE

THIS SHEET IS FOR INFORMATION PURPOSES AND SHALL NOT BE CONSIDERED A PART OF THIS CONTRACT.

Bidder's attention is directed to Section 2, "Bidding," regarding the additional information the County requires in completing the listing of subcontractors and the County's reliance on that information in determining whether the bid is responsive.

Bidder's attention is directed to Section 3, "Contract Award and Execution," of these Special Provisions and "Guaranty" of the Bidder's Book regarding bonding for the guaranty.

RIO NIDO CULVERT INSTALLATIONS FLOOD MITIGATION PROJECT

PM Yoash Tilles, PE

County Project C20012

FEMA PROJECT NO. HMGP DR-4434-708-10R

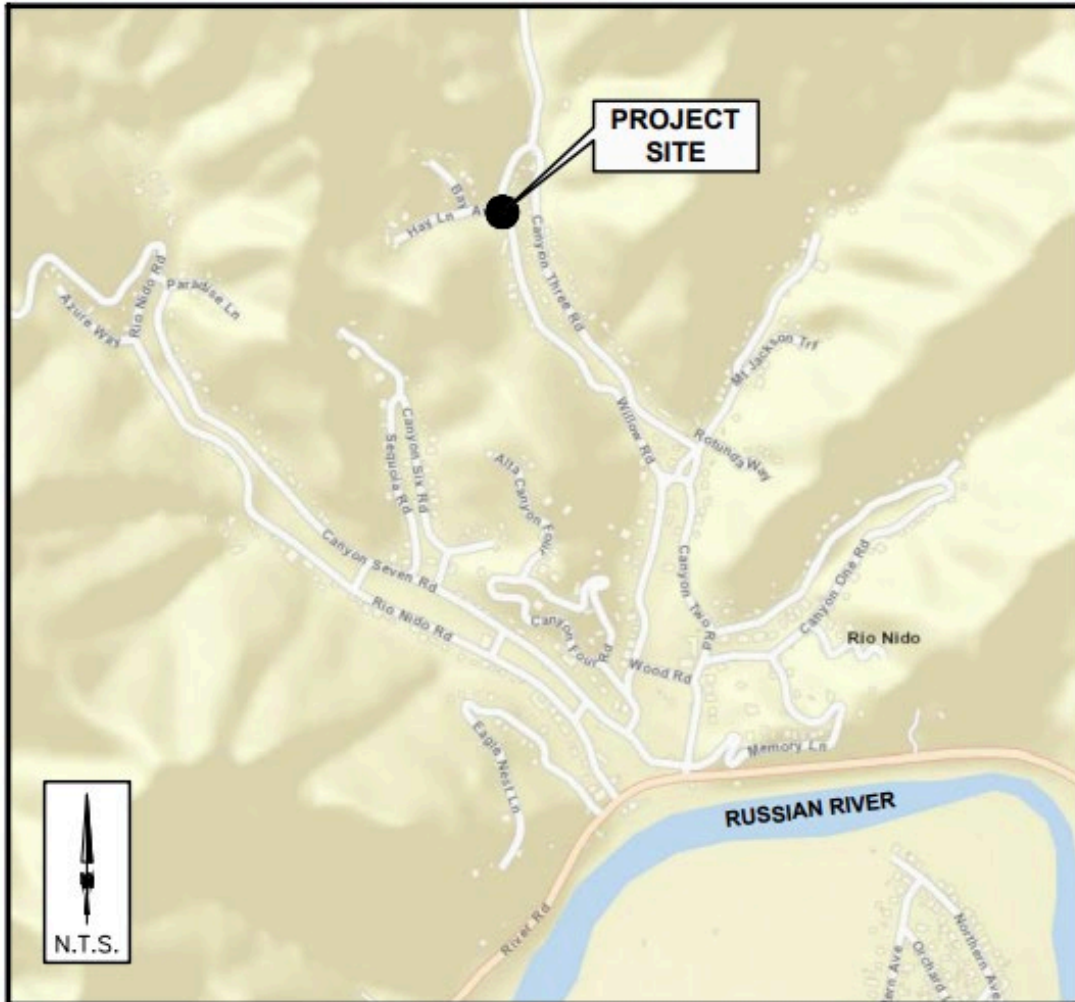
The special provisions contained herein have been prepared by or under the direction of the following registered person(s) per the Professional Engineers Act § 6735 of the California Business and Professional Code)

Damon Morelli, P.E.
LICENSED CIVIL ENGINEER, PE 63621

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LOCATION MAP



VICINITY MAP

NOT TO SCALE

STANDARD PLANS LIST

| | <u>Plan Number</u> | <u>Title</u> |
|--|--------------------|--|
| | | <u>EXCAVATION AND BACKFILL</u> |
| | A62F | Excavation and Backfill Metal and Plastic Culverts |
| | | <u>CURBS, DRIVEWAYS, DIKES, CURB RAMPS AND ACCESSIBLE PARKING</u> |
| | A87A | Curbs and Driveways |
| | | <u>DRAINAGE INLETS, PIPE INLETS AND GRATES</u> |
| | D71 | Drainage Inlet Markers |
| | D72A | Cast in Place Drainage Inlets Type OS, OL, & GOL |
| | D72F | Cast in Place Drainage Inlets Notes |
| | D73A | Precast Drainage Inlets - Types OS, OL and GOL |
| | D73B | Precast Drainage Inlets - Types G1, G2, G3, G4, G5 and G6 |
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| | D73F | Precast Drainage Inlet Notes |
| | D73G | Precast Drainage Inlet Tables |
| | D74 | Drainage Inlet Details |
| | D77A | Grate Details Number 1 |
| | D77B | Grate Details Number 2 |
| | | <u>GUTTER AND INLET DEPRESSIONS</u> |
| | D78A | Gutter Depressions |
| | D78B | Inlet Depressions - Concrete Shoulders |
| | D78C | Inlet Depressions – Hot Mix Asphalt Shoulders |
| | | |

**COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATIONS AND PUBLIC WORKS**

NOTICE TO BIDDERS

**CONTRACT NO. C20012
FEMA PROJECT NO. HMGP DR-443-708-10R**

Sealed bids for the work shown on the plans entitled:

**COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
CONSTRUCTION PLANS FOR:**

RIO NIDO CULVERT INSTALLATIONS FLOOD MITIGATION PROJECT

**Contract No. C20012
FEMA Project No. HMGP DR-4434-708-10R**

The County of Sonoma Department of Transportation and Public Works is soliciting bids for the Rio Nido Culvert Installations Flood Mitigation Project. The County requires that bidders submit their bids electronically on the County's Supplier Portal, until **2:00PM**, as determined by the time and date stamp on the Supplier Portal on **Month, Day, 2023**. Bidders shall submit an electronic copy of the entire bid book and all other required documents in the bid submission. Bid Openings are being virtually conducted with Cisco Web Ex. The County will open all Bids promptly following the deadline for receiving Bids and initially evaluate them for responsiveness, and determine an Apparent Low Bidder as specified herein. The Sonoma County Director of Transportation and Public Works will review the bids and refer the bids to the Board of Supervisors to consider awarding the project within 60 to 90 days of the bid opening.

Bid forms for this work are included in a separate book entitled:

**COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
BID BOOK FOR:**

RIO NIDO CULVERT INSTALLATIONS FLOOD MITIGATION PROJECT

**Contract No. C20012
FEMA Project No. HMGP DR-4434-708-10R**

General Work Description:

Project Description: The project proposes to construct a new 18" diameter storm drain line and drainage inlets, new 2" diameter water main and water services, and remove and replace existing asphalt paving in a portion of Bay Avenue and Willow Road.

Project Location: The project site is located on Bay Avenue and Willow Road in the unincorporated area of Rio Nido, Sonoma County.

Pre-bid meeting date/location: XXXX

General Information:

Engineer's Estimate: \$225,377

Working Days: 60.

This shall include any and all alternates, should alternate award occur.

Bids are required for the entire work described herein.

THIS PROJECT IS SUBJECT TO THE "BUY AMERICA" PROVISIONS OF THE SURFACE TRANSPORTATION ASSISTANCE ACT OF 1982 AS AMENDED BY THE INTERMODAL SURFACE TRANSPORTATION EFFICIENCY ACT OF 1991.

The Contractor shall possess a Class A license at the time of bid submittal and at the time of award. Also, the Contractor shall either possess a Hazardous Substance Removal Certificate at the time of bid submittal, or the Contractor shall have a listed subcontractor, so licensed and certified, designated to perform the hazardous substance removal work requiring the additional license and certificate.

REGISTRATION PURSUANT TO LABOR CODE SECTION 1725.5 REQUIRED. As of March 1, 2015, all Contractors submitting a bid proposal for this project, and any Subcontractors listed therein, must be currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. County requires proof of current registration by contractor and all listed subcontractors as a condition to bid on this project, subject only to the allowances of Labor Code section 1771.1.

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

Plans, specifications, supplemental materials, and bid forms for bidding this project may be reviewed by logging into the Supplier Portal at any time prior to 3:00PM on the date of the bid opening. Bidders must obtain Bidding Documents, at no charge, by registering at Sonoma County's Supplier Portal, the County's online procurement system:

Bidders must obtain Bidding Documents, at no charge, by registering at Sonoma County's Supplier Portal, the County's online procurement system:

<https://esupplier.sonomacounty.ca.gov/psp/FNPRD/SUPPLIER/ERP/h/?tab=DEFAULT>.

Special Provisions following in this document are organized as follows:

1. Division I Sections 1 through 9 and Division II Sections 10 through 12, 13, 15 through 17, 19, 21, 26, 39, 51, 61, 64, 73 and 75 are under headings that correspond with the main-section headings of the 2018 Caltrans Standard Specifications which are made a part of this Contract by reference including applicable revisions listed under each referenced section.
2. Technical Specifications for Water Utilities are not a part of Caltrans Standard Specifications and are standalone for this Contract.

Bidders must submit: An electronic copy of the entire Bid Book and other required documents as attachments in your bid submission within the Supplier Portal.

Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.

Technical questions should be emailed to Yoash Tilles at tpwbidinquiries@sonoma-county.org at the Department of Transportation and Public Works. Only questions received no later than **date** will receive a response.

An Addendum, if necessary, will post on the County's Supplier Portal on **date**.

The successful bidder shall furnish both a performance bond for the full amount of the contract and a payment bond in accordance with California Civil Code Section 3247, as set forth in the Instructions to Bidders.

The County of Sonoma affirms that in any contract entered into pursuant to this advertisement, minority business enterprises and woman-owned business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, national origin or other prohibited basis in consideration for an award.

Liquidated damages in the amount of \$3,600 will be assessed for each and every calendar days delay in finishing the work in excess of the number of working days prescribed in the contract.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The successful Bidder must comply with all prevailing wage laws applicable to the Project, and related requirements contained in the Contract Documents.

Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the county, or counties, in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available from the California Department of Industrial Relations' Internet web site at:

<https://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>

The Federal minimum wage rates for this project as predetermined by the United States Secretary of Labor are available at the website below:

<https://wdolhome.sam.gov/>

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

and subcontractors must pay not less than the Federal minimum wage rate, which most closely approximates the duties of the employees in question.

The Contractor must post the applicable prevailing wage rates at the Project Site, in addition to all other job site notices prescribed by regulation.

The U.S. Department of Transportation (DOT) provides a toll-free “hotline” service to report bid rigging activities. Bid rigging activities can be reported Mondays through Fridays, between 8:00 a.m. and 5:00 p.m., Eastern Time, Telephone No. 1-800-424-9071. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report these activities. The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

The Board of Supervisors of Sonoma County reserves the right to reject any or all bids and to waive any defect or irregularity in bidding.

COPY OF BID ITEM LIST

RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT (PROJECT# C20012)

(NOT TO BE USED FOR BIDDING PURPOSES)

| No. | S-F | Code | Bid Item Description | Unit | Quantity |
|-----|-----|------|--|------|----------|
| 1 | | | Mobilization/Demobilization | LS | 1 |
| 2 | | | Traffic Control (including Construction Signs) | LS | 1 |
| 3 | | | Water Pollution Control | LS | 1 |
| 4 | | | Remove Existing Asphalt Concrete Paving and Aggregate Base | SF | 1,500 |
| 5 | | | Remove Existing Concrete Channel Wall Section | LS | 1 |
| 6 | | | Remove and Replace Existing Fence | LF | 80 |
| 7 | | | Remove Existing Trees and Stump | EA | 5 |
| 8 | | | Remove Existing Driveway Culvert | LS | 1 |
| 9 | | | Remove/Abandon Existing 2" Water Main | LF | 118 |
| 10 | | | Remove/Abandon Existing Water Service Line | LF | 20 |
| 11 | | | Remove and Replace Existing Tent Structure | LS | 1 |
| 12 | | | Earthwork | LS | 1 |
| 13 | | | Class 2 Aggregate Base | TON | 93 |
| 14 | | | Asphalt Concrete Paving | TON | 30 |
| 15 | | | Minor Concrete – Type A2 Curb (8" Curb Height) | LF | 34 |
| 16 | | | Minor Concrete – Type A2 Curb (6" Curb Height) | LF | 44 |
| 17 | | | Storm Drain Connection to Existing Concrete Channel | LS | 1 |
| 18 | | | Type G1 Drain Inlet | EA | 2 |

| No. | S-F | Code | Bid Item Description | Unit | Quantity |
|-----|-----|------|-----------------------------------|------|----------|
| 19 | | | Type OL (L=21') Drain Inlet | EA | 1 |
| 20 | | | Type OL (L=10') Drain Inlet | EA | 1 |
| 21 | | | 18" Storm Drain | LF | 86 |
| 22 | | | Connection to Existing Water Line | EA | 2 |
| 23 | | | New 2" Water Line | LF | 117 |
| 24 | | | New 1" Water Service Line | LF | 20 |
| | | | | | |
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When an item of work is designated as (F) in the Engineer's Estimate, the estimate quantity shall be the final pay quantity. When an item of work is designated as (P) in the Engineer's Estimate, then that item is subject to partial payment as materials furnished but not incorporated in the work. When an item of work is designated as (S) in the Engineer's Estimate, then that item is a Specialty Item, as defined in Section 5 "Control of Work" of these Special Provisions.

**COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
SANTA ROSA, CALIFORNIA**

(www.sonoma-county.org/tpw)

SPECIAL PROVISIONS

**FOR CONSTRUCTION OF
RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT**

COUNTY PROJECT: C20012

FEMA PROJECT #: HMGP DR-4434-708-10R

ORGANIZATION

Special provisions are under headings that correspond with the main-section headings of the *Standard Specifications*. A main-section heading is a heading shown in the table of contents of the *Standard Specifications*.

Each special provision begins with a revision clause that describes or introduces a revision to the *Standard Specifications* as revised by any revised standard specification.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the *Standard Specifications* for any other reference to a paragraph of the *Standard Specifications*.

DIVISION I. GENERAL PROVISIONS

1. GENERAL

Add the following definitions to section 1-1.07B:

Board of Supervisors: The governing body of the County of Sonoma.

Caltrans: California Department of Transportation

Contract Execution: is defined as signature by the Chairperson of the County Board of Supervisors.

County: The County of Sonoma, a political subdivision of the State of California.

Driving:

1. Means operating a motor vehicle on a roadway, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

2. It does not include being in your vehicle (with or without the motor running) in a location off the roadway where it is safe and legal to remain stationary.

Final Acceptance: The formal acceptance by the Transportation and Public Works Director of an entire contract which has been completed in all respects in accordance with the plans and specifications and any modifications thereof previously approved.

Text messaging: means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication.

Modify the following definitions in section 1-1.07B with:

Authorized Laboratory: Independent testing laboratory authorized by the Engineer to test materials and work involved in the contract (1) not employed or compensated by any subcontractor or subcontractor's affiliate providing other services for the Contract and (2) authorized by Department.

Business day: Day on the calendar except a Saturday, Sunday and a holiday.

Working day: Time measure unit for work progress. A working day is any 24-consecutive-hour period except:

- 2.1. Saturday, Sunday and a holiday.
- 2.2. Day during which you cannot perform work on the controlling activity for at least 50 percent of the scheduled work shift with at least 50 percent of the scheduled labor and equipment due to any of the following:
 - 2.2.1. Adverse weather-related conditions.
 - 2.2.2. Traffic maintenance under the Contract.
 - 2.2.3. Suspension of a controlling activity that you and the Engineer agree benefits both parties.
 - 2.2.4. Unanticipated event not caused by either party, such as:
 - 2.2.4.1. Act of God
 - 2.2.4.2. Act of a public enemy.
 - 2.2.4.3. Epidemic.
 - 2.2.4.4. Fire.
 - 2.2.4.5. Flood.
 - 2.2.4.6. Governor-declared state of emergency.
 - 2.2.4.7. Landslide.
 - 2.2.4.8. Quarantine restriction.
 - 2.2.5. Issue involving a third party, including:
 - 2.2.5.1. Industry or area-wide labor strike.
 - 2.2.5.2. Material shortage.
 - 2.2.5.3. Freight embargo.
 - 2.2.5.4. Jurisdictional requirement of a law enforcement agency.
 - 2.2.5.5. Workforce labor dispute of a utility or nonhighway facility owner resulting in a nonhighway facility rearrangement not described and not solely for the

Contractor's convenience. Rearrangement of a nonhighway facility includes installation, relocation, alteration, or removal of the facility.

2.3. Day during a concurrent delay.

Department: The County of Sonoma Department of Transportation and Public Works.

Holiday: When a designated legal holiday falls on a Sunday, the following Monday will be a designated legal holiday. When a designated legal holiday falls on a Saturday, the preceding Friday will be a designated legal holiday.

| <u>Holiday</u> | <u>Date Observed</u> |
|------------------------------------|--------------------------------------|
| New Year's Day | January 1 st |
| Birthday of Martin Luther King Jr. | 3 rd Monday in January |
| Lincoln's Birthday | February 12 th |
| Washington's Birthday | 3 rd Monday in February |
| Cesar Chavez Day | March 31 st |
| Memorial Day | Last Monday in May |
| Independence Day | July 4 th |
| Labor Day | 1 st Monday in September |
| Veterans Day | November 11 th |
| Thanksgiving Day | 4 th Thursday in November |
| Day after Thanksgiving | Day after Thanksgiving |
| Christmas Day | December 25 th |

Add to table in section 1-1.11 with:

Web Sites, Addresses, and Telephone Numbers

| Reference or agency or department unit | Web site | Address | Telephone no. |
|--|---|---|----------------|
| County of Sonoma Department of Transportation and Public Works | http://www.sonoma-county.org/tpw/ | SONOMA COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS 2300 COUNTY CENTER DRIVE, SUITE B-100 | (707) 565-2231 |

Replace section 1-1.12 with:

Make checks and bonds payable to County of Sonoma.

2 BIDDING

Replace section 2-1.06 with:

2-1.06A General

Standard Specifications, Standard Plans and Revised Standard Specifications are available from the Caltrans website.

All project and bidding documents must be obtained by registering at The County of Sonoma's Supplier Portal:

<https://esupplier.sonomacounty.ca.gov/psp/FNPRD/SUPPLIER/ERP/h/?tab=DEFAULT>

The Special Provisions book includes the Notice to Bidders. The Bid Book contains all forms necessary to submit a responsive bid and all bids shall be made using these forms. There is no charge to download forms from the Supplier Portal.

2-1.06B Supplemental Project Information

Cross sections and logs of test borings are considered Supplemental Project Information, and if applicable, are attached to the project plans.

If available, as-built plans may be inspected in the office of Sonoma County Department of Transportation and Public Works, 2300 County Center Drive, Suite B100, Santa Rosa, CA 95403

2-1.06C Miscellaneous

The Department will not consider for award any bid submitted by any contractor, and will not consent to subletting any portion of the contract to any subcontractor, of a foreign country during any period in which such foreign country is listed against U.S. firms in construction procurements for public works projects.

2-1.06D Reserved

Replace Section 2-1.12 with:

2-1.12 MBE/WBE Requirements

Contractor shall make good faith effort and take all necessary affirmative steps (including those listed in 2 CFR 200.321) to assure that Minority and Women's Business Enterprises and labor surplus area firms are used when possible. Failure to engage in such affirmative steps shall be considered as a material breach of the contract.

Contractor, and all its subcontractors, must take all affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible, including as

sources of supplies, construction, equipment, or services. These affirmative steps must be documented and reported. Failure of Contractor or any subcontractor thereof to take the following steps shall be deemed a material breach of this Agreement:

- i. Place qualified small and minority businesses and women's business enterprises on solicitation lists;
- ii. Assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- iii. Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
- iv. Establish delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises; and
- v. Use the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.

If subcontracts are to be let, Contractor shall take the affirmative steps listed above and as otherwise required by 2 CFR 200.321.

Delete Section 2-1.15

Delete section 2-1.18.

Delete section 2-1.27.

Replace Section 2-1.32 with:

2-1.32 BID PRICE FOR FLAGGING

The cost set forth by the Department in the bid form for the Flagging Item shall be the cost used by all bidders for the purpose of comparison of bids. The bidder shall not alter the cost set forth. The cost shown represents 50% of anticipated Flagging costs, the Department pays 50% of Flagging costs.

Replace section 2-1.33A with:

Complete the forms in the Bid Book.

Use the forms provided by the Department, except as otherwise specified for a bidder's bond.

Fax or deliver to the Engineer only the documents specified for later submittal. Fax is (707) 526-2620. Email is tpwbidinquiries@sonoma-county.org

Failure to submit the forms and information as specified may result in a nonresponsive bid.

If an agent other than the authorized corporate officer or a partnership member signs the bid, file a Power of Attorney with the Department either before opening bids or with the bid. Otherwise, the bid may be nonresponsive.

Delete section 2-1.33B.

Add the following to section 2-1.33B(1):

The completed list of subcontractors must be submitted at the time of the bid, on the day of the bid opening.

Add the following to section 2-1.33(2)(c) with:

If subcontractors are used as part of this contract, the Contractor shall follow the five affirmative steps to employ MBE/WBE firms in 2 CFR 200.321. Additionally, the Contractor must complete the MBE/WBE Good Faith Effort form included in the bid book. A bid will be found unresponsive if this form is not included with the bid documents.

Replace section 2-1.34 with:

2-1.34 BIDDER'S SECURITY

Submit one of the following forms of bidder's security equal to at least 10% of the bid:

1. Cashier's check
2. Certified check
3. Signed bidder's bond by an admitted surety insurer

Submit cashier's check, certified check or bidder's bond with your bid.

If using a bidder's bond, you must use the form in the Bid Book. The bid security shall be made payable to the County of Sonoma.

Delete the 2nd paragraph in section 2-1.40.

Replace section 2-1.47 with:

The Department may grant bid relief under Public Contract Code § 5100 et seq. Submit any request for bid relief to Yoash Tilles at Yoash.tilles@sonoma-county.org

3 CONTRACT AWARD AND EXECUTION

Replace section 3-1.02B with:

The Department breaks a tied bid with a coin toss.

Replace section 3-1.04 with:

3-1.04 CONTRACT AWARD

If the Department awards the contract, the award is made to the lowest responsive and responsible bidder whose bid complies with all the requirements.

Add as section 3-1.04A:

3-1.04A: BID PROTEST

Any bid protest must be submitted in writing to The County of Sonoma Department of Transportation and Public Works, 2300 County Center Drive, Suite B100, Santa Rosa, CA 95403 before 5:00pm (as determined by the clock in the reception area of the Public Works office) on the fifth business day following posting of the Notice of Intent to Award the Contract, at the office of the Sonoma County Board of Supervisors.

The initial protest document must contain a complete statement of the basis for the protest. The protest must refer to the specific portion of the document that forms the basis for the protest. The protest must include the name, address and phone number of the person representing the protesting party.

The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

The procedure and time limits set forth in this paragraph are mandatory and are bidder's sole and exclusive remedy in the event of bid protest. Bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code Claim or legal proceedings. A bidder may not rely on a protest submitted by another bidder, but must timely pursue its own protest.

Replace the 2nd item in the list in section 3-1.05 with:

2. Performance bond to guarantee the faithful performance of the Contract. This bond must be equal to at least 100% of the total bid.

Replace the 2nd paragraph in section 3-1.05 with:

Contractor shall use the forms in the Bid Book.

Replace section 3-1.07 with:

Refer to section 7-1.06 for insurance requirements

Delete section 3-1.08.

Delete section 3-1.11.

Replace section 3-1.18 with:

3-1.18 CONTRACT EXECUTION

The successful bidder must sign the Contract.

Deliver to the Engineer:

1. Signed Contract, including signatures on final 2 pages of FEMA Exhibit
2. Contract bonds
3. Documents identified in section 7-1.06 Insurance
4. MBE/WBE good Faith Effort Form

The Engineer must receive these documents within 10 business days, not including Saturdays, Sundays, or legal holidays, after the bidder receives the contract for execution.

The bidder's security may be forfeited for failure to execute the contract within the time specified (Pub Cont Code §§ 10181, 10182, and 10183).

4 SCOPE OF WORK

Add to section 4-1.06C:

In addition to the above, this contract is subject to Public Contract Code, Section 7104(c):

“That in the event that a dispute arises between the public entity 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 which pertain to the resolution of disputes and protests between the contracting parties.”

Delete section 4-1.07C.

Replace the 2nd paragraph of Section 4-1.13 with:

Do not remove warning, regulatory, or guide signs until directed by the Engineer.

5 CONTROL OF WORK

Replace the fifth paragraph of section 5-1.13A with:

Perform, with your own organization, contract work amounting to not less than 50 percent of the original total contract price.

When items of work in the Engineer's Estimate are preceded by the letters (S) or (S-F), those items are designated as "Specialty Items". These items may be performed by subcontract and the value deducted from the original contract price before calculating the amount of work required to be performed by your organization.

Where an entire item is subcontracted, the value of work subcontracted will be based on the contract item bid price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the contract item bid price, determined from information submitted by you, subject to approval by the Engineer.

Replace the ninth paragraph of section 5-1.13A with:

Submit copies of all subcontracts prior to start of work.

Add to section 5-1.13A.

The Contractor shall maintain records showing the name and business address of each first-tier subcontractor.

Upon completion of the contract, a summary of these records shall be certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the Engineer.

Delete section 5-1.13B(1).

Delete section 5-1.13B(2)

Add to section 5-1.20B:

Add to section 5-1.20B(4) with:

The County has not obtained any additional areas for use by the contractor.

Replace paragraph 6 of section 5-1.23A with:

If the last day for submitting a document falls on a Saturday, Sunday, or a holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the day specified.

Add at the end of section 5-1.23B(1) to include:

Action Submittals include:

1. Progress Schedule (Baseline)
2. WPCP
3. Traffic Control Plans

Replace section 5-1.27E with:

Maintain separate records for change order work costs.

Submit change order bills to the Engineer.

Replace the 2nd paragraph of section 5-1.32 with:

If areas are available for the exclusive use of the Contractor, they are designated on the plans. Use of the Contractor's work areas and other County-owned property shall be at the Contractor's own risk, and the County shall not be held liable for damage to or loss of materials or equipment located within these areas.

Contractor shall include Areas of Contractor Use in their storm water documents, including staging area.

The Contractor shall secure, at the Contractor's own expense, areas required for plant sites, storage of equipment or materials or for other purposes, if sufficient area is not available to the Contractor within the contract limits, or at the sites designated on the plans outside the contract limits. A possible staging area has been shown on the Plans and is available for use by Contractor. Use of other areas not designated shall be the responsibility of the Contractor including storm water management. It shall be the Contractor's responsibility to provide storm water management and water quality control for the staging area (designated site and/or other sites selected by the Contractor) including preparation of a Storm Water Pollution Prevention Plan and storm water monitoring, if required.

Local material sites used by the Contractor shall be graded so that, at the time of final inspection of the contract, the sites will drain and will blend in with the surrounding terrain.

Add to the end of section 5-1.32:

Personal vehicles of your employees must not be parked on the traveled way or shoulders, including sections closed to traffic.

Add to section 5-1.32A:

5-1.32A Borrow, Disposal and Material Sites:

The operation of a borrow or disposal site used by the Contractor to produce or dispose of material for this project shall comply with the requirements in the Standard Specifications and these Special Provisions. Provisions for water pollution, air pollution, and sound control that

apply within the limits of the contract shall apply to borrow or disposal sites utilized by the Contractor.

Temporary haul roads shall be surfaced or watered and otherwise maintained so that no dust nuisance is created, in conformance with the provisions in Section 14-9.03, "Air Monitoring," of the Standard Specifications. Operations at the site shall be confined to as small an area as is practicable. Vegetation, desert crust, and other natural features outside the operating area shall be protected from damage by the Contractor's operations.

If the Contractor obtains the necessary permits for borrow, disposal or material sites from the city or County having jurisdiction or from the appropriate pollution control boards and such permits contain requirements which conflict with the requirements in the second, third and fourth paragraphs of this section, the requirements of the permits shall govern over the conflicting requirements of this section.

Full compensation for complying with the requirements for borrow, disposal, and material sites in this section shall be considered as included in the prices paid for the contract items of work which require the use of the sites and no additional compensation will be allowed therefore.

6 CONTROL OF MATERIALS

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Add to section 7-1.02K(3):

Submit originally signed Fringe Benefit Statements at the beginning of covered work and whenever benefits are changed.

Delete the 6th through 10th paragraphs of section 7-1.02K(3) regarding electronic submission.

Add to section 7-1.02K(6)(a):

Text Messaging While Driving. In accordance with Executive Order 13513, Federal Leadership on Reducing Text Messaging While Driving, and Department of Transportation Order 3902.10, Text Messaging While Driving, text messaging while driving is prohibited in the performance of any duties included in this agreement for both consultant and any sub-consultants hired for performance of duties under this Agreement. Contractor shall include a provision prohibiting texting while driving in all sub-contractor agreements entered into related to the performance of its obligations under this Agreement.

Replace section 7-1.06 with:

7-1.06 INSURANCE

The Contractor shall obtain insurance acceptable to County in a company or companies acceptable to the County. The required documentation of such insurance shall be furnished to the County at the time the Contractor returns the executed contract. The proper insurance shall be provided within eight (8) days, not including Saturdays, Sundays and legal holidays, after the bidder has received notice that the contract has been awarded and prior to the county executing the contract and issuing a notice to proceed. The Contractor shall not commence Work, nor allow its employees, subcontractors or anyone to commence Work until all insurance required hereunder has been submitted and approved and a notice to proceed has been issued. Any requirement for insurance to be maintained after completion of the Work shall survive this Contract.

County reserves the right to review any and all of the required insurance policies and/or endorsements, but has no obligation to do so. Failure to demand evidence of full compliance with the insurance requirements set forth in this Contract or failure to identify any insurance deficiency shall not relieve Contractor from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this Contract.

With respect to performance of work under this contract, Contractor shall maintain and shall require all of its subcontractors to maintain insurance as described below:

Contractor Required Insurance

1. Workers Compensation Insurance & Employers Liability Insurance

- a. Workers Compensation insurance with statutory limits as required by the Labor Code of the State of California.
- b. Employers Liability with minimum limits of \$1,000,000 per Accident; \$1,000,000 Disease per employee; \$1,000,000 Disease per policy.
- c. The policy shall be endorsed to include a written waiver of the insurer's right to subrogate against County.
- d. *Required Evidence of Insurance:*
 - i. Subrogation waiver endorsement; and
 - ii. Certificate of Insurance.

If injury occurs to any employee of Contractor, Subcontractor or sub-subcontractor for which the employee, or the employee's dependents in the event of employee's death, is entitled to compensation from County under provisions of the Workers Compensation Insurance and Safety Act, as amended, or for which compensation is claimed from County, County may retain out of sums due, the amount sufficient to cover such compensation, as fixed by the Act, as amended, until such compensation is paid, or until it is determined that no compensation is due. If County is compelled to pay compensation, County may, in its discretion, either deduct and retain from the sums due the amount so paid, or require to reimburse County.

2. General Liability Insurance

- a. Commercial General Liability Insurance on a standard occurrence form, no less broad than Insurance Services Office (ISO) form CG 00 01.
- b. Minimum Limits:

- i. Projects under \$5,000,000: \$2,000,000 per Occurrence; \$4,000,000 General Aggregate; \$4,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project. The required limits may be provided by a combination of General Liability Insurance and Commercial Excess or Commercial Umbrella Liability Insurance. If Contractor maintains higher limits than the specified minimum limits, County requires and shall be entitled to coverage for the higher limits maintained by Contractor.
 - ii. Projects from \$5,000,000 - \$9,999,999: \$5,000,000 per Occurrence; \$5,000,000 General Aggregate; \$5,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project. The required limits may be provided by a combination of General Liability Insurance and Commercial Excess or Commercial Umbrella Liability Insurance. If Contractor maintains higher limits than the specified minimum limits, County requires and shall be entitled to coverage for the higher limits maintained by Contractor.
 - iii. Projects \$10,000,000 and Over: Minimum Limits: \$10,000,000 per Occurrence; \$10,000,000 General Aggregate; \$10,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project. The required limits may be provided by a combination of General Liability Insurance and Commercial Excess or Commercial Umbrella Liability Insurance. If Contractor maintains higher limits than the specified minimum limits, County requires and shall be entitled to coverage for the higher limits maintained by Contractor.
- c. Any deductible or self-insured retention shall be shown on the Certificate of Insurance. If the deductible or self-insured retention exceeds \$25,000 it must be approved in advance by County. Contractor is responsible for any deductible or self-insured retention and shall fund it upon County's written request, regardless of whether Contractor has a claim against the insurance or is named as a party in any action involving the County.
 - d. Insurance shall be maintained for the entire period of the Work plus one (1) year from the completion of the Work.
 - e. **The County of Sonoma, its Officers and Employees** shall be endorsed as additional insureds for liability arising out of ongoing and completed operations by or on behalf of the Contractor in the performance of the Work under this Contract. Additional insured status shall continue for (1) one year after completion of the Work.
 - f. The insurance provided to the additional insureds shall be primary to, and non-contributory with, any insurance or self-insurance program maintained by them.
 - g. The policy definition of "insured contract" shall include assumptions of liability arising out of both ongoing operations and the products-completed operations hazard (broad form contractual liability coverage including the "F" definition of insured contract in ISO form CG 00 01, or equivalent).
 - h. The policy shall not exclude injury or damage caused by, or resulting from, explosion, collapse and/or underground hazards.

- i. The policy shall not contain a Contractors' Warranty or other similar language which eliminates or restricts coverage because of a subcontractor's failure to carry specific insurance or to supply evidence of such insurance.
- j. The policy shall be endorsed to include a written waiver of the insurer's right to subrogate against all persons or entities that are, or are required to be, additional insureds.
- k. The policy shall cover inter-insured suits between County and Contractor and include a "separation of insureds" or "severability" clause which treats each insured separately.
- l. *Required Evidence of Insurance:*
 - i. Additional insured endorsements or policy language granting additional insured status;
 - ii. Endorsement or policy language indicating that coverage is primary and non-contributory; and
 - iii. Certificate of Insurance.

3. Automobile Liability Insurance

- a. Minimum Limit: \$2,000,000 combined single limit per accident. The required limit may be satisfied by a combination of Automobile Liability Insurance and either Commercial Excess or Commercial Umbrella Liability Insurance.
- b. Insurance shall cover all owned, hired and non-owned vehicles.
- c. The County of Sonoma, its Board of Supervisors, and their employees, representatives, consultants, and agents shall be defined as insureds under the policy or shall be endorsed as additional insureds.
- d. *Required Evidence of Insurance:*
 - i. Endorsement or policy language indicating that County, its Board of Supervisors, and their employees, representatives, consultants, and agents are insureds; and
 - ii. Certificate of Insurance.

4. Contractors Pollution Liability Insurance

- a. Minimum Limits:
 - i. Projects not near or over a body of water: \$1,000,000 per pollution Incident; \$1,000,000 Aggregate. If Contractor maintains higher limits than the specified minimum limits, County requires and shall be entitled to coverage for the higher limits maintained by Contractor.
 - ii. Projects near or over a body of water: \$2,000,000 per pollution Incident; \$2,000,000 Aggregate. If Contractor maintains higher limits than the specified minimum limits, County requires and shall be entitled to coverage for the higher limits maintained by Contractor.
- b. The insurance shall cover:
 - i. bodily injury, sickness, disease, sustained by any person, including death;
 - ii. property damage, including physical injury to or destruction of tangible property including the resulting loss of use thereof;

- iii. cleanup costs, and the loss of use of tangible property that has not been physically injured or destroyed including diminution of value and natural resources damages;
 - iv. defense costs, including costs, charges, and expenses incurred in the investigation, adjustment, or defense of claims; and
 - v. liability assumed by Contractor under a written contract or agreement.
- c. Any deductible or self-insured retention shall be shown on the Certificate of Insurance. If the deductible or self-insured retention exceeds \$25,000 it must be approved in advance by County. Contractor is responsible for any deductible or self-insured retention and shall fund it upon County's written request, regardless of whether Contractor has a claim against the insurance or is named as a party in any action involving the County.
 - d. If the insurance is on a Claims-Made basis, the retroactive date shall be no later than the commencement of Work.
 - e. Insurance shall be maintained for the entire period of the Work plus the additional periods as specified below:
 - i. Projects not near or over a body of water: one (1) year after Final Completion and acceptance of the final payment for the Work.
 - ii. Projects near or over a body of water: Two (2) years after Final Completion and acceptance of the final payment for the Work.
 - d. If the insurance is on a Claims-Made basis, the continuation coverage may be provided by: (a) renewal of the existing policy; (b) an extended reporting period endorsement; or (c) replacement insurance with a retroactive date no later than the commencement of the Work.
 - e. The County of Sonoma, its officers, agent and employees shall be endorsed as additional insureds for liability arising out of operations by or on behalf of the Contractor in the performance of the Work.
 - f. The insurance provided to the additional insureds shall be primary to, and non-contributory with, any insurance or self-insurance program maintained by them.
 - g. The policy shall cover inter-insured suits between the Contractor and the additional insureds and include a "separation of insureds" or "severability" clause which treats each insured separately.
 - h. *Required Evidence of Insurance:*
 - i. Additional insured endorsement or policy language granting additional insured status;
 - ii. Endorsement or policy language indicating that coverage is primary and non-contributory; and
 - iii. Certificate of Insurance including an indication of the coverage basis: occurrence or claims-made. If claims-made, the Certificate shall show the policy retroactive date.

5. Increase of Minimum Limits

Required minimum amounts of insurance may be increased should conditions of Work, in opinion of County, warrant such increase. Contractor shall increase required insurance amounts upon direction by County.

6. Standards for Insurance Companies

Insurers, other than the California State Compensation Insurance Fund, shall have an A.M. Best's rating of at least A:VII.

7. Documentation

- a. The Certificate of Insurance shall include the following reference: **Rio Nido Culvert Installation Flood Mitigation Project (County #C20012)**.
- b. Contractor agrees to maintain current Evidence of Insurance on file with County for the required period of insurance. Any requirement to maintain insurance after Final Completion of the Work, including providing Certificates evidencing required coverage(s), shall survive the Contract.
- c. Required Evidence of Insurance shall be submitted to Jackie Porter, jackie.porter@sonoma-county.org
- d. Required Evidence of Insurance shall be submitted for any renewal or replacement of a policy that already exists, at least ten (10) days before expiration or other termination of the existing policy.
- e. Contractor shall provide immediate written notice if: (1) any of the required insurance policies is terminated; (2) the limits of any of the required policies are reduced; or (3) the deductible or self-insured retention is increased.
- f. Upon written request, certified copies of required insurance policies must be provided within thirty (30) days.

8. Policy Obligations

Contractor's indemnity and other obligations shall not be limited by the foregoing insurance requirements.

9. Material Breach

If Contractor fails to maintain Insurance which is required pursuant to the Contract Documents, it shall be deemed a material breach. County, at its sole option, may terminate the Contract for default and obtain damages from Contractor resulting from said breach. Alternatively, County may purchase the required Insurance, and without further notice to Contractor, County may deduct from sums due to Contractor any premium costs advanced by County for such insurance. These remedies shall be in addition to any other remedies available to County under the Contract Documents or Law.

Subcontractors – Required Insurance

With respect to their portion of the work, subcontractors of all tiers shall maintain the same insurance required to be maintained by contractor with limits as follows:

1. Minimum General Liability Limits: \$1,000,000 per Occurrence; \$2,000,000 General Aggregate; \$2,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project. The required limits may be provided by a combination

of General Liability Insurance and Commercial Excess or Commercial Umbrella Liability Insurance. If Subcontractor maintains higher limits than the specified minimum limits, County requires and shall be entitled to coverage for the higher limits maintained by Subcontractor.

2. Minimum Automobile Liability Limit: \$1,000,000 combined single limit per accident.
3. Minimum Employers Liability Limits: \$1,000,000 per Accident; \$1,000,000 Disease per employee; \$1,000,000 Disease per policy.
4. *Required Evidence of Insurance*: Certificate of Insurance.

8 PROSECUTION AND PROGRESS

Replace section 8-1.03 with:

8-1.03 Pre-Construction Conference

Prior to the issuance of the Notice to Proceed, a pre-construction conference will be held, for the purpose of discussing with the Contractor the scope of work, Contract drawings Specifications, existing conditions, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution of and the satisfactory completion of the project as required. The Contractor's representative at this conference shall include all major superintendents for the work and may include major subcontractors.

Replace the 1st and 2nd paragraphs of section 8-1.04B with:

Start job site activities within fifteen (15) calendar days of the date of the Notice to Proceed. Do not start in advance of the Notice to Proceed unless specific arrangements are made with the Department.

Insert as the first paragraph of 8-1.05

The number of working days for this project is **XXXX**

9 PAYMENT

Add to section 9-1.01:

All payments will be made in accordance with Sonoma County Board of Supervisors' Resolution No. 62627, dated December 19, 1978.

The Board of Supervisors' approved form, "Escrow Agreement for Security Deposits in lieu of Retention" is available from the Department of Transportation and Public Works.

Replace "6 percent" in the first sentence of the 13th paragraph of section 9-1.03 with:

7 percent

Replace “6 percent” in the first sentence of the 14th paragraph of section 9-1.03 with:

7 percent

Add to the end of section 9-1.03

Submit Subcontractor Payment Declaration Form on a monthly basis.

Replace section 9-1.07 with:

Payment adjustments for price index fluctuations do not apply to this contract.

Replace the second paragraph of section 9-1.16E(4) with:

Stop Notice information may be obtained from the County Auditor, 585 Fiscal Drive, Room 101F, Santa Rosa 95403, Telephone (707) 565-2631.

Replace section 9-1.16F with:

The Department retains 5 percent of the estimated value of the work completed and 5 percent 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, except that at any time after 20 percent of the work has been completed, if the Engineer finds that satisfactory progress is being made, the Department may reduce the total amount being retained from payment pursuant to the above requirements to 3 percent of the total estimated value of the work and materials and may also reduce the amount retained from any of the remaining partial payments to 3 percent of the estimated value of the work and materials.

In addition, on any partial payment made after 95 percent of the work has been completed, the Department may reduce the amount withheld from payment pursuant to the requirements of this Section 9-1.16, to such lesser amount as the Department determines is adequate security for the fulfillment of the balance of the work and other requirements of the contract, but in no event will that amount be reduced to less than 125 percent of the estimated value of the work yet to be completed as determined by the Engineer.

PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS: Federal regulation (49 CFR 26.29) requires the following method be used in federal-aid contracts to ensure prompt and full payment of any retainage kept by the prime contractor or subcontractor to a subcontractor.

The agency holds retainage from the prime contractor and makes prompt and regular incremental acceptances of portions, as determined by the agency of the contract work and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor returns all monies withheld in retention from all subcontractors within 30 days administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of: after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Any delay or postponement of payment may take place only for good cause and with the agency’s prior written approval. Any violation of these provisions subjects the violating prime contractor to the penalties, sanctions, and other remedies

specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, a dispute involving late payment or nonpayment by the contractor; deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Replace section 9-1.17D(3) with:

Failure to allow timely access to the supporting data for a claim when requested waives the claim.

The Department's costs in reviewing or auditing a claim not supported by the Contractor's accounting or other records are damages incurred by the State within the meaning of the California False Claims Act.

If the Engineer determines that a claim requires additional analysis, upon the written consent of the Contractor, the Engineer schedules a board of review meeting in compliance with section 5-1.43E(2) or 5-1.17E(3), as applicable. Meet with the board of review and make a presentation supporting the claim.

After the Engineer or review board finishes reviewing the claim, the Department makes the final determination of claims and provides it to you within 45 days of receipt of the claim, or within 45 days of receipt of the recommendation from the board of review, and shall provide a written statement identifying what portion of the claim is disputed and what portion is undisputed.

If the Department needs approval from the Board of Supervisors to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the Board of Supervisors 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 Department shall have up to three days following the next duly publicly noticed meeting of the governing body after the Board of Supervisors, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

Failure by the Department to respond to a claim from Contractor within the time periods described in this section 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 Department'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.

The Engineer provides you a final estimate and the Department pays the amount due within 60 days. The final estimate is conclusive as to the amount of work completed and the amount payable except as specified in sections 5-1.27, 5-1.47, and 9-1.21.

If the Contractor disputes the Department's written response, or if the Department fails to respond to a claim issued pursuant to this section within the time prescribed, the Contractor 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 Department shall schedule a meet and confer conference within 30 days for settlement of the dispute.

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 Department shall provide the Contractor 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 Department 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 Department and the Contractor sharing the associated costs equally. The Department and Contractor 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.

If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against the Department because privity of contract does not exist, the Contractor may present to the Department 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 Department 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 Department and, if the Contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

Your failure to comply with the claim procedures is a bar to arbitration under Pub Cont Code § 10240.2.

DIVISION II GENERAL CONSTRUCTION

10 GENERAL

Add to section 10-1.02D:

The reference plan for existing striping and markings shall be approved by the Engineer prior to the elimination of the existing delineations.

Replace paragraph 5 of section 10-1.06 with:

The contractor is responsible for developing construction water for use on this project. The department does not own or maintain any water facilities.

12 TEMPORARY TRAFFIC CONTROL

Replace section 12-1.04 with:

Flagging is paid for under the bid item for flagging.

The Department pays for 50% of the actual cost of flagging, on a Force Account basis.

The cost listed under the Flagging contract bid item is 50% of the total estimated cost of flagging.

Payment for flagging only includes the periods when traffic controls have been implemented and flaggers are actively directing traffic. Flagging and traffic control setup or breakdown and light-towers are paid for under the Traffic Control System bid item.

Furnishing and operating Pilot Cars if ordered by the plans or Engineer is paid for at 100% of cost. Pilot cars and drivers are paid under the Flagging bid item, as Force Account work per section 9-1.04.

Add to section 12-4.01A

Replace the table in section 12-4.02A(2) with:

| <u>Holiday</u> | <u>Date Observed</u> |
|----------------------------|------------------------------------|
| New Year's Day | January 1 st |
| Martin Luther King JR. Day | 3 rd Monday in January |
| Lincoln's Birthday | February 12 th |
| President's Day | 3 rd Monday in February |

| | |
|---------------------------|--------------------------------------|
| Cesar Chavez Day | March 31st |
| Memorial Day | Last Monday in May |
| Independence Day | July 4th |
| Labor Day | 1 st Monday in September |
| Veteran's Day | November 11 th |
| Thanksgiving Day | 4 th Thursday in November |
| Friday After Thanksgiving | 4 th Friday in November |
| Christmas Day | December 25 th |

Add to section 12-4.02A(3)(a)

Submit a Traffic Control Plan prior to beginning work. Work may not proceed without a TCP approved by the Engineer.

Delete section 12-4.02A(3)(b)

Add to section 12-4.02C(1)

On weekdays, the Contractor will restrict their hours of work to the period between one-half hour after sunrise and one-half hour before sunset, but in no case will work begin before 7:00 am and end after 7:00 pm. On weekends and holidays, the Contractor will restrict his hours of work to the period between 9:00 am and 7:00 pm. The Contractor will request of the Engineer at least 48 hours in advance of the Contractor's intent to work on weekends or holidays.

Lane closures will be limited to the hours of 8:00 am to 5:00 pm exclusive of the roads where night work for paving is involved.

The maximum length of a single stationary lane closure will be 1 mile.

Not more than one separate stationary lane closure will be allowed in each direction of travel at one time on the same road.

Keep the full width of the traveled way open to traffic when no active construction activities are occurring in the traveled way or within 6 feet of the traveled way and on:

1. Friday after 3:00 p.m.
2. Saturday
3. Sunday
4. Designated holidays
5. Special days

Replace section 12-4.02C(2)

This section does not apply

Replace section 12-4.02C3)(a)

12-4.02C(3)(a) General

Maintaining traffic will conform to the provisions in Sections 7-1.03, "Public Convenience," Section 7-1.04, "Public Safety," and Section 12, "Temporary Traffic Control," of the Standard Specifications and these special provisions.

Work that interferes with public traffic will be limited to the hours when lane closures are allowed, except for work required under Sections 7-1.03, "Public Convenience," and Section 7-1.04, "Public Safety."

Closures will conform to the provisions in "Traffic Control System for Lane Closure" of these special provisions.

12-4.02C(3)(a)(i) Definitions

Closure is defined as the closure of a traffic lane or lanes, including shoulder, ramp or connector lanes, within a single traffic control system.

12-4.02C(3)(a)(ii) Construction

The full width of the traveled way will be open for use by public traffic as shown in the table "Lane Closure Restriction for Designated Legal Holidays and Special Days" included in this section, "Maintaining Traffic."

The full width of the traveled way will be open for use by public traffic when construction operations are not actively in progress.

Under one-way reversing traffic control operations, public traffic may be stopped in one direction for periods not to exceed 30 minutes. After each stoppage, all accumulated traffic for that direction will pass through the work zone before another stoppage is made.

The Contractor will make every effort to minimize closure of access to all parcels during project construction.

The Contractor will provide for passage of emergency vehicles through the project site at all times.

Local emergency services will be notified prior to construction to inform them that traffic delays may occur, and also of the proposed construction schedule. The Contractor will provide for passage of emergency vehicles through project site at all times.

Personal vehicles of the Contractor's employees will not be parked within the right of way.

When leaving a work area and entering a roadway carrying public traffic, the Contractor's equipment, whether empty or loaded, will in all cases yield to public traffic.

When work vehicles or equipment are parked within 6 feet of a traffic lane to perform active construction, the shoulder area will be closed with fluorescent orange traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 traffic cones or portable delineators will be used for the taper. A W20-1 (ROAD WORK AHEAD) or W21-5b (RIGHT/LEFT SHOULDER CLOSED AHEAD) or C24(CA) (SHOULDER WORK AHEAD) sign will be mounted on a crashworthy portable sign support with flags. The sign will be placed where designated by the Engineer. The sign will be a minimum of 48" x 48" in size. The Contractor will immediately restore to the original position and location a traffic cone or delineator that is displaced or overturned, during the progress of work.

A minimum of one paved traffic lane, not less than 10 feet wide, will be open for use by public traffic at all times.

12-4.02C(3)(a)(iii) Payment

Full compensation for furnishing, erecting, maintaining, and removing and disposing of the W20-1, W21-5b, and C24(CA) signs will be considered as included in the contract lump sum price paid for Traffic Control System and no additional compensation will be allowed therefore.

Replace section 12-4.02C(3)(e) with:

Replace section 12-4.02C(4) with

12-4.02C(4)(a) General

Replace section 12-4.02C(7)(b) with:

When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way, will be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations designated by the Engineer within the limits of the highway right of way.

One-way traffic will be controlled through the project in conformance with the plan entitled "Traffic Control System for Lane Closure on Two Lane Conventional Highways" and these special provisions.

Each vehicle used to place, maintain and remove components of a traffic control system will have cellular phone and radio contact with personnel in the work area.

When flaggers are required, all flaggers will have cellular phone and radio contact with personnel in the work area.

Utilizing a pilot car will be at the option of the Contractor. If the Contractor elects to use a pilot car, the cones shown along the centerline on the plan need not be placed. The pilot car will have radio contact with personnel in the work area. The maximum speed of the pilot car through the traffic control zone will be 25 miles per hour.

Replace section 12-4.02D with:

Traffic Control Systems will be paid per the bid item for Traffic Control Systems.

Replace section 12-4.04A(3) with:

Prior to beginning work, you shall submit a pedestrian access plan for review and approval by the Engineer.

Replace last paragraph in section 12-4.04D with:

Compensation for providing pedestrian facilities shall be paid at Extra Work at force account as directed by the Engineer and outlined in section 9-1.04 of the Standard Specifications.

13 WATER POLLUTION CONTROL

13-1 General

13-1.01A: Water Pollution Control shall be performed in accordance with Section 13 - Water Pollution Control, of the Standard Specifications with the following modifications, clarifications, and additional requirements included in this section of these Special Provisions.

The Contractor shall follow best management practices in accordance with the Association of Bay Area Governments (ABAG) Erosion and Sediment Control field manual (07102). All work within a stream channel and the streams associated with the Riparian corridor is subject to California Department of Fish & Game (DF&G) regulations and permits.

The contractor shall comply with the NPDES permit requirements and SUSMP Guidelines established by the City of Santa Rosa and the County of Sonoma under Order No. R1-2009-0050, NPDES No. CA0025054, MS4 Storm Water Permit. For more information on these requirements your attention is directed to the State Water Resources Control Board and County of Sonoma websites at: www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/ and <http://www.sonoma-county.org/prmd/sw/pdf/susmp.pdf>.

The California Stormwater Quality Association Storm Water BMP Handbook for Construction ([CASQA Handbook](http://www.casqa.org/)). BMPs shall be selected, installed and maintained in accordance with the latest edition. A copy of the handbook can be downloaded from CASQA, <http://www.casqa.org/>.

This work shall consist of, but not be limited to, constructing such facilities, both temporary and permanent, and taking such measures as are necessary to prevent, control and abate water, mud, and erosion damage to public and private property and reducing discharge of sediment and pollutants to storm drains and streams as a result of the construction of this project.

13-2 Water Pollution Control Program

13-2.01B Submittals: Before starting any work on the project, the Contractor shall submit, for acceptance by the Engineer, a program to control water pollution effectively during construction of the project, including the staging area. Such program shall show the schedule for the erosion control work included in the contract and for all water pollution control measures which the Contractor proposes to take in connection with construction of the project to minimize the effects

of his operation upon the adjacent creek. The Contractor shall not perform any work in the creek until such program has been accepted.

The program to control water pollution that is required to be submitted under this section of the Standard Specifications and shall include a spill contingency plan that establishes clean-up procedures that will be followed in the event of a spill of potentially hazardous, toxic, or polluting materials.

13-2.04 Payment: Water Pollution Control shall be paid for at the contract lump sum price, which shall include full compensation for complying with the requirements of the Standard Specifications, this section of the Special Provisions, and the Storm Water Permit including, but not limited to preparing and implementing a written program to control water pollution; furnishing, installing, maintaining, and removing BMPs and erosion control measures; and other work incidental thereto complete in accordance with the Project Plans, applicable Federal, State, and Local Regulations, Permit requirements, and as specified herein, and no additional allowance will be made therefore.

13-3 Storm Water Pollution Prevention Plan

13-3.01A Summary: This project is exempt from the State Water Resources Control Board General NPDES Permit for the Discharge of Storm Water related to Construction Activities (Construction General Permit), and not required to have a Storm Water Pollution Prevention Plan (SWPPP), therefore Section 13-2 – Storm Water Pollution Prevention Plan, of the Standard Specifications does not apply to this project. Note, if the Contractor’s use of the designated staging area (or other area selected by the Contractor) exceeds 38,000 square feet, a SWPPP will be required. If this is the case, it will be the Contractor’s responsibility to prepare and implement an appropriate SWPPP.

13-4 Job Site Management

13-4.01A Summary: With the exception of personnel with hand held tools, no work or equipment is permitted within the stream bed. No work, materials, tools or equipment of any kind is permitted within the banks of the stream between October 15 and June 1 without prior written approval from DF & G.

Stockpiles of material shall be covered with waterproof sheets while not actively being used. Any material (including debris) stored along the street gutter or other drainage path shall include provisions allowing drainage to pass unimpeded and without increasing sediment or pollutants in the water.

The Contractor shall provide and use a protected concrete wash out area.

All storm drain inlets to which the project areas drain shall be protected from sedimentation with straw bales, gravel bags or wattles.

The Contractors staging area and all disturbed surfaces shall be protected by appropriate run off control devices such as wattles, fiber rolls, gravel bags and other measures.

Upon project completion, all surfaces shall be completely restored or covered with permanent erosion control seeded and strained or mulched. Such work shall be included in the contract bid item for “Surface Restoration,” elsewhere in these Special Provisions.

13-4.03E(7) Paving, Sealing, Sawcutting, Grooving, and Grinding Activities: The following additional BMPs shall be implemented for paving, repaving, reconstruction, patching, digouts, or resurfacing:

1. Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions;
2. Install gravel bags and filter fabric or other appropriate inlet protection at all susceptible storm drain inlets and manholes to prevent paving products and tack coat from entering the storm drain;
3. Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses;
4. Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt;
5. Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly
6. Collect liquid waste in a container with a secure lid for transport to a maintenance facility to be reused, recycled, or disposed of properly;
7. Collect solid waste by shoveling and vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled, or disposed of properly;
8. Cover “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm;
9. Cover loads with tarp before haul-off to a storage site, ensuring that trucks are not overloaded;
10. Minimize airborne dust by using water spray during grinding; and
11. Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or watercourses.

13-4.04 Payment: Full compensation for job site management shall be considered as paid for under the lump sum bid price for **Water Pollution Control**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved in complying with this section, and no additional compensation will be made therefor.

13-5 Temporary Soil Stabilization

13-5.01 General: Temporary soil stabilization (hydroseeding) shall be applied to all graded/exposed areas as shown on the Project Plans and as directed by the Engineer in accordance with the Standard Specifications (Section 21 Erosion Control) and these Special Provisions.

13-5.03I Temporary Hydroseed: Hydroseeding shall be conducted in a three-step process. First, evenly apply seed mix and fertilizer to the exposed area. Second, evenly apply mulch over the seed and fertilizer. Third, stabilize the mulch in place.

Applications shall be broadcasted mechanically or manually at the rates specified below. Seed mix and fertilizer shall be worked into the soil by rolling or tamping. If straw is used as mulch, straw shall be derived from wheat, rice, or barley and be approximately six to eight inches in depth. Stabilization of mulch shall be done hydraulically by applying an emulsion or mechanically by crimping or punching the mulch into the soil. Equivalent methods and materials may be used only if they adequately promote vegetation growth and protect exposed slopes.

Hydroseeding shall be applied between September 16 and October 15 to all graded/exposed areas that are finished. For all graded areas finished between October 16 and March 31, hydroseeding shall be applied immediately following the finishing of grading.

Any exposed areas that have been damaged as a result of the Contractor's operations shall be hydroseeded at the Contractor's sole expense.

Seed mix and application rate shall conform to the following:

| | |
|--------------------------------------|--------------------|
| Bromus mollis (Blando Brome) | 40 pounds per acre |
| Trifolium hirtum (Hykon Rose Clover) | 20 pounds per acre |

Commercial fertilizer shall have a guaranteed chemical analysis of 16 percent nitrogen, 20 percent phosphoric acid, 0 percent water soluble potash, and 15 percent Sulphur, with an application rate of 300 pounds per acre.

Straw mulch shall be applied at a rate of 4,000 pounds per acre.

Hydraulic stabilizer shall be non-asphaltic, derived from plants and shall be applied at a rate of 75 to 100 pounds per acre.

13-5.04 Payment: Full compensation for job temporary soil stabilization shall be considered as paid for under the lump sum bid price for **Water Pollution Control**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved in complying with this section, and no additional compensation will be made therefor.

13-6 Temporary Sediment Control

13-6.01 General: Temporary erosion and sediment control shall consist of, but not be limited to, constructing such facilities and taking such measures as are necessary to prevent, control and abate water, mud, and erosion damage to public and private property as a result of the construction of this project.

Temporary Erosion Control shall be in accordance with best management practices, the Standard Specifications, these Special Provisions, CASQA Handbook, and the Project Plans.

Temporary erosion control features in addition to the provisions shown on the Project Plans, as are necessary to prevent damage and sediment transport shall be constructed and functional to the satisfaction of the Engineer. At a minimum, facilities shall be constructed and functional during the winter season, from October 15th to April 15th. The Contractor shall construct such

supplementary temporary erosion control facilities as are necessary to protect adjacent private and public property.

13-6.03C Temporary Drainage Inlet Protection: Temporary drainage inlet protection shall be installed at all drainage inlets as indicated on the Project Plans and in accordance with the Standard Specifications.

13-6.03E Temporary Fiber Rolls: Temporary fiber rolls (straw wattles) and straw bale barriers shall be furnished, installed, maintained, and later removed as shown on the Project Plans and other applicable sections of the Standard Specifications and these Special Provisions. Fiber rolls shall be provided and installed in accordance with the requirements of Sections 21-2.02P and 21-2.03P of the Standard Specifications.

13-6.03G Maintenance: Temporary fiber rolls shall be maintained to provide a sediment holding capacity of approximately one-half the height of the fiber roll above ground. When sediment exceeds this height, or when directed by the Engineer, sediment shall be removed. The removed sediment shall be deposited within the project limits in such a way that the sediment is not subject to erosion by wind or by water.

Temporary wattles shall be repaired or replaced on the same day when the damage occurs. Damage to the temporary wattles resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

13-6.04 Payment: Full compensation for any cost involved in temporary sediment control to act as temporary water pollution control and temporary erosion control shall be paid for under the lump sum bid price for **Water Pollution Control**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved in complying with this section, and no additional compensation will be made therefor.

13-7 Temporary Tracking Control

13-7.03 Temporary Construction Entrances and Roadways: Temporary construction entrances shall be installed at the locations as indicated on the Project Plans or as determined by the Contractor and approved by the Engineer if not shown on the Plans, and shall be in accordance with the Standard Specifications.

13-7.03D Payment: Full compensation for any cost involved in temporary construction entrances to shall be paid for under the lump sum bid price for **Water Pollution Control**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved in complying with this section, and no additional compensation will be made therefor.

13-9 Temporary Concrete Washouts

13-9.01 General: Temporary concrete washouts, if needed, shall be installed at the locations as indicated on the Project Plans or as determined by the Contractor and approved by the Engineer if not shown on the Plans, and shall be in accordance with the Standard Specifications.

13-9.04 Payment: Full compensation for any cost involved in temporary concrete washouts to shall be paid for under the lump sum bid price for **Water Pollution Control**, which price shall

include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved in complying with this section, and no additional compensation will be made therefor.

15 EXISTING FACILITIES

15-1.01 General: Performing work on existing facilities includes abandoning, adjusting, modifying, obliterating, reconstructing, relaying, relocating, remodeling, removing, repairing, resetting, or salvaging a facility. Work shall be in accordance with Section 15 – Existing Facilities of the Standard Specifications with the following modifications, clarifications, and additional requirements as included in this section of these Special Provisions.

All existing utilities found to reside in excavated areas, that are active, shall be supported in place with service maintained during construction. The Contractor shall be responsible for any damage caused by their operations and any needed repairs shall be completed to the Engineer's satisfaction.

Existing utilities found to reside in excavated areas shall be supported or removed and replaced at the Contractor's option and at no additional cost to the County. The Contractor shall be responsible for maintaining the existing line and grade of the utilities. If the Contractor elects to remove and replace, it shall be done per applicable Utility Company or County Standards and Specifications.

Except for materials indicated to be stockpiled or to remain the County's property, cleared materials are the Contractor's property and are to be removed from the project site in a lawful manner.

Notify Engineer when encountering roots within the drip line of trees which are greater than 1 inch. Hand dig around all roots greater than one inch in diameter. All tree roots two inches and greater which are encountered during excavation must be pruned by hand. The root shall be cut cleanly with a saw to avoid splits. When digging within the drip line of trees, Contractor shall exercise extreme caution to avoid pulling on roots with excavation equipment.

15-1.03D Remove Existing Asphalt and Concrete and Aggregate Base: Remove existing asphalt concrete and concrete channel wall section as indicated on the Plans in accordance with the Standard Specifications, and these Special Provisions.

Existing base rock under the asphalt and concrete shall be removed to the planned subgrade elevation. For the areas where new construction is not proposed, backfill with clean onsite or import soil material to existing adjacent elevations. Grade all areas to drain.

Saw-cut to the full depth the length of existing pavement to remain before removing existing pavement. Saw-cut faces vertically.

Asphalt concrete and Portland Cement concrete removed shall be recycled.

All concrete which is to be removed from the drainage channel shall be removed per the dimensions indicated on the plans or as directed by the Engineer. The edge of existing concrete to remain shall be neat and free of defects.

Reinforcing steel may be encountered in portions of concrete to be removed and no additional allowance will be made for the removal of such steel.

15-1.03E Remove and Replace Existing Fencing: Remove existing fencing as indicated on the Plans in accordance with the Standard Specifications, and these Special Provisions. Fencing shall be replaced to match the existing fence in kind. Fence post concrete footings shall be removed entirely and replaced unless otherwise directed by the Engineer.

15-1.03F Remove Existing Trees and Sump: Remove existing trees and stumps as indicated on the Plans and in accordance with the Standard Specifications and these Special Provisions. Trees designated for removal shall be clearly identified by the Contractor before removal operations begin. Only those trees shown on the Plans or so designated by the Engineer shall be removed.

Trees will be taken down in a manner consistent with the health and safety of the Contractor, the general public and private property. All tree removal work must be performed by ISA certified tree workers or reviewed by a supervising ISA certified arborist, adhering to Cal-Osha and ANSI Standards.

Felled trees shall be cut into sections and removed from the site. All branches, leaves and vegetative debris shall be reduced to chips. All resulting stumps are to be routed to twelve (12) inches below the soil level.

All tree rounds, branches, chips, debris and the like shall be completely removed and disposed of offsite unless otherwise directed by the Engineer. Wood debris shall not be stored onsite. All wood debris shall be removed as it is generated. Unless otherwise directed by the Engineer, chips or other combustible materials are to be disposed of offsite.

15-1.03G Remove Existing Driveway Culvert: Remove existing driveway culvert as indicated on the Plans and in accordance with the Standard Specifications and these Special Provisions. Culvert shall be completely removed and disposed of offsite unless otherwise directed by the Engineer. Backfill and compact areas where material is removed to ensure positive drainage.

15-1.03H Remove or Abandon Existing Water Main: Remove the existing 2” water main as indicated on the Plans and in accordance with the Standard Specifications and these Special Provisions and in accordance with the requirements of the Sweetwater Springs Water District.

15-1.03I Remove or Abandon Existing Water Service Line: Remove the existing water service line as indicated on the Plans and in accordance with the Standard Specifications and these Special Provisions and in accordance with the requirements of the Sweetwater Springs Water District.

15-1.03J Remove and Replace Existing Tent Structure: Remove, salvage, and store existing tent structure for reinstallation in kind after construction is completed.

15-3.04 Payment

Full compensation for any cost involved in the removal of existing asphalt concrete paving and aggregate base shall be paid for at the contract price per square foot for **Remove Existing Asphalt Concrete Paving and Aggregate Base**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but

not limited to, saw-cutting, removing asphalt concrete material, and removing aggregate base rock material, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer and no additional allowance will be made therefor.

Full compensation for any cost involved in the removal of existing concrete channel wall section shall be paid for at the contract price lump sum price for **Remove Existing Concrete Channel Wall Section**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but not limited to, saw-cutting, removing concrete material, and removing existing reinforcing bar, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer and no additional allowance will be made therefor.

Full compensation for any cost involved in the removal and replacement of existing fence shall be paid for at the contract price per lineal foot for **Remove and Replace Existing Fence**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but not limited to, removal of fencing, post, and footings as shown on the Plans, and replacing in the same location in kind, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be made therefor.

Full compensation for any cost involved in the removal of existing trees and stumps shall be paid for at the contract price for **Remove Existing Trees and Stump** for each tree and stump removed, which price shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, cutting, chipping, root and stump grinding, removal, disposal and cleanup as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer and no additional allowance will be made therefor.

Full compensation for any cost involved in the removal of the existing driveway culvert shall be paid for at the lump sum contract price for **Remove Existing Driveway Culvert**, which price shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, excavating, removal, disposal, backfill and compact of replacement material, and cleanup as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer and no additional allowance will be made therefor.

Full compensation for any cost involved in the removal or abandonment of existing 2" water main shall be paid for at the contract price per lineal foot for **Remove/Abandon Existing 2" Water Main**, which price shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, excavation, removal, backfill, disposal of any pipe, and cleanup as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer and Sweetwater Springs Water District and no additional allowance will be made therefor.

Full compensation for any cost involved in the removal or abandonment of existing water service line shall be paid for at the contract price per lineal foot for **Remove/Abandon Existing Water Service Line**, which price shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, excavation, removal, backfill, disposal of any pipe and fittings, and cleanup as shown on the

Plans, as specified in these Special Provisions, and as directed by the Engineer and Sweetwater Springs Water District and no additional allowance will be made therefor.

Full compensation for any cost involved in the removal, salvage, storage, and reinstallation for existing tent structure at the contract price lump sum for **Remove and Replace Existing Tent Structure**, which price shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, removal, salvage, storing, and replacing as shown on the Plans, as specified in these Special Provisions, and no additional allowance will be made therefor.

DIVISION III. EARTHWORK AND LANDSCAPE

19 EARTHWORK

19-1.01A Summary: Earthwork shall conform to the applicable provisions in Section 19 – Earthwork of the Standard Specifications, these Special Provisions, and the Plans. Earthwork shall include all labor, materials, equipment, tools, and incidentals and performing all operation necessary to excavate, earth and rock, regardless of character and subsurface conditions; prepare foundations for the placement of other material thereon, transport, place, compact, and furnish fill materials; mix, blend, and moisture condition materials as required; remove and replace unsuitable materials; over-excavate, remove, and replace expansive clay material; remove, transport, and dispose of surplus excavated material.

Grading and earthmoving shall be performed during the dry season. No grading or earthmoving will be allowed between October 15 and April 1 unless approved by the County.

19-1.01B Definitions: Whenever used in this Section or in the Project Plans, the following terms shall have the primary meaning given herein:

1. **Excavation** – Removal of native materials below the plane established by the stripping operations to the lines and grades shown on the Plans from those areas upon which fill materials will be placed or as directed by the Engineer.
2. **Fill** – Suitable materials meeting the requirements and handled in accordance with these contract documents that is required to bring the existing ground elevation to the finished grade shown on the Plans.
3. **Over-Excavation** – Known or unforeseen removal of native materials beyond the normal limits of excavation and replacement of the material to the normal lines of excavation with a specified engineered fill, or suitable native materials. Known over-excavation limits of expansive materials are defined on the Plans. Over-excavation limits of unforeseen material are not defined on the Plans, but are a requirement of encountering unsuitable materials during excavation that were previously unknown.
4. **Suitable Material** – Material that meets the requirements for fill as described herein.

19-1.01D Quality Assurance: The Contractor shall lay out all work, establish grades, locate existing underground utilities, set markers and stakes, set up and maintain barricades and protect all utilities prior to beginning actual earthwork operations.

19-2 Roadway Excavation

19-2.01A Summary: Roadway excavation shall consist of excavation within the limits for construction, as shown on the Project Plans, and disposal of excess material, as specified herein. Any additional excavation performed by the Contractor beyond the limits of the road reconstruction shown on the Project Plans shall be filled with aggregate base in accordance with Section 26 of these Special Provisions at the Contractor's expense.

Except where conflicting with tree or structural or right-of-way limitations, existing soil shall be removed to the lines and grades as shown on the Project Plans. The exposed surface shall be

scarified to a depth of at least 8 inches, uniformly moisture conditioned to within two percent of the optimum moisture content and compacted to a minimum of 90 percent of the maximum dry density of the materials as determined by ASTM Test Method D-1557. The grade exposed should be proof-rolled with rubber tier equipment and should be smooth, firm, and uniform and unyielding.

19-2.04 Payment: Full compensation for any cost involved in roadway excavation shall be paid for at the contract lump sum price for **Earthwork**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but not limited to, subgrade preparation of the pathway; grading; excavating; loading, hauling and disposing of the excavated material; and no additional compensation will be made therefor.

19-3 Structure Excavation and Backfill

19-3.03E(1) General: No backfill material shall be deposited against recently poured concrete before seven days, or until either the concrete has developed a strength of not less than 2,500 pounds per square inch in compression as determined by test cylinders, or attained sufficient strength to withstand the loads imposed as directed by the Engineer.

19-3.04 Payment: Full compensation for any cost involved in structure excavation and backfill shall be paid for at the contract lump sum price for **Earthwork**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but not limited to, excavating; loading, hauling and disposing of the excavated material; backfill material, placement, and compaction; and no additional compensation will be made therefor.

19-5 Compaction

19-5.03C Relative Compaction (90%): All fill material should be placed and compacted in lifts, a maximum of eight-inches loose thickness, compacted to a minimum of 90 percent relative compaction at or within two percent of the optimum moisture content for both native and import fill.

19-5.04 Payment: Full compensation for any cost involved in compaction shall be paid for at the contract lump sum price for **Earthwork**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but not limited to, scarifying, moisture conditioning, and compaction; and no additional compensation will be made therefor.

19-6 Embankment Materials

19-602 Materials: All fill materials shall be free of perishable matter and rocks or lumps over four inches in diameter, and must be approved by the geotechnical engineer prior to use. The suitability of the on-site soils for use as select fill should be verified during grading.

Select fill should be free of organic matter, have a low expansion potential, and conform in general to the following requirements criteria:

| | |
|------------------|--------------|
| Plasticity Index | less than 15 |
| Liquid Limit | less than 40 |

Percent Soil Passing #200 Sieve
Maximum Aggregate Size

between 15% and 40\$
4 inches

The contractor is responsible for submitting, at least 72 hours (3 working days) in advance of its intended use, samples of the proposed import material for laboratory testing and approval by the geotechnical engineer.

19-6.04 Payment: Full compensation for any cost involved in fill materials shall be paid for at the contract lump sum price for **Earthwork**, which price shall include full compensation for furnishing all labor, materials, tools, and equipment, and doing all work involved including, but not limited to conformance grading and furnishing and placing fill material, and no additional compensation will be made therefor.

DIVISION IV. SUBBASES AND BASES

26 AGGREGATE BASES

26-1.01 General: Aggregate base shall be Class 2 conforming to and placed in accordance with the requirements of Section 26 of the Standard Specifications, with the following modifications, clarifications, and additional requirements included in this section of these Special Provisions.

Compaction shall commence immediately after spreading of the damp material and before the material has dried sufficiently to allow separation between the fine and coarse particles. If the Engineer determines that the aggregate base has dried excessively before compaction can be achieved, the aggregate base shall be removed and replaced, or moisture conditioned prior to resumption of compaction effort at the Engineer's direction and the Contractor's expense.

26-1.01D Quality Assurance: The minimum sand equivalent shall be 31 for any individual test.

26-1.03E Compacting: The surface of the finished aggregate base shall be firm and unyielding. Any visible movement vertically or horizontally of the aggregate base under the action of construction equipment or other maximum legal axle loads shall be considered as evidence that the aggregate base does not meet this requirement.

26-1.04 Payment: Full compensation for any cost involved in furnishing and placing Class 2 Aggregate Base shall be paid for at the contract price per ton for **Class 2 Aggregate Base** which price shall include full compensation for furnishing all labor, materials, tools, equipment and doing all work involved in furnishing and placing the base material as specified, including furnishing, hauling, and applying water as specified and directed by the Engineer, and any other work required for the installation of class 2 aggregate base not specifically enumerated in the Standard Specifications, these Special Provisions or on the Plans, and no additional allowance will be made therefor.

Aggregate base will be measured and paid for by the ton in accordance with Sections 26-1.04 of the Standard Specifications.

Aggregate base under minor structures, curbs, gutters, sidewalks, driveway aprons, and other Minor Concrete will be included in the price paid for such concrete and no additional allowance will be made therefor.

DIVISION V. SURFACINGS AND PAVEMENTS

39 ASPHALT CONCRETE

39-1 GENERAL

39-1.01 DESCRIPTION

This work shall consist of furnishing and mixing aggregate and asphalt binder at a central mixing plant, spreading and compacting the mixture and furnishing and placing pavement reinforcing fabric, all as specified in these special provisions.

Asphalt concrete will be Type A as shown on the plans and will conform to the provisions in these Special Provisions. The Caltrans Standard Specifications for section 39 of any year do not apply.

39-2 MATERIALS

39-2.01 ASPHALTS

Asphalt binder will be PG 64-16 conforming to the provisions in Section 92, "Asphalts," of the Standard Specifications.

Asphalt binder for all lower lifts of asphalt concrete and replace asphalt concrete surfacing will be PG 70-10.

The amount of asphalt binder to be mixed with the aggregate will be specified by the Engineer at the time of paving. Different asphalt binder content may be specified for each lift and each location.

Liquid anti-stripping agent (LAS) will be added to the asphalt binder at a rate of 0.5% by weight of asphalt binder. The LAS will be AD-here LOF 65-00 or equivalent, and will be stored, measured, and blended with the asphalt binder in accordance with the anti-stripping agent manufacturer's recommended practice. The LAS can be added at the asphalt plant or at the refinery. When added at the asphalt plant, the equipment will indicate and record the amount of LAS added. If added at the refinery, the shipping ticket from the refinery will certify the type and amount of LAS added. Equivalency of the LAS may be determined by demonstrating to the satisfaction of the Engineer that the asphalt concrete job mix achieves a Tensile Strength Ratio (TSR) minimum of 70.

Liquid asphalt for prime coat shall conform to the provisions in Section 93 "Liquid Asphalts," and shall be of the grade designated by the contract item or specified in the special provisions.

Asphaltic emulsion for paint binder (tack coat) shall conform to the provisions in Section 94, "Asphaltic Emulsions," for the rapid-setting or slow-setting type and grade selected by the Engineer.

39-2.02 AGGREGATE

The aggregate for all types of asphalt concrete will achieve a minimum Durability Index of 35 for contract compliance. The aggregate will not be treated with lime, cement or other chemical material before the Durability Index test is performed.

Aggregates shall be clean and free from decomposed materials, organic material and other deleterious substances. Coarse aggregate is material retained on the No. 4 sieve; fine aggregate is material passing the No. 4 sieve; and supplemental fine aggregate is added fine material passing the No. 30 sieve, including, but not limited to, cement and stored fines from dust collectors.

The combined aggregate, prior to the addition of asphalt binder, shall conform to the requirements of this section. Conformance with the grading requirements will be determined by California Test 202, modified by California Test 105 when there is a difference in specific gravity of 0.2 or more between the coarse and fine portions of the aggregate or between blends of different aggregates.

In the tables below, the symbol "X" is the gradation which the Contractor proposes to furnish for the specific sieve. The proposed gradation shall meet the gradation shown in the table under "Limits of Proposed Gradation." Changes from one mix design to another shall not be made during the progress of the work unless permitted by the Engineer. However, changes in proportions to conform to the approved mix design shall not be considered changes in mix design.

AGGREGATE GRADING REQUIREMENTS
Types A and B Asphalt Concrete
Percentage Passing

³/₄ inch Maximum, Medium

| Sieve Sizes | Limits of Proposed Gradation | Operating Range | Contract Compliance |
|-------------------------------|------------------------------|-----------------|---------------------|
| 1" | — | 100 | 100 |
| ³ / ₄ " | — | 95-100 | 90-100 |
| ³ / ₈ " | — | 65-80 | 60-85 |
| No. 4 | 49-54 | X±5 | X±8 |
| No. 8 | 36-40 | X±5 | X±8 |
| No. 30 | 18-21 | X±5 | X±8 |
| No. 200 | — | 3-8 | 0-11 |

¹/₂ inch Maximum, Coarse

| Sieve Sizes | Limits of Proposed Gradation | Operating Range | Contract Compliance |
|-------------------------------|------------------------------|-----------------|---------------------|
| ³ / ₄ " | — | 100 | 100 |
| ¹ / ₂ " | — | 95-100 | 89-100 |
| ³ / ₈ " | — | 75-90 | 70-95 |
| No. 4 | 55-61 | X±5 | X±8 |

| | | | |
|---------|-------|-----|------|
| No. 8 | 40-45 | X±5 | X±8 |
| No. 30 | 20-25 | X±5 | X±8 |
| No. 200 | — | 3-7 | 0-10 |

1/2 inch Maximum, Medium

| Sieve Sizes | Limits of Proposed Gradation | Operating Range | Contract Compliance |
|-------------|------------------------------|-----------------|---------------------|
| 3/4" | — | 100 | 100 |
| 1/2" | — | 95-100 | 89-100 |
| 3/8" | — | 80-95 | 75-100 |
| No. 4 | 59-66 | X±5 | X±8 |
| No. 8 | 43-49 | X±5 | X±8 |
| No. 30 | 22-27 | X±5 | X±8 |
| No. 200 | — | 3-8 | 0-11 |

3/8 inch Maximum

| Sieve Sizes | Limits of Proposed Gradation | Operating Range | Contract Compliance |
|-------------|------------------------------|-----------------|---------------------|
| 1/2" | — | 100 | 100 |
| 3/8" | — | 95-100 | 95-100 |
| No. 4 | 73-77 | X±6 | X±10 |
| No. 8 | 58-63 | X±6 | X±10 |
| No. 30 | 29-34 | X±6 | X±10 |
| No. 200 | — | 3-10 | 0-14 |

The combined aggregate shall conform to the following quality requirements prior to the addition of the asphalt:

| Tests | California Test | Asphalt Concrete Type | | Open Graded Asphalt Concrete | Asphalt Concrete Base Type | |
|--|-----------------|-----------------------|-----|------------------------------|----------------------------|-----|
| | | A | B | | A | B |
| Percentage of Crushed Particles: | 205 | | | | | |
| Coarse Aggregate (Min.) | | 90% | 25% | 90% | 90% | 25% |
| Fine Aggregate Passing No. 4, Retained on No. 8 (Min.) | | 70% | 20% | 90% | 70% | 20% |
| Los Angeles Rattler: | 211 | | | | | |
| Loss at 100 Rev. (Max.) | | 10% | — | 10% | 10% | — |
| Loss at 500 Rev. (Max.) | | 45% | 50% | 40% | 45% | 50% |
| Sand Equivalent: | 217 | | | | | |
| Contract Compliance (Min.) | | 47 | 42 | — | 47 | 42 |

| | | | | | | |
|------------------------------------|-----|-----|-----|-----|-----|-----|
| Operating Range (Min.) | | 50 | 45 | — | 50 | 45 |
| Film Stripping (Max.) ^a | 302 | — | — | 25% | — | — |
| K _c Factor (Max.) | 303 | 1.7 | 1.7 | — | 1.7 | 1.7 |
| K _f Factor (Max.) | 303 | 1.7 | 1.7 | — | 1.7 | 1.7 |

a After mixing with asphalt binder

If the results of either or both the aggregate grading and Sand Equivalent tests do not meet the requirements specified for "Operating Range" but meet the "Contract Compliance" requirements, placement of the asphalt concrete or asphalt concrete base may be continued for the remainder of that day. However, another day's work may not be started until tests, or other information, indicate to the satisfaction of the Engineer that the next material to be used in the work will comply with the requirements specified for "Operating Range."

If the results of either or both the aggregate grading and Sand Equivalent tests do not meet the requirements specified for "Contract Compliance," the asphalt concrete or asphalt concrete base which is represented by these tests shall be removed. However, if requested by the Contractor and approved by the Engineer, the asphalt concrete or asphalt concrete base may remain in place and the Contractor shall pay to the County \$5.00 per ton for the asphalt concrete or asphalt concrete base represented by these tests and left in place. The Department may deduct this amount from any moneys due, or that may become due, the Contractor under the contract. If both the aggregate grading and Sand Equivalent do not conform to the "Contract Compliance" requirements, only one adjustment shall apply.

No single grading or Sand Equivalent test shall represent more than one day's paving.

The combined aggregate will also conform to the following quality requirements when mixed with an amount of asphalt determined to give 4 percent air voids by the job mix formula in accordance with the section entitled "Job Mix Formula" of these Special Provisions.

| Tests | California Test | Asphalt Concrete Type | | Open Graded Asphalt Concrete | Asphalt Concrete Base Type | |
|--------------------------------------|-----------------|-----------------------|------|------------------------------|----------------------------|------|
| | | A | B | | A | B |
| Swell (Max.) (inch) | 305 | 0.03 | 0.03 | — | 0.03 | 0.03 |
| Moisture Vapor Susceptibility (Min.) | 307 | 30 | 25 | — | 30 | 25 |
| Stabilometer Value (Min.): | | | | | | |
| (3/8" & No. 4 Max. AC) | 366 | 30 | 30 | — | — | — |
| All Others | 366 | 37 | 35 | — | 37 | 35 |

39-2.03 JOB MIX FORMULA

The Contractor will submit in writing a satisfactory job mix formula for each mixture to the Engineer a minimum of five (5) working days before producing asphalt concrete. The job mix formula will be in effect until a change is approved in writing by the Engineer.

The job mix formula will be prepared at the Contractor's expense by a materials testing laboratory approved by the Engineer, and will be designed in accordance with ASTM Test Methods D1560

and D1561, Hveem Method; D2041, Rice's Method; and D1188, "Bulk Specific Gravity of Compacted Bitumen Mixtures, Using Paraffin-Coated Specimens." The asphalt content will be calculated on the percentage basis by weight of dry aggregate. The voids in the mineral aggregate will be computed based upon ASTM Bulk Specific Gravities; minimum values will be as follows:

| | |
|-----------------------|-----|
| 1/2 inch Max. grading | 13% |
| 3/4 inch Max. grading | 12% |

The job mix formula for each mixture will establish a single percentage of aggregate passing each required sieve size. If the aggregate is separated into 2 or more sizes, the proposed gradation will consist of gradations for individual sizes, and the proposed proportions of individual sizes, combined mathematically to indicate one proposed gradation. Such gradation will meet the applicable grading requirements shown in Section 39-2.02, "Aggregate." The gradation established for the job mix formula will produce a smooth curve within the moving average limits designated and will not vary from the low limit on one sieve to the high limit on the adjacent sieves, or vice versa.

The job mix formula for each mixture will be designed with sufficient samples to demonstrate the performance of the mixture having a minimum stabilometer value of 37 at 4 percent air voids, as determined with ASTM Test Methods D2041 and D1188 or D2726.

All individual aggregate cold feed materials, prior to the addition of asphalt binder, will have a durability of at least 35 as determined by California Test 229.

Upon prior approval of the Engineer, the Contractor may submit, in writing, a job mix formula based on data from actual plant production or recent mix designs from previous jobs using the same mixture.

Regardless of the source, the job mix formula must establish to the satisfaction of the Engineer that it conforms to all the requirements of this Section. The Engineer reserves the right to verify the job mix formula with testing personnel prior to placement of any material.

The Engineer will specify the percentage of asphalt binder to be used in asphalt concrete and asphalt concrete base using the "Job Mix Formula" data submitted. The specified percentage of asphalt binder chosen will provide a minimum stabilometer value required, air voids in the lab compacted samples will be allowed to vary a maximum of two percent (2%) below to two percent (2%) above the air voids provided in the "Job Mix Formula" for the specified percentage of asphalt binder.

Air voids variation exceeding the above will be cause to reject the job mix formula, unless otherwise permitted by the Engineer, the paving operation will cease until a new job mix formula is approved.

After the job mix formula is approved, a trial plant mix will be made to verify compliance of the plant with the job mix formula requirements. Should the trial plant mix fail to conform to these requirements during the trial run or during actual production, production of asphalt concrete will stop until such compliance is reestablished or until a new job mix formula is approved.

A new job mix formula will be submitted for approval prior to use of the mixture when there is a change in the character or source of the materials composing the mix, when unsatisfactory results or other conditions make it necessary.

39-3 STORING, PROPORTIONING AND MIXING MATERIALS

39-3.01 STORAGE

Aggregate shall be stored so that separately sized aggregates will not be intermingled, and asphalt binder shall be stored so that different grades of asphalt will not be intermingled. Any aggregate which has been intermingled with another size of aggregate shall be removed and replaced with aggregate of specified grading. As used in this specification, "cold storage" is the storing of aggregates prior to their having been processed in a drier, and "hot storage" is the storing of aggregates after their having been processed in a drier. "Hot-feed control" and "cold-feed control" indicate the location of measuring devices or controls.

When the Contractor adds supplemental fine aggregate, each supplemental fine aggregate used shall be stored separately and kept thoroughly dry.

The measurement and storage requirements of this Section 39-3, shall not apply to the dust collected in skimmers and expansion chambers (knock-out boxes) or to the dust collected in centrifugal (cyclone) collectors. Dust from these collectors may be returned to the aggregate without being measured or stored separately, provided the dust is returned uniformly at a point in advance of the sampling device in batch-mixing plants or is returned at or before mixing in continuous mixing plants.

Aggregate and asphalt binder shall also be stored in conformance with the following:

39-3.01A COLD STORAGE

When aggregate contains material of which at least 20 percent will pass the

No. 8 sieve, the material shall be fed from storage by means of a mechanical feeder.

Before being fed to the drier, aggregate shall be separated into sizes and stored as follows:

39-3.01A(1) COLD STORAGE FOR PLANTS UTILIZING HOT-FEED CONTROL

Aggregate for asphalt concrete base shall be separated into 4 or more sizes and stored separately. Aggregate for Type A or Type B asphalt concrete of the 3/4-inch and 1/2-inch maximum sizes shall be separated into 3 or more sizes and stored separately.

Aggregate for Type A or Type B asphalt concrete of the 3/8-inch maximum size and the No. 4 maximum size, and aggregate for Open Graded asphalt concrete need not be separated into sizes and stored separately.

39-3.01A(2) COLD STORAGE FOR PLANTS UTILIZING COLD-FEED CONTROL

When the Contractor elects to use a plant equipped with cold-feed control, aggregate for asphalt concrete base shall be separated into 4 or more sizes. Aggregate for asphalt concrete of the 3/4-inch and 1/2-inch maximum sizes shall be separated into 3 or more sizes. Aggregate for asphalt

concrete of the 3/8-inch maximum size and aggregate for Open Graded asphalt concrete shall be separated into 2 or more sizes. Aggregate for asphalt concrete of No. 4 maximum size need not be separated.

After the aggregate is separated, each size shall be stored separately.

39-3.01B HOT STORAGE

Aggregate for asphalt concrete and asphalt concrete base to be mixed in batch mixing plants, after being dried, shall be stored in accordance with the following:

Aggregates for asphalt concrete base shall be separated into 4 or more sizes. Aggregates for asphalt concrete of 3/4-inch and 1/2-inch maximum sizes shall be separated into 3 or more sizes. Aggregate for asphalt concrete of 3/8-inch maximum size and aggregate for Open Graded asphalt concrete shall be separated into 2 or more sizes. Aggregate for asphalt concrete of No. 4 maximum size need not be separated.

After the aggregate is separated, each size shall be stored in a separate bin and shall be recombined in conformance with the provisions in Section 39-3.03, "Proportioning," to conform to the gradings specified in Section 39-2, "Materials."

Storage bins shall be provided with chutes to prevent overflow into adjacent bins.

39-3.01C ASPHALT BINDER STORAGE

Asphalt to be used as a binder for asphalt concrete shall be stored in tanks accurately calibrated in uniform intervals of 100 gallon intervals and maintained to this accuracy. The storage tanks shall be accessible for measuring the volume of asphalt at any time.

The Contractor shall provide a suitable sampling device in asphalt feed lines connecting plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall consist of a valve with a nominal diameter between 1/2 inch or 3/4 inch valve constructed in a manner that a one-quart sample may be withdrawn slowly at any time during plant operations. The valve shall be maintained in good condition, and if the valve fails to function properly, the valve shall be replaced. The sampling device shall be readily accessible and in an area free of dangerous obstructions and shall be between 24 inches and 30 inches above the platform. A drainage receptacle shall be provided for flushing the device prior to sampling.

The discharge end of the asphalt binder circulating pipe shall be maintained below the surface of the asphalt binder in the storage tank to prevent discharging hot asphalt binder into open air.

A temperature-sensing device shall be installed in the asphalt feed line. The device shall measure the temperature of the asphalt and shall be accurate to 10° F.

The indicator shall be located and maintained at the point where the proportioning operations are controlled. When a recording type indicator is used, the recording type indicator shall be maintained in working condition and shall be serviced as required.

39-3.02 DRYING

Aggregate shall be fed directly to a drier-drum mixer or to a drier at a uniform rate.

Drying shall continue for a sufficient time and at a sufficiently high temperature that, at the time of spreading, the moisture content of the completed mixture shall not exceed one percent. Moisture content will be determined by California Test 310 or 370.

The drier or drier-drum mixer shall be provided with a device which senses the temperature of the material leaving the drier or the drier-drum mixer. The temperature-sensing device shall be accurate to the nearest 10° F, and shall be installed in such a manner that changes of 10° F in temperature of the material will be shown within one minute. The indicator shall be located and maintained at the point where the proportioning operations are controlled. When a recording type indicator is used, the recording type indicator shall be maintained in working condition and shall be serviced as required.

The burner used for heating the aggregate shall achieve complete combustion of the fuel.

39-3.03 PROPORTIONING

Before producing asphalt concrete or asphalt concrete base, the Contractor shall submit in writing to the Engineer the gradation of the aggregate for each mix which he proposes to furnish. If the aggregate is separated into 2 or more sizes, the proposed gradation shall consist of gradations for individual sizes, and the proposed proportions of individual sizes, combined mathematically to indicate one proposed gradation. The gradation shall meet the applicable grading requirements shown in Section 39-2.02, "Aggregate," and shall show the percentage passing each of the specified sieve sizes.

39-3.03A PROPORTIONING FOR BATCH MIXING

When the Contractor elects to use batch mixing equipment, each aggregate storage bin shall be equipped with a suitable, safe sampling device which will provide a sample, representative of actual production, of the aggregate discharged into the weighhopper or volumetric proportioning bin. When the samples are taken from a location above ground level, a means shall be provided for lowering the aggregate samples to the ground.

The fine material collected in dust control systems, other than centrifugal collectors or knock-out boxes, shall be proportioned as provided for supplemental fine aggregate in this Section 39-3.03A.

When supplemental fine aggregate is used, it shall be proportioned by weight as provided in "Weight Proportioning" of Section 39-3.03A(1), "Manual Proportioning." A suitable, safe sampling device shall be installed in each feed line or surge tank preceding the weighhopper. The delivery point of samples shall be safe and convenient.

Aggregate and asphalt shall be proportioned by weight or by volume as follows:

39-3.03A(1) MANUAL PROPORTIONING

An automatic plant shall not be operated manually unless the automatic circuitry is disconnected to the extent that the automatic circuitry cannot be activated by the mere operation of a switch, circuit breaker or some other similar routine procedure.

When manual proportioning is used in the production of asphalt concrete or asphalt concrete base, proportioning shall conform to the following:

WEIGHT PROPORTIONING

The zero tolerance for aggregate scales shall be 0.5-percent of the total batch weight of the aggregate. The zero tolerance for separate scales for weighing supplemental fine aggregate or asphalt binder shall be 0.05-percent of the total batch weight of the aggregate.

The indicated weight of material drawn from storage for any draft of material shall not vary from the preselected scale setting by more than the following percentages of the total batch weight of the aggregate:

- (1) Aggregate shall be within one percent, except that when supplemental fine aggregate is used and is weighed cumulatively with the aggregate, the draft of aggregate drawn immediately before the supplemental fine aggregate shall be within 0.5-percent.
- (2) Supplemental fine aggregate shall be within 0.5-percent.
- (3) Asphalt binder shall be within 0.1-percent.

The asphalt binder shall be measured by a tank scale.

VOLUMETRIC PROPORTIONING

Each size of aggregate, except supplemental fine aggregate, shall be proportioned in a separate bin that is adjustable in size. Each bin shall have a gate or other device so designed that the bin shall be completely filled and struck off in measuring the volume of aggregate to be used in the mix. Means shall be provided for calibrating the weight of material in each measuring bin at any time. The plant shall be operated in such a manner that the material in each aggregate bin is within 2 percent of the weight preselected for the type of mixture being produced.

Asphalt binder shall be proportioned by a meter or an adjustable calibrated tank. When meters are used, the asphalt lines leading to asphalt meters shall be full-circulating or shall be regulated so that, during plant stoppages, the temperature of the asphalt does not change more than 15° F from the temperature maintained while the plant is in full operation. Asphalt binder shall be proportioned to within 2 percent of the weight preselected for the mixture being produced.

39-3.03A(2) AUTOMATIC PROPORTIONING

When automatic batch mixing is required by the special provisions or when the Contractor elects to use an automatic batching system, the proportioning devices shall be automatic to the extent that the only manual operation required for proportioning all materials for one batch shall be a single operation of a switch or starter.

WEIGHT PROPORTIONING

Automatic proportioning devices shall be of a type in which materials discharged from the several bins are controlled by gates or by mechanical conveyors. The batching devices shall be so interlocked that no new batch may be started until all weighhoppers are empty, the scales are at zero, and the discharge gates are closed. The means of withdrawal from the bins and of discharge

from the weigh box shall be interlocked so that not more than one bin can discharge onto any given scale at one time, and that the weigh box cannot be tripped until the required quantity from each of the bins has been deposited therein. In addition, automatic proportioning devices shall be interlocked so that the weighing cycle will be interrupted whenever the amount of material drawn from any storage varies from the preselected amount by more than the tolerances specified in Section 39-3.03A(1), "Manual Proportioning." Whenever the weighing cycle is interrupted, that specific batch shall not be used in the work unless it can be manually adjusted to meet the specified tolerances based on the total weight of the batch. When partial batches are batched automatically, the interlock tolerances, except the zero tolerance, shall apply to the total weight of the aggregate in the partial batch.

Automatic proportioning devices shall be operated so that all weight increments required for a batch are preset on the controls at the same time. Controls shall be designed so that these settings may be changed without delay, and the order of discharge from the several bins can be changed as directed by the Engineer.

Automatic proportioning controls shall be equipped with means for inspection of the interlock tolerance settings, and instructions for doing so shall be immediately available at the point of operation.

In order to check the accuracy of proportioning during plant operation, the Contractor shall provide means to check the weight of various proportioned amounts on a separate scale located at the plant.

VOLUMETRIC PROPORTIONING

Asphalt binder shall be proportioned by an adjustable calibrated tank.

Automatic volumetric proportioning devices shall be of a type which will not allow the bins to discharge into the mixer unless the mixer is empty and the mixer discharge gate is closed and will not operate unless the aggregate bins and asphalt binder tank are full.

The automatic proportioning device shall operate in such a manner that the material in each aggregate bin and the asphalt binder tank is within 2 percent of the preselected weight.

In order to check the accuracy of proportioning during plant operation, the Contractor shall provide means to check the weight of various proportioned amounts on a separate scale located at the plant.

39-3.03B PROPORTIONING FOR CONTINUOUS MIXING

The asphalt meter shall automatically compensate for changes in asphalt temperature, unless the meter is of the weight flow, Coriolis Effect, type. The system shall be capable of varying the rate of delivery of binder proportionate with the delivery of aggregate. During any day's run, the temperature of asphalt binder shall not vary more than 50° F. The meter and lines shall be heated and insulated. The storage for binder shall be equipped with a device for automatic plant cut-off when the level of binder is lowered sufficiently to expose the pump suction line.

When supplemental fine aggregate is used, it shall be proportioned by weight by a method that uniformly feeds the material within 2 percent of the required amount. Supplemental fine aggregate shall be discharged from the proportioning device directly into the mixer.

The supplemental fine aggregate proportioning system shall function with such accuracy that, when operated at between 30 percent and 100 percent of maximum operating capacity, the average difference between the indicated weight of material delivered and the actual weight delivered will not exceed one percent of the actual weight for three 15-minute runs. For any of 3 individual 15-minute runs, the indicated weight of material delivered shall not vary from the actual weight delivered by more than 2 percent of the actual weight.

The fine material collected in all dust control systems may be returned to the aggregate production stream without proportioning if returned at a rate commensurate with overall plant production, and if returned at or before the mixer. Any return rate of less than 100 percent of the collection rate shall be metered as specified above for supplemental fine aggregate.

The asphalt feeder, each of the aggregate feeders, the supplemental fine aggregate feeder, if used, and the combined aggregate feeder, shall be equipped with devices by which the rate of feed can be determined while the plant is in full operation.

The combined aggregate shall be weighed using a belt scale. The belt scale shall be of such accuracy that, when the plant is operating between 30 percent and 100 percent of belt capacity, the average difference between the indicated weight of material delivered and the actual weight delivered will not exceed one percent of the actual weight for three 3-minute runs. For any of the 3 individual 3-minute runs, the indicated weight of material delivered shall not vary from the actual weight delivered by more than 2 percent of the actual weight.

The actual weight of material delivered for proportioning device calibrations shall be determined by a vehicle scale. 14-The vehicle scale shall be located at the plant and shall be sealed within 24 hours of checking the plant's proportioning devices. The plant shall be equipped so that this accuracy check can be made prior to the first operation for a project and at any other time as directed by the Engineer.

The belt scale for the combined aggregate, the proportioning devices for supplemental fine aggregate, if used, and the asphalt proportioning meter shall be interlocked so that the rates of feed of the aggregates and asphalt will be adjusted automatically (at all production rates and production rate changes) to maintain the bitumen ratio (pounds of asphalt per 100 pounds of dry aggregate including supplemental fine aggregate, if used) designated by the Engineer. The plant shall not be operated unless this automatic system is operating and in good working condition.

Asphalt meters and aggregate belt scales used for proportioning aggregates and asphalt shall be equipped with rate-of-flow indicators to show the rates of delivery of asphalt and aggregate, and resettable totalizers so that the total amounts of asphalt and aggregate introduced into the mixture can be determined. Rate-of-flow indicators and totalizers for like materials shall be accurate within one percent when compared directly. The asphalt cement totalizer shall not register when the asphalt metering system is not delivering material to the mixer.

The bin or bins containing the fine aggregate and supplemental fine aggregate, if used, shall be equipped with vibrating units or other equipment which will prevent any hang-up of material while the plant is operating. Each belt feeder shall be equipped with a device to monitor the depth

of aggregate between the troughing rollers. The device for monitoring depth of aggregate shall automatically shut down the plant whenever the depth of aggregate is less than 70 percent of the target depth. To avoid erroneous shutdown by normal fluctuation, a delay between sensing less than 70 percent flow and shutdown of the plant will be permitted, as determined by the Engineer, at the time of the initial California Test 109. A second device shall be located either in the stream of aggregate beyond the belt or where it will monitor movement of the belt by detecting revolutions of the tail pulley on the belt feeder. The device for monitoring no flow or belt movement, as the case may be, shall stop the plant automatically and immediately when there is no flow. The plant shall not be operated unless both low-flow and no-flow devices are in good working condition and functioning.

The Contractor shall determine the moisture content of the aggregate at least once during each 2 hours of production and shall adjust the moisture control equipment accordingly.

For continuous pugmill mixing plants an aggregate sampling device which will provide a 60-pound to 80-pound sample of the combined aggregate while the plant is in full operation shall be provided in advance of the point where the aggregate enters the mixer.

For drier-drum mixing plants an aggregate sampling device which will provide a 60-pound to 80-pound sample of the combined aggregate while the plant is in full operation shall be provided in advance of the point where the aggregate enters the drier-drum mixer.

When the samples are taken from a location above ground level, a means shall be provided for lowering the aggregate samples to the ground.

When supplemental fine aggregate is used, a suitable, safe sampling device shall be installed in each feed line or surge tank preceding the proportioning device for the supplemental fine aggregate.

39-3.04 MIXING

Aggregate, supplemental fine aggregate and asphalt binder shall be mixed in a batch mixer, continuous mixing pugmill mixer or continuous mixing drier-drum mixer. The asphalt content of the asphalt mixture will be determined by extraction tests in conformance with the requirements in California Test 310 or 362, or will be determined in conformance with the requirements in California Test 379. The bitumen ratio (pounds of asphalt per 100 pounds of dry aggregate including supplemental fine aggregate if used) shall not vary by more than 0.5-pound of asphalt above or 0.5-pound of asphalt below the amount designated by the Engineer. Compliance with this requirement, except for Open Graded asphalt concrete, will be determined by testing samples taken from the mat behind the paver before initial or breakdown compaction of the mat.

The charge in a batch mixer, or the rate of feed to a continuous mixer, shall not exceed that which will permit complete mixing of all of the material. Dead areas in the mixer, in which the material does not move or is not sufficiently agitated, shall be corrected by a reduction in the volume of material or by other adjustments.

Asphalt binder shall be at a temperature of not less than 250° F nor more than 375° F when added to the aggregate.

The temperature of the aggregate before adding the binder, except for Open Graded mixes, shall be not more than 325° F. The temperature of the aggregate for Open Graded mixtures shall be not more than 275° F.

The Contractor will be allowed to use two or more asphalt concrete plants provided the following conditions are met:

1. The Contractor will give the Engineer one working day notice prior to using two or more plants.
2. The lab density, hereinafter specified, will be the highest of the separate densities obtained that day for asphalt mixtures from each of the plants.
3. If asphalt concrete that does not meet these specifications cannot be identified in the field, asphalt concrete placed for that entire day will be rejected.
4. Asphalt concrete arriving on the project from separate plants will not vary more than 10 degrees Fahrenheit in temperature.

39-3.04A BATCH MIXING

When asphalt concrete or asphalt concrete base is produced by batch mixing, the mixer shall be equipped with a sufficient number of paddles of a type and arrangement to produce a properly mixed batch.

The binder shall be introduced uniformly into the mixer along the center of the mixer parallel to the mixer shafts, or by pressure spraying. When a pan is used, the pan shall be equipped with movable vanes in order that the flow of binder may be directed across the width of the pan, as desired. The vanes shall be equipped with a means for quick adjustment, and a positive lock to prevent shifting.

The mixer platform shall be of ample size to provide safe and convenient access to the mixer and other equipment. The mixer housing and weighbox housing shall be provided with gates of ample size to permit ready sampling of the discharge of aggregate from each of the plant bins and from each feed line or surge tank of supplemental fine aggregate, if used. The Contractor shall provide a sampling device capable of delivering a representative sample of sufficient size to permit the required tests.

The mixer shall be equipped with a timing device which will indicate by a definite audible or visual signal the expiration of the mixing period. The device shall measure the time of mixing within 2 seconds.

The time of mixing a batch shall begin on the charging stroke of the weighhopper dumping mechanism and shall end when discharge is started. Mixing shall continue until a homogeneous mixture of uniformly distributed and properly coated aggregates of unchanging appearance is produced. The time of mixing shall be not less than 30 seconds.

When automatic proportioning or automatic batch mixing is required by the special provisions or when the Contractor elects to use an automatic batching system, an interval timer shall control the time of mixing. The interval timer shall be interlocked so that the mixer cannot be discharged until all of the materials have been mixed for the full time specified.

Temperature of the completed mixture shall not exceed 325° F at discharge.

39-3.04B CONTINUOUS MIXING

Continuous mixing plants shall utilize pugmill or drier-drum mixers.

When asphalt concrete or asphalt concrete base is produced by pugmill mixing, the mixer shall be equipped with paddles of a type and arrangement to provide sufficient mixing action and movement to the mixture to produce properly mixed asphalt concrete or asphalt concrete base. The combined aggregate shall be fed directly from the drier to the mixer at a uniform and controlled rate.

Mixing shall continue until a homogeneous mixture of thoroughly and uniformly coated aggregates of unchanging appearance is produced at discharge from the mixer.

Temperature of the completed mixture shall not exceed 325° F at discharge from the mixer.

The mixer shall discharge into a storage silo with a capacity of not less than that specified in Section 39-3.05, "Asphalt Concrete and Asphalt Concrete Base Storage." The Contractor shall provide a means of diverting the flow of asphalt concrete or asphalt concrete base away from the silo to prevent incompletely mixed portions of the mixture from entering the silo.

39-3.05 ASPHALT CONCRETE AND ASPHALT CONCRETE BASE STORAGE

When asphalt concrete or asphalt concrete base is stored, the asphalt concrete or asphalt concrete base shall be stored only in silos. Asphalt concrete or asphalt concrete base shall not be stockpiled. The minimum quantity of asphalt concrete or asphalt concrete base in any one silo during mixing shall be 20 tons except for the period immediately following a shutdown of the plant of 2 hours or more. A means shall be provided to indicate that storage in each silo is being maintained as required.

Storage silos shall be equipped with a surge-batcher sized to hold a minimum of 2 tons of material. A surge-batcher consists of equipment placed at the top of the storage silo which catches the continuous delivery of the completed mix and changes it to individual batch delivery and prevents the segregation of product ingredients as the completed mix is placed into storage. The surge-batcher shall be center loading and shall be thermally insulated or heated or thermally insulated and heated to prevent material buildup. Rotary chutes shall not be used as surge-batchers.

The surge-batcher shall be independent and distinct from conveyors or chutes used to collect or direct the completed mixture being discharged into storage silos and shall be the last device to handle the material before it enters the silo. Multiple storage silos shall be served by an individual surge-batcher for each silo. Material handling shall be free of oblique movement between the highest elevation (conveyor outfall) and subsequent placement in the silo. Discharge gates on surge-batchers shall be automatic in operation and shall discharge only after a minimum of 2 tons of material has been collected and shall close before the last collected material leaves the device. Discharge gate design shall prevent the deflection of material during the opening and closing operation.

Open Graded asphalt concrete stored in excess of 2 hours, and any other asphalt concrete or asphalt concrete base stored in excess of 18 hours, shall not be used in the work.

Asphalt concrete or asphalt concrete base with hardened lumps in the mixture shall not be used. Any storage facility which contained the material with the hardened lumps shall not be used for further storage until the cause of the lumps is corrected.

39-3.06 ASPHALT CONCRETE PLANTS

Any plants, including commercial plants, that produce asphalt concrete or asphalt concrete base that is subject to these specifications shall conform to the provisions in Section 14-9.02, "Air Pollution Control," and shall be equipped with a wet-tube dust washer or equal and other devices which will reduce the dust emission to the degree that adjacent property is not damaged. The washer and other equipment shall function efficiently at all times when the plant is in operation.

During production, petroleum products such as diesel fuel and kerosene shall not be used as a release agent on belts, conveyors, hoppers or hauling equipment.

Plants shall be equipped with an inspection dock so constructed that an inspector standing on the dock can inspect the completed mix and take samples, as necessary, from the hauling vehicle before the vehicle leaves the plant site. This inspection dock shall allow the vehicle to pull alongside and shall meet all applicable safety requirements of the California Division of Occupational Safety and Health. Drivers shall be instructed to stop at the dock whenever an inspector is on the dock and to remain there until directed to leave by the inspector.

39-4. SUBGRADE, PRIME COAT, PAINT BINDER (TACK COAT), AND PAVEMENT REINFORCING FABRIC

39-4.01 SUBGRADE

Immediately prior to applying prime coat or paint binder (tack coat), or immediately prior to placing the asphalt concrete or asphalt concrete base when a prime coat or paint binder (tack coat) is not required, the subgrade to receive asphalt concrete or asphalt concrete base shall conform to the compaction requirement and elevation tolerances specified for the material involved and shall be free of loose or extraneous material. If the asphalt concrete or asphalt concrete base is to be placed on an existing base or pavement which was not constructed as part of the contract, the Contractor shall clean the surface by sweeping, flushing or other means to remove all loose particles of paving, all dirt and all other extraneous material immediately before applying the prime coat or paint binder (tack coat).

39-4.02 PRIME COAT AND PAINT BINDER (TACK COAT)

A prime coat of liquid asphalt shall be applied to the areas to be surfaced when there is a contract item for the work or when the work is required by the special provisions.

The area to which paint binder (tack coat) has been applied will be closed to public traffic. Care will be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction.

Prime coat shall be applied only to those areas designated by the Engineer.

Prime coat shall be applied at the approximate total rate of 0.25-gallon per square yard of surface covered. The exact rate and number of applications will be determined by the Engineer.

A paint binder (tack coat) of asphaltic emulsion shall be furnished and applied in conformance with the provisions in Section 94, "Asphaltic Emulsions," and shall be applied to all vertical surfaces of existing pavement, curbs, gutters and construction joints in the surfacing against which additional material is to be placed, to a pavement to be surfaced and to other surfaces designated in the special provisions.

Paint binder (tack coat) shall be applied in one application at a rate of from 0.02-gallon to 0.10-gallon per square yard of surface covered. The exact rate of application will be determined by the Engineer.

Before placing a layer of Open Graded asphalt concrete on any other type of asphalt concrete or on an existing bituminous pavement, paint binder (tack coat) shall be applied in one application at a rate of from 0.05-gallon to 0.10-gallon per square yard of surface covered. The exact rate of application will be determined by the Engineer.

At the Contractor's option, paving asphalt may be used for paint binder (tack coat) instead of asphaltic emulsion. If paving asphalt is used, the grade to be used and the rate of application will be determined by the Engineer. The paving asphalt shall be applied at a temperature of not less than 285° F nor more than 350° F.

Prime coat or paint binder (tack coat) shall be applied only so far in advance of placing the surfacing as may be permitted by the Engineer. When asphaltic emulsion is used as a paint binder (tack coat), asphalt concrete shall not be placed until the asphaltic emulsion has cured.

Immediately in advance of placing asphalt concrete or asphalt concrete base, additional prime coat or paint binder (tack coat) shall be applied as directed by the Engineer to areas where the prime coat or paint binder (tack coat) has been damaged, and loose or extraneous material shall be removed, and no additional compensation will be allowed therefor.

39-4.03 PAVEMENT REINFORCING FABRIC

Pavement reinforcing fabric shall be placed on existing pavement to be surfaced or between layers of asphalt concrete when the work is shown on the plans or specified in the special provisions, or ordered by the Engineer.

Before placing the pavement reinforcing fabric, a binder of paving asphalt shall be applied to the surface to receive the pavement reinforcing fabric at an approximate rate of 0.25-gallon per square yard of surface covered. The exact rate will be determined by the Engineer. The binder shall be applied to a width equal to the width of the fabric mat plus 3 inches on each side.

Before applying binder, large cracks, spalls and chuckholes in existing pavement shall be repaired as directed by the Engineer, and the repair work will be paid for as extra work as provided in Section 4-1.05.

The fabric shall be aligned and placed with no wrinkles that lap. The test for lapping shall be made by gathering together the fabric in a wrinkle. If the height of the doubled portion of extra

fabric is 1/2 inch or more, the fabric shall be cut to remove the wrinkle, then lapped in the direction of paving. Lap in excess of 2 inches shall be removed.

Pavement reinforcing fabric shall not be placed in areas of conform tapers where the thickness of the overlying asphalt concrete is 0.10-foot or less.

If manual laydown methods are used, the fabric shall be unrolled, aligned, and placed in increments of approximately 30 feet.

Adjacent borders of the fabric shall be lapped 2 inches to 4 inches. The preceding roll shall lap 2 inches to 4 inches over the following roll in the direction of paving at ends of rolls or at any break. At fabric overlays, both the binder and the fabric shall overlap the previously placed fabric by the same amount.

Seating of the fabric with rolling equipment after placing will be permitted. Turning of the paving machine and other vehicles shall be gradual and kept to a minimum to avoid damage.

A small quantity of asphalt concrete, to be determined by the Engineer, may be spread over the fabric immediately in advance of placing asphalt concrete surfacing in order to prevent fabric from being picked up by construction equipment.

Public traffic shall not be allowed on the bare reinforcing fabric, except that public cross traffic shall be allowed to cross the fabric, under traffic control, after the Contractor has placed a small quantity of asphalt concrete over the fabric.

Care shall be taken to avoid tracking binder material onto the pavement reinforcing fabric or distorting the fabric during seating of the fabric with rolling equipment. If necessary, exposed binder material shall be covered lightly with sand.

39-5 SPREADING EQUIPMENT

Asphalt pavers will be self-propelled mechanical spreading and finishing equipment provided with a screed or strike off assembly capable of distributing the material to not less than the full width of a traffic lane, or a traffic lane together with its adjoining shoulder. Screed action will include any cutting, crowding or other practical action which is effective on the mixture without tearing, shoving or gouging, and which produces a surface texture of uniform appearance. The screed will be adjustable to the required section and thickness. The paver will be provided with either a full width roller or tamper or other suitable compacting devices. Pavers that leave ridges, indentations, or other marks in the surface that cannot be eliminated by rolling or prevented by adjustment in operation will not be used.

Unless otherwise provided in the Special Provisions or directed by the Engineer, all asphalt concrete pavers will be equipped with a mobile grade reference system capable of averaging the existing grade or pavement profile over a minimum 30 feet distance or by a non-contacting laser or sonar type ski with at least four referencing stations mounted on the paver at a minimum length of 24 feet will be used. Equipment, which in the judgment of the Engineer, does not perform satisfactorily will be disallowed. The automatic screed controls will be used for all paving unless otherwise directed by the Engineer.

When paving contiguously with previously placed mats, the end of the screed adjacent to the previously placed mat will be controlled by a sensor that responds to the grade of the previously placed mat and will reproduce the grade in the new mat within a 0.01 foot tolerance. The end of the screed farthest from the previously placed mat will be controlled in the same manner as when placing the initial mat.

Should the methods and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the requirements, including straightedge tolerance, of the subsection entitled "Compacting" of this section of these Special Provisions, the paving operations will be discontinued and the Contractor will modify his equipment or furnish substitute equipment.

Should the automatic screed controls fail to operate properly during the day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day, however, the equipment will be corrected or replaced with alternative automatically controlled equipment conforming to the requirements in this section before starting another day's work.

The Contractor will schedule his paving operations such that each layer of asphalt concrete is placed on all contiguous lanes of the traveled way each work shift. At the end of each work shift, the distance between the ends of the layers of asphalt concrete on adjacent lanes will not be greater than 10 feet nor less than 5 feet. Additional asphalt concrete will be placed along the transverse edge at the end of each lane and along the exposed longitudinal edges between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.

Before placing successive lifts of asphalt concrete on any other type of asphalt concrete or on an existing bituminous pavement, paint binder (tack coat) will be applied in one application at a rate of from 0.08 to 0.10 gallon per square yard of surface covered. The exact rate of application will be determined by the Engineer.

Full compensation for furnishing, placing and maintaining the paint binder (tack coat) will be considered as included in the contract price paid per ton of asphalt binder and no separate payment will be made therefore.

39-6 SPREADING AND COMPACTING

39-6.01 GENERAL REQUIREMENTS

Placing material in a windrow, then picking it up and placing it in the asphalt paver with loading equipment, will be permitted provided:

1. The asphalt paver is of such design that the material will fall into a hopper which has a movable bottom conveyor to feed the screed.
2. The loader (pick-up machine) is constructed and operated so that substantially all of the material deposited on the roadbed is picked up and deposited in the paving machine.
3. The windrow is deposited only so far in advance of the paver to provide for continuous operation of the paver and not so far as to allow the temperature of the asphalt concrete in the windrow to fall below 260° F.

Asphalt concrete shall be placed only when the atmospheric and surface temperature is above 50° F.

Asphalt concrete and asphalt concrete base shall not be placed when rain is imminent or standing water is present on the intended surface to be paved.

Do not allow traffic on new AC pavement until its mid-depth temperature is below 160° F.

The Contractor will have a backup paver and rollers that meet the specifications of the primary equipment, on site, in the event of breakdown of the primary equipment.

Equipment which does not perform satisfactorily in the opinion of the Engineer will be disallowed and removed from the site of the work.

When the total compacted thickness of asphalt concrete is shown on the plans to be less than 0.25 foot, asphalt concrete will be spread and compacted in one layer. All other asphalt concrete will be spread and compacted in layers. The top layer of asphalt concrete will be not more than 0.25 foot nor less than 0.15 foot in compacted thickness. The next lower layer will not be more than 0.40 foot nor less than 0.15 foot in compacted thickness unless the total thickness is shown on the plans to be less than 0.30 foot, and any lower layers will be not less than 0.15 foot nor more than 0.40 foot in compacted thickness. Deviations from these lift thickness requirements may be permitted by the Engineer.

A layer shall not be placed over a layer which exceeds 0.25 foot in compacted thickness until the temperature of the layer which exceeds 0.25 foot in compacted thickness is less than 160° F at mid depth.

Asphalt concrete and asphalt concrete base to be placed on shoulders, and other areas off the traveled way having a width of 5 feet or more, shall be spread in the same manner as specified above. When the shoulders and other areas are less than 5 feet in width, the material may be deposited and spread in one or more layers by any mechanical means that will produce a uniform smoothness and texture. Unless otherwise shown on the plans, asphalt mixtures shall not be handled, spread or windrowed in a manner that will stain the finished surface of any pavement or other improvements.

The completed mixture shall be deposited on the roadbed at a uniform quantity per linear foot, as necessary to provide the required compacted thickness without resorting to spotting, picking-up or otherwise shifting the mixture.

Segregation shall be avoided, and the surfacing shall be free from pockets of coarse or fine material. Asphalt concrete or asphalt concrete base containing hardened lumps shall not be used.

Longitudinal joints in the top layer shall correspond with the edges of proposed traffic lanes.

Unless otherwise allowed or directed by the Engineer or otherwise provided in these Special Provisions, paving will be performed in the following order:

1. Asphalt concrete base, if any, will be placed.
2. The base course of asphalt concrete, if any, will be placed.

3. The top layer of asphalt concrete will be placed.

Where asphalt concrete base or a base course of asphalt concrete is used, all intersecting roads, driveways and ditches will be paved before commencement of placing the top layer of asphalt concrete.

At locations shown on the plans, specified in the special provisions or as directed by the Engineer, the asphalt concrete shall be tapered or feathered to conform to existing surfacing or to other highway and non-highway facilities.

At locations where the asphalt concrete or asphalt concrete base is to be placed over areas inaccessible to spreading and rolling equipment, the asphalt concrete or asphalt concrete base shall be spread by any means to obtain the specified results and shall be compacted thoroughly to the required lines, grades and cross sections by means of pneumatic tampers, or by other methods that will produce the same degree of compaction as pneumatic tampers.

TAPERED NOTCHED WEDGE

Where shown in the plans with an AC thickness greater than 0.15 foot construct a 1-foot wide tapered notch wedge joint as a longitudinal joint between adjacent lanes open to traffic. A vertical notch of 0.75 inch maximum must be placed at the top and bottom of the tapered wedge.

The tapered notch wedge must keep its shape while exposed to traffic. Pave the adjacent lane within 1 day.

Construct the tapered portion of the tapered notched wedge with an authorized strike-off device. The strike-off device must provide a uniform slope and must not restrict the main screed of the paver.

You may use a device attached to the screed to construct longitudinal joints that will form a tapered notched wedge in a single pass. The tapered notched wedge must be compacted to a minimum of 95 percent compaction. See 2018 Caltrans Standard Plan P70 for additional details regarding tapered notched wedge.

TAPERED EDGE

Where shown in the plans with an AC thickness greater than 0.15 foot construct a tapered edge on the pavements edge. Construct the tapered edge in conformance with 2018 Caltrans Standard Plans P74 and P75.

39-6.02 SPREADING

All layers, except as otherwise provided in Section 39-6.01, "General Requirements," and in this Section 39-6.02, shall be spread with an asphalt paver. Asphalt pavers shall be operated in such a manner as to ensure continuous and uniform movement of the paver.

In advance of spreading asphalt concrete over an existing base, surfacing or bridge deck, if there is a contract item for asphalt concrete (leveling) or if ordered by the Engineer, asphalt concrete shall be spread by any mechanical means that will produce a uniform smoothness and texture. Asphalt concrete (leveling) shall include, but is not limited to, the filling and leveling of

irregularities and ruts. Asphalt concrete used to change the cross slope or profile of an existing surface shall not be considered as asphalt concrete (leveling).

When directed by the Engineer, paint binder (tack coat) shall be applied to any layer in advance of spreading the next layer.

Before placing the top layer adjacent to cold transverse construction joints, the joints shall be trimmed to a vertical face and to a neat line. Transverse joints shall be tested with a 12-foot straightedge and shall be cut back as required to conform to the provisions in Section 39-6.03, "Compacting," for surface smoothness. Connections to existing surfacing shall be feathered to conform to the provisions for smoothness. Longitudinal joints shall be trimmed to a vertical face and to a neat line if the edges of the previously laid surfacing are, in the opinion of the Engineer, in such condition that the quality of the completed joint will be affected.

39-6.03 COMPACTING

39-6.03A GENERAL REQUIREMENTS

After the bituminous mixture has been spread, struck off, and surface irregularities adjusted, it will be thoroughly and uniformly compacted by rolling. Rolling will be performed in such a manner that cracking, shoving or displacement will be avoided.

The completed surfacing will 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 by blading or other equipment will be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations, or other objectionable marks in the asphalt concrete will be discontinued, and acceptable equipment will be furnished by the Contractor.

When a straightedge 12 feet is laid on the finished surface and parallel with the center line, the surface will not vary more than 0.01 foot from the lower edge of the straightedge. The transverse slope of the finished surface will be uniform to a degree such that no depressions greater than 0.02 foot are present when tested with a straightedge 12 foot laid in a direction transverse to the center line and extending from edge to edge of a 12-foot traffic lane.

If the finished surface of the asphalt concrete does not meet the specified surface tolerances, it will be brought within tolerance by either (1) abrasive grinding (with fog seal coat on the areas which have been ground), (2) removal and replacement, or (3) placing an overlay of asphalt concrete. The method will be selected by the Engineer. The corrective work will be at the Contractor's expense.

If abrasive grinding is used to bring the finished surface to specified surface tolerances, additional grinding will be performed as necessary to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel to the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at lines normal to the pavement centerline, within any ground area. All ground areas will be neat rectangular areas of uniform surface appearance. Abrasive grinding will conform to the requirements in Section 42-3.03, "Construction," of the Standard Specifications.

39-6.03B COMPACTING COURSES LESS THAN 0.13 FOOT THICK

A pass will be one movement of a roller in either direction. A coverage will be as many passes as are necessary to cover the entire width being paved. Overlap between passes during any coverage, made to ensure compaction without displacement of material in accordance with good rolling practice, will be considered to be part of the coverage being made and not part of a subsequent coverage. Each coverage will be completed before subsequent coverages are started.

Rolling will commence at the lower edge and will progress toward the highest portion, except that if directed by the Engineer, rolling will commence at the center and will progress outwards.

Initial or breakdown compaction will consist of 3 coverages of a layer of asphalt mixture and will be performed with a 2-axle or 3-axle tandem or a 3-wheel roller weighing not less than 12 tons and having rolling wheels with a diameter of 40 inches or more. Fewer coverages than specified above may be ordered by the Engineer if necessary to prevent damage to the layer being compacted.

The initial or breakdown compaction will be followed immediately by additional rolling consisting of 3 coverages with a pneumatic tired roller. Coverages with a pneumatic-tired roller will start when the temperature of the mixture is as high as practicable, preferably above 180°F, and will be completed while the temperature of the mixture is at or above 150°F.

Each layer of asphalt concrete and asphalt concrete base will be compacted additionally without delay by a final rolling consisting of not less than one coverage with a steel-tired roller weighing not less than 8 tons. Except as otherwise provided for low rates of production, a separate finish roller will be required.

Rolling will be performed so that cracking, shoving or displacement will be avoided.

Provided it is demonstrated to the satisfaction of the Engineer that one roller can perform the work, the required minimum rolling equipment specified above may be reduced to one 2-axle tandem roller, weighing at least 8 tons, for each paver under any of the following conditions:

4. When asphalt concrete is placed at a rate of 50 tons, or less, per hour at any location.
5. When asphalt concrete is placed at a rate of 100 tons, or less, per hour and at the locations or under the conditions as follows:
 - 5.1. Placed on miscellaneous areas in accordance with the provisions in Section 39-7.01, "Miscellaneous Areas."
 - 5.2. When the width to be placed is less than 8 feet.
 - 5.3. When the total thickness to be placed is less than 0.1 foot.
6. When the total amount of asphalt concrete included in the contract is 1,000 tons, or less.
7. When rolling equipment is reduced as provide in this Section F(2) the rolling requirements may be reduced to a least 3 complete coverages with said tandem roller.

Alternative compacting equipment, approved by the Engineer in accordance with California Test 113, may be used for the initial or breakdown compaction if operated according to the procedures and under the conditions designated in the approval. Such allowance of alternative compacting equipment for breakdown and finish compaction does not waive the requirement for using pneumatic-tired rollers. A vibratory roller may be used as the finish roller provided that it meets the requirements for a finish roller and is operated with the vibratory unit turned off.

During rolling operations and when ordered by the Engineer, the asphalt concrete will be cooled by applying water. No layer will be cooled with water unless so ordered or permitted by the Engineer.

39-6.03C COURSES 0.13 FOOT THICK OR MORE

The Contractor will cover the loads of asphalt concrete with tarpaulins. The Tarpaulins will completely cover the exposed asphalt concrete until the asphalt concrete has been completely transferred into the asphalt concrete paver hopper or deposited on the roadbed.

The Contractor will use a minimum of three rollers with separate operators: two for breakdown, and one for finish work.

Breakdown compaction will be completed before the temperature in the mat drops below 250°F.

Asphalt concrete will be compacted to an average density of not less than 95.5 percent of the average density of specimens of the asphalt concrete mixture compacted in the laboratory.

Average in-place density will be determined by nuclear gauge in conformance with ASTM Test Method D2950. Laboratory specimens will be compacted in conformance with California Test 304.

Nuclear gauge tests for determining average in-place density will be taken at the locations determined by the Engineer and which represent lots of 500 tons or less of mix. A minimum of five (5) randomly selected locations within the lot will be tested.

The extent of each lot will be determined by the Engineer. In determining the limits of each lot consideration will be given to such factors as productions rate, location (main line, shoulders, etc.), lift thickness and differences in the asphalt concrete mix.

Any lot of asphalt concrete or asphalt concrete base that does not meet the specified density will be removed and replaced by the Contractor at no cost to the County, except that, if requested in writing by the Contractor, a lot with an average density of 93.0 percent or greater may be accepted on the basis of a reduced payment.

| Average Density (Percent) | Percent Reduction | Average Density (Percent) | Percent Reduction |
|----------------------------------|--------------------------|----------------------------------|--------------------------|
| 95.5 | 0.0 | 94.2 | 39.0 |
| 95.4 | 3.0 | 94.1 | 42.0 |
| 95.3 | 6.0 | 94.0 | 45.0 |
| 95.2 | 9.0 | 93.9 | 48.0 |
| 95.1 | 12.0 | 93.8 | 51.0 |
| 95.0 | 15.0 | 93.7 | 54.0 |
| 94.9 | 18.0 | 93.6 | 57.0 |
| 94.8 | 21.0 | 93.5 | 60.0 |
| 94.7 | 24.0 | 93.4 | 63.0 |
| 94.6 | 27.0 | 93.3 | 66.0 |
| 94.5 | 30.0 | 93.2 | 69.0 |
| 94.4 | 33.0 | 93.1 | 72.0 |
| 94.3 | 36.0 | 93.0 | 75.0 |

The field density of asphalt mixtures, for the purpose of deduction, will be determined from a minimum of three drilled specimens per lot.

The field density will be the average of the required drilled specimens.

The laboratory density, for the purpose of deduction, will be the average density for all asphalt concrete samples taken for the project that represent the same grading, type and oil content as the material in question.

The amount of asphalt mixture involved will be computed from the field density and the volume of asphalt mixture. The volume of the mixture will be computed from the average thickness of the drilled specimens and the measured area of the asphalt mixture.

The limits of the asphalt mixture in question will be defined by the Engineer.

39-7 MISCELLANEOUS

39-7.01 MISCELLANEOUS AREAS

Surfacing of miscellaneous areas, such as median areas (exclusive of inside shoulders), island areas, sidewalks, dikes, gutters, gutter flares, ditches, overside drains, aprons at the ends of drainage structures and other areas outside the traveled way which are designated on the plans as miscellaneous areas to be paved with asphalt concrete, shall conform to these specifications.

The combined aggregate grading for asphalt concrete placed on miscellaneous areas shall conform to that specified for the asphalt concrete placed on the traveled way, unless otherwise directed by the Engineer. The amount of asphalt binder used in the asphalt concrete placed in dikes, gutters, gutter flares, overside drains and aprons at the ends of drainage structures, unless otherwise directed by the Engineer, shall be increased one percent by weight of the aggregate over the amount of asphalt binder used in the asphalt concrete placed on the traveled way.

The asphalt concrete placed in miscellaneous areas may be spread in one layer. The material shall be compacted to the required lines, grades and cross section.

Dikes shall be shaped and compacted with an extrusion machine or other equipment capable of shaping and compacting the material to the required cross section.

39-7.02 SEAL COAT

Where shown on the plans or provided in the special provisions, a fog seal coat shall be applied to the surface of Types A and B asphalt concrete in conformance with the provisions in Section 37, "Bituminous Seals."

39-8 MEASUREMENT AND PAYMENT

39-8.01 MEASUREMENT

Asphalt concrete and asphalt concrete base will be measured by weight. The quantity to be paid for will be the combined weight of the mixture for the various types of asphalt concrete or asphalt concrete base, whichever is designated in the Engineer's Estimate.

Quantities of paving asphalt, liquid asphalt and asphaltic emulsion to be paid for as contract items of work will be determined in accordance with the methods provided in Sections 92, "Asphalts," or 94, "Asphaltic Emulsions," as the case may be.

When recorded batch weights are printed automatically, these weights may be used for determining pay quantities providing the following requirements are complied with:

- A. Total aggregate and supplemental fine aggregate weight per batch shall be printed. When supplemental fine aggregate is weighed cumulatively with the aggregate, the total batch weight of aggregate shall include the supplemental fine aggregate.
- B. Total bitumen weight per batch shall be printed.
- C. Zero-tolerance weight shall be printed prior to weighing the first batch and after weighing the last batch of each truckload.
- D. Time, date, mix number, load number and truck identification shall be correlated with load slip.
- E. A copy of the recorded batch weights shall be certified by a licensed weighmaster and submitted to the Engineer.

When there is a contract item to place asphalt concrete dikes by the linear foot, the quantity to be paid for will be the length in feet measured along the completed dike. When there is a contract item to place asphalt concrete (miscellaneous area), the quantity to be paid for will be the area in square yards of the asphalt concrete compacted in place. In addition to the quantities for placing asphalt concrete measured on a linear foot or square yard basis, the asphalt concrete to be placed will also be measured for payment.

Pavement reinforcing fabric will be measured and paid for by the square yard for the actual pavement area covered.

39-8.02 PAYMENT

The contract price paid per ton for Asphalt Concrete will include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in placing the Asphalt Concrete, complete in place as shown on the plans, as specified in these Special Provisions, and as directed by the Engineer.

Asphalt concrete placed in the work, unless otherwise specified, will be paid for at the contract price per ton for asphalt concrete or asphalt concrete base of the types designated in the Engineer's Estimate.

When there is a contract item for asphalt concrete (leveling), quantities of asphalt concrete placed for leveling will be paid for at the contract price per ton for asphalt concrete (leveling). When there is no contract item for asphalt concrete (leveling), and leveling is ordered by the Engineer, asphalt concrete so used will be paid for as extra work as provided in Section 4-1.05.

When there is a contract item for place asphalt concrete dike by the linear foot, quantities of dikes will be paid for at the contract price per ton for asphalt concrete and also at the contract price per linear foot for place asphalt concrete dike. Full compensation for any necessary excavation, backfill and preparation of the area shall be considered as included in the contract price paid per

linear foot for place asphalt concrete dike and no additional compensation will be allowed therefor.

Quantities of asphalt concrete placed in miscellaneous areas designated in the special provisions or tabulated on the plans to be included in the contract item of place asphalt concrete (miscellaneous area), will be paid for at the contract price per ton for asphalt concrete and also at the contract price per square yard for place asphalt concrete (miscellaneous area). Full compensation for any necessary excavation, backfill and preparation of the area shall be considered as included in the contract price paid per square yard for place asphalt concrete (miscellaneous area) and no additional compensation will be allowed therefor.

When there is no item for place asphalt concrete dike by the linear foot or for place asphalt concrete (miscellaneous area) by the square yard and the work is shown on the plans, full compensation therefor, including any necessary excavation, backfill, and preparation of the area, shall be considered as included in the contract price paid for the asphalt concrete.

Quantities of pavement reinforcing fabric placed and paving asphalt applied as a binder for the pavement reinforcing fabric will be paid for at the contract price per square yard for pavement reinforcing fabric and per ton for paving asphalt (binder-pavement reinforcing fabric). Full compensation for furnishing and spreading sand to cover exposed binder material, if necessary, shall be considered as included in the contract price paid per ton for paving asphalt (binder-pavement reinforcing fabric) and no separate payment will be made therefor.

Small quantities of asphalt concrete placed on pavement reinforcing fabric to prevent the fabric from being displaced by construction equipment or to allow traffic to cross over the fabric, shall be considered as part of the layer of asphalt concrete to be placed over the fabric and will be measured and paid for by the ton as asphalt concrete.

When there is a contract item for liquid asphalt (prime coat), the quantity of prime coat will be paid for at the contract price per ton for the designated grade of liquid asphalt (prime coat). When there is no contract item for liquid asphalt (prime coat) and the special provisions require the application of prime coat, full compensation for furnishing and applying prime coat shall be considered as included in the contract price paid per ton for the asphalt concrete, and no separate payment will be made therefor.

When there is a contract item for asphaltic emulsion (paint binder), the quantity of asphaltic emulsion or paving asphalt used as paint binder (tack coat) will be paid for at the contract price per ton for asphaltic emulsion (paint binder). When there is no contract item for asphaltic emulsion (paint binder), full compensation for furnishing and applying paint binder (tack coat) shall be considered as included in the contract price paid per ton for the asphalt concrete, and no separate payment will be made therefor.

Fog seal coat will be paid for as provided in Section 37-1, "Seal Coats."

No adjustment of compensation will be made for any increase or decrease in the quantities of paint binder (tack coat) or fog seal coat required, regardless of the reason for the increase or decrease.

DIVISION VI. STRUCTURES

51 CONCRETE STRUCTURES

51-7 MINOR STRUCTURES

51-7.01A GENERAL

51-1.01A Summary: Minor structures shall include concrete structures including the precast drainage inlets (Type G1), the cast in place drainage inlets (Type OL), and the storm drain connection at the existing concrete channel and shall conform to Section 51 and 52 of the Standard Specifications, these Special Provisions and as shown of the Plans, with the following modifications, clarifications, and additional requirements.

51-7.01B Materials: Concrete for precast drainage inlets and cast in place drainage inlets shall comply with the specifications for minor concrete. Concrete for the storm drain connection at the existing concrete channel shall have a 28-day compressive strength of 3,000 psi and maximum slump of 4”.

Metal frames, covers, grates, and other miscellaneous iron and steel used with minor concrete shall comply with Section 75-2 of the Standard Specifications.

Reinforcement shall be deformed billet steel conforming to ASTM A615, Grade 40 for #3 bars and #4 bars and Grade 60 for #5 bars.

Reinforcing dowels that need to be set into already cured concrete shall be secured with Hilti HIT-HY 200 Epoxy.

51-7.01C Construction: It is the Contractor’s responsibility to ensure that the precast concrete drainage structures are laid and bedded on sound materials, existing and new. Any field conditions that may affect grade shall be brought to the attention of the Engineer prior to installation. All existing material that has been disturbed must be removed from the trench prior to the installation of new bedding and backfill material.

Pipeline penetrations through the wall of precast concrete structures shall be made as indicated on the Plans.

Earthwork for construction of the drainage inlets shall conform to Section 19 of the Standard Specifications and these Special Provisions.

51-7.01D Payment: Full compensation for the precast drainage inlets and grate and the cast in place drainage inlets will be paid for at the contract price per each drainage inlet designated as **Type G1 Drainage Inlet, Type OL (L=21’) Drain Inlet, and Type OL (L=10’) Drain Inlet**, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in providing and installing complete in place, including but not limited to any necessary hand digging, furnishing and installing precast structure and metal grate, forms, reinforcement, furnishing and installing concrete, and any other items necessary to construct the precast drainage inlets and the cast in place drainage inlets not specifically enumerated in the Standard Specifications, these Special Provisions or on the Plans, and no additional allowance will be made therefor. Excavation for drainage inlets including

removal and disposal of excavated material and placing and compacting all required bedding and backfill is paid for under the bid item for **Earthwork**.

Full compensation for the storm drain connection at the existing concrete channel will be paid for at the lump sum price per for **Storm Drain Connection to Existing Channel**, which price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in providing and installing complete in place, including but not limited to any necessary hand digging, furnishing and installing concrete, reinforcement, and dowels, and any other items necessary to construct the storm drain connection to the existing channel not specifically enumerated in the Standard Specifications, these Special Provisions or on the Plans, and no additional allowance will be made therefor.

DIVISION VII. DRAINAGE FACILITIES

64 PLASTIC PIPE

64-2 General

64-2.01A Summary: Plastic storm drain pipe shall conform to Section 64 of the Standard Specifications, these Special Provisions, and as shown on the Plans, with the following modifications, clarifications, and additional requirements.

64-2.02A Materials: HDPE pipe shall be either Type S corrugated polyethylene pipe, ribbed profile wall polyethylene pipe, or ribbed polyvinyl chloride drain pipe. Plastic pipe shall be smooth interior. Type S corrugated polyethylene pipe shall conform to the requirements in AASHTO Designation M294 and shall be manufactured from high density polyethylene virgin compounds. All fittings and accessories shall be manufactured and furnished by the pipe supplier and have bell and/or space configurations identical to that of the pipe.

64-2.03C Pipe Placement: Trenching operations shall be conducted in such a manner not to disturb private property. The Contractor shall incur all costs associated with repairs needed, in the opinion of and to the satisfaction of the Engineer, by any such damage due to their operations.

Trenches shall not be open longer than the time required to place the pipe and backfill to the adjoining grade. Trenches shall be backfilled the same day within the allowable working hours.

Contractor shall exercise caution when working in close proximity to existing trenches.

Trenching operations for pipelines and structures shall be conducted in such a manner to minimize the damage to existing tree roots. Hand digging shall be used where necessary to protect tree roots. Where tree roots are encountered, root pruning shall be accomplished by use of sharp tools appropriate for the size of root to be cut. Each cut shall be clean with no torn bark or splintered wood remaining on the tree. All tree work shall be performed by a certified arborist from the list approved by the County.

Trench dams shall be installed at the location and per the details shown on the Plans.

Bedding and backfill for plastic pipe shall be of the dimensions and materials recommended by the pipe manufacturer for the given depth of installation. The Contractor shall be responsible any additional work and costs associated with such bedding and backfill, including increases in trench width, depths and surfaces.

It is the Contractor's responsibility to ensure that storm drain pipe is laid and bedded on sound materials, existing and new. Any field conditions that may affect alignment and/or grade shall be brought to the attention of the Engineer prior to installation. All disturbed native material must be removed from the trench prior to the installation of new bedding material.

64-2.04 Payment: Full compensation for storm drain pipe will be paid for at the contract price per linear foot of **18" Storm Drain** (as determined by measuring the total horizontal length installed), which price shall include full compensation for furnishing all labor, tools, materials, and equipment, including all couplings and fittings, and for doing all the work involved in installing storm drains, including but not limited to, excavation and disposal of excavated

materials; dewatering trench; contamination awareness; HDPE pipe; connections to new or existing structures or mains including sealing of penetrations water tight; supporting or removal and disposal as necessary of existing utilities in the same trench; placing and compacting all required bedding and backfill including control density fill, if required; trench plates *as needed*; temporary trench paving; replacement of street striping or pavement markings; cleaning and flushing; all required testing; and any other work required for the installation of HDPE storm drain pipe as specified these Special Provisions and indicated on the Plans, and no additional allowance will be made therefor.

DIVISION VIII. MISCELLANEOUS CONSTRUCTION

73 CONCRETE CURBS AND SIDEWALKS

73-1.01 General: This Section includes the specifications for constructing concrete curb and gutter. Construction shall conform to Sections 73 and 90 of the Standard Specifications, these Special Provisions, and as shown on the Project Plans with the following modifications, clarifications, and additional requirements

73-1.02 Materials: Concrete for curb and gutter shall be minor concrete in accordance with Section 90-2 of the Standard Specifications with a minimum of five sacks of cement per cubic

73-2 Curbs

73-2.03A Construction: Curb and gutter shall be constructed in accordance with the details and locations shown on the Plans and Standard Details, and in accordance with the Standard Specifications.

Class 2 aggregate base per Section 26 of these Special Provisions shall be placed under curb and gutter, as shown on the Plans.

All concrete shall be cured in accordance with the requirements of Section 90-1 of the Standard Specifications except that the Contractor may substitute other than a pigmented sealer upon the approval in writing of such substituted sealer by the Engineer.

Soft or spongy subgrade material shall be removed and replaced with suitable material as required by the Engineer.

All concrete which is to be removed shall be removed full width to the nearest construction joints or as directed by the Engineer. The edge of existing concrete to remain shall be neat and free of defects. Saw-cutting may be required to achieve this effect.

73-2.04 Payment: Full compensation for installation of curb and gutter shall be measured and paid for on the contract bid price per linear foot for **Minor Concrete – Type A2 Curb (8” Height) and Minor Concrete - Type A2 Curb (6” Height)**, and shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in constructing the Type A2 curb complete in place, including but not limited to, removal and disposal of excavated material, backfill and compaction, forming, expansion joint filler, reinforcing, doweling, pigmentation, applying curing material, removing discoloring, and any other items necessary to install concrete curb and gutter not specifically enumerated in these Special Provisions or on the Plans, and no additional allowance will be made therefor.

Full compensation for furnishing, placing, grading and compacting aggregate base shall be considered as included in the contract item prices paid for the concrete curb involved and no further compensation will be allowed.

DIVISION IX. TECHNICAL SPECIFICATIONS

SECTION 33 10 00 - WATER UTILITIES

PART 1 - GENERAL

1.1 GENERAL

- A. The work encompassed by this section shall consist of performing all operations and furnishing all labor, materials, tools, equipment, and incidentals as necessary for the following:
 - 1. Water system piping.
 - 2. Valves, fittings, and other water system appurtenances.

- B. All water utilities and related appurtenances shall be constructed in accordance with the requirements of the Sweetwater Springs Water District, these Special Provisions, and as directed by the Engineer. Where work is performed in the County right of way, all water utilities and related appurtenances shall be constructed in accordance with the aforementioned standards as well as the applicable sections of the appropriate Encroachment Permit.

1.2 SUBMITTALS FOR REVIEW

- A. Product Data: The Contractor shall submit to the Engineer for approval copies of submittals and/or shop drawings for all specified materials. The Contractor shall furnish catalog data, descriptive literature, manufacturer's drawings, and manufacturer's installation instructions on pipe materials, pipe fittings, valves and accessories

1.3 QUALITY ASSURANCE

- A. Water mains, services, and appurtenances shall be subject to hydrostatic and leakage tests and shall be sterilized prior to connection to existing systems.

1.4 UTILITY CLEARANCES

- A. The Contractor shall be required to investigate, confirm and/or determine locations of existing utilities, verify clearances between existing and proposed utilities, and determine elevations of existing utilities at crossings or connection points. The Contractor shall verify clearances at known utility crossings and/or areas where clearances may be tight, and confirm elevations at least five (5) working days in advance of working at the specific crossing. The Contractor shall notify the Engineer immediately upon discovery of any conflict.

PART 2 - PRODUCTS

2.1 WATER PIPE

- A. Pipe shall be as shown on the plans and as specified herein. Each length of pipe and coupling shall be marked with the manufacturer's name, lot number and the date the pipe was tested. A certificate of compliance shall be furnished to the District certifying that the pipe has been tested and meets the requirements of the American Water Association.
- B. Pressure pipe for the water main shall be HDPE, PE 4710, IPS SDR 9, conforming to the latest edition of ANSI/AWWA C901, or ANSI/AWWA C906 and ANSI/AWWA Standard 61, unless otherwise denoted on the plans. All HDPE pipe shall be joined by fusion, and installed by open trenching as denoted on the plans.
 - 1. Service saddle shall be HDPE 4710, class 200 electrofusion branch saddle (IPS to IPS), NSF 61 listed and meet or exceed applicable ANSI/AWWA requirements manufactured by George Fisher (Central) or approved equal. The fittings shall be provided with bottom underclamps or loading tool as specified by manufacturer's installation procedure.
 - 2. Trace Wire: Number 12 insulated copper wire.

2.2 WATER SERVICES

- A. Water service piping shall be polyethylene plastic pipe, SDR-9, conforming to the requirements of ASTM D2737.
- B. Water service components:
 - 1. Service Meters: Service meters shall be new 5/8"x 3/4" or 1" magnetic cold-driven water meters as manufactured by Badger Meter, Inc., specifically Model 25 or 70 Bronze, or approved equal. The meters shall be NSF-61 approved. The meters shall be in accordance with AWWA C-700. The flow unit shall be cubic feet and must be indicated on the shop drawings.
 - 2. Meter boxes shall be pre-cast concrete boxes installed in accordance with the detail on the plans. Boxes for 3/4" meters shall be Christy B9X Box with lid suitable for traffic loading, or approved equal. Boxes for 1" meters shall be Christy B-16 Box with lid suitable for traffic loading, or approved equal. Water meter boxes shall be bedded on a minimum of 3" thick of 3/4" drain rock, or other clean material with typical sand equivalent of 20 minimum, uncontaminated by native soil, against compacted or undisturbed base. The gravel bed shall extend to a 4" minimum beyond all sides of the meter box. Box shall be set flush with top of curb, or sidewalk, whichever is applicable. When meters are set off-pavement or concrete, the meter box shall be set 1-inch above existing surface, per details shown on the plans. Addresses must be clearly marked on top side lip of meter box with a permanent marking pen. Meter lids shall be solid (without meter reader inserts).
 - 3. Corporation stops installed in service saddles shall have male iron pipe threads. Corporation stops shall be Mueller B25028 or approved equal.
 - 4. Angle meter stops shall be full port ball angle meter stops that hold pressure in both directions. The angle meter stops shall be Mueller B24258 or approved equal.
 - 5. Meter boxes shall be pre-cast concrete boxes installed in accordance with the detail on the plans. Boxes for 3/4" meters shall be Christy B9X Box with lid suitable for

traffic loading, or approved equal. Boxes for 1” meters shall be Christy B-16 Box with lid suitable for traffic loading, or approved equal. Water meter boxes shall be bedded on a minimum of 3” thick of 3/4” drain rock, or other clean material with typical sand equivalent of 20 minimum, uncontaminated by native soil, against compacted or undisturbed base. The gravel bed shall extend to a 4” minimum beyond all sides of the meter box. Box shall be set flush with top of curb, or sidewalk, whichever is applicable. When meters are set off-pavement or concrete, the meter box shall be set 1-inch above existing surface, per details shown on the plans. Addresses must be clearly marked on top side lip of meter box with a permanent marking pen. Meter lids shall be solid (without meter reader inserts).

6. Ball valves on the customer side of the meter shall be full port angle ball curb stops with handles. Ball valves shall hold pressure in both directions. Ball valves for standard services shall be Mueller B24265 with lever handle 20298-99000 or approved equal.

7. Tracer wire to be No. 10 insulated copper wire.

2.4 ACCESSORIES

- A. Fittings: All fittings and accessories shall be manufactured and furnished by pipe supplier and shall be of same material as pipe, molded or formed to suit pipe size and end design, in required tee, bends, elbows, cleanouts, reducers, traps and other configurations required.
- B. Disinfectant: Liquid chlorine, gas-water mixture, fed-chlorine gas, or calcium hypochlorite water mixture, unless otherwise approved by the District/
- C. Pipe Bedding and Backfill: Per the requirements as shown on the plans.

PART 3 - EXECUTION

3.1 GENERAL

- A. All water utilities and related appurtenances shall be constructed in accordance with the requirements of the Sweetwater Springs Water District, these Special Provisions, and as directed by the Engineer.
- B. Contractor shall verify location of point of connection (POC) as generally indicated on Plans. Connection to existing mains shall be in accordance with the Sweetwater Sprints Water District requirements.
- C. Contractor shall coordinate with other trades and verify suitable trenching and preparation of pipe bedding. Contractor shall verify that trench and pipe subgrade conform with the UPC, the Plans and these Specifications.
- D. Contractor shall furnish all necessary fittings, fixtures, hardware, plates, fasteners, etc. to provide a complete installation.
- E. Location for pipes, fixtures, fittings, and drains that are shown on the Plans are approximate. The Contractor shall locate fixtures, fittings, and drains to best service the

intended use and to avoid mechanical and structural interference. Location of valves, valve boxes, and fittings must be approved by the Engineer prior to installation.

F. All installations shall be secure and watertight.

3.2 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle products to site in accordance with manufacturer's recommendations.

B. Deliver and store valves in shipping containers with labeling in place

3.3 PREPARATIO

A. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, remove burrs.

B. Remove scale and dirt on inside and outside before assembly.

C. Prepare pipe connections to equipment with flanges or unions.

3.4 INSTALLATION

A. Excavate pipe trench in accordance with the plans.

B. Form and place concrete for pipe thrust restraints at any change of pipe direction. Place concrete to permit full access to pipe and pipe accessories. Concrete shall be formed to provide minimum area as shown on the Plans.

C. Maintain minimum horizontal separation of 10 feet between water main and sewer main piping and five feet between domestic water service and sewer lateral.

D. Route pipe in straight line. Use factory manufactured fittings for all turns, corners or radii.

E. Establish elevations of buried piping to ensure the minimum cover as indicated on the plans.

F. All pipe shall be free of any visible evidence of contamination, dirt, and foreign material before it is lowered into its position in the trench, and it shall be kept clean by approveeans during and after laying.

G. Whenever it is necessary, either in the vertical or horizontal plane, to avoid obstructions, or when long radius curves are permitted, the amount of deflection shall not exceed the maximum recommended by the pipe manufacturer or that required for satisfactory jointing.

H. Grade and Alignment Control: The Contractor shall utilize the necessary trenching and installation procedure to insure the pipe is installed straight or on smooth curves, horizontal or vertical, as shown on the plans. Misalignment caused by the trencher or backhoe shall be corrected before pipe is installed to provide specified room for bedding and compacting around the pipe.

- I. Install trace wire continuous over top of pipe and bring up inside valve box and end of pipe runs.
- J. Backfill trench in accordance with the details as shown on the plans.
- K. HDPE pipe joints shall be butt fusion welded following the procedures described in this Section and referenced Standards

3.5 VALVE BOXES, VAULTS AND PITS

- A. All meter boxes, vaults and pits shall be bedded on 3" minimum thick, ¾" drain rock, or other clean material with typical sand equivalent of 20 minimum, uncontaminated by native soil or against compacted of undisturbed base. The gravel bed shall extend to a 4" minimum beyond all side of the meter box. Box shall be set flush with top of curb, sidewalk, or ground, whichever is applicable.
- B. Meter boxes and vaults shall be set so that the reading lids are aligned over the meter registers as closely as possible.

3.6 ADJUSTING WATER VALVE BOXES

- A. After street has been paved, mark location of all water valve boxes in white paint before the close of that work day. Within 48 hours of paving, adjust all water valve boxes up to grade.

3.7 HDPE PIPE INSTALLATION

- A. The Contractor shall have all the equipment necessary to install the pipe and appurtenances referred to in the Plans and these Special Provisions.
- B. HDPE pipe shall be installed per AWWA Manual of Practice, M55, PE Pipe-Design and Installation and PPI Polyethylene Piping Systems Field Manual for Municipal Water, ASTM F2620 and ASTM D2774.
- C. Extreme care must be exercised when moving plastic pipe, support stands and rollers shall be used when fusing and lowering pipe into the trench or bore hole. HDPE pipe shall not be dragged on the ground or on paved surfaces. Support stands/rollers must be used at all times that pipe is above paved surfaced/ground level including during directional boring pull-in.
- D. Pipe support stands shall be utilized to support pipe during fusion joining, directional boring pull-in, and while lowering of the pipe into the trench. Pipe support stands shall not be spaced greater than 15' apart for directional boring pull-in. Pipe shall be supported with stands at all times and not placed on pavement to avoid scratching the pipe surface.
- E. Pipe cutter shall be guillotine style cutter outfitted with a ratchet drive or power driven designed to cut HDPE pipe. No other cutting tools will be allowed to use.
- F. The minimum bend radius for HDPE water pipe, SDR 9, is 25 times the outer pipe diameter. If fusions, fitting, or flange are present or to be installed in the bend, the minimum radius shall be 100 times the outer pipe diameter.

- G. If possible, HDPE pipe shall be installed in the trench by “snaking” method and additional pipe length shall be allowed for the possible thermal contraction of the pipe.
- H. The Contractor shall provide all equipment necessary for fusion of pipe including butt fusion machine, facer, heating iron, generator, pyrometer, and any other equipment necessary. All equipment must be in good working order and properly maintained during project installation.
- I. Pipe fusion shall be conducted in accordance with the manufacturer’s recommended fusion procedure and in compliance with ASTM F2620 and PPI Technical Report TR-33. Ambient temperature shall be between 55 degrees F and 85 degrees F prior to pipe fusion; otherwise pipe shall be protected from direct sunlight and cooled down until the ambient temperature falls within the above temperature range.
- J. Fusion joints shall be allowed to cool for the times recommended by the pipe manufacturer prior to any movement of the fused joint.
- K. Contractor shall seal open piping with butt fusion end caps or with an approved manufacturer end cap at the end of each workday. No open pipe ends will be allowed at the end of the day.

3.8 HDPE PIPE QUALITY ASSURANCE

- A. The Owner may have a qualified inspector at the job site. The inspector has the right to reject any fusions not meeting requirements. The Contractor shall replace all fusions not meeting requirements at his own expense. The Contractor shall furnish all labor necessary to assist the inspector in inspecting pipe upon delivery. Contractor shall remove defective and rejected pipe immediately.
- B. All butt fusions must be performed by a qualified person that has been fully trained in butt fusion of HDPE pipes. The fusion machine operator(s) shall demonstrate successful completion of at least three (3) projects where HDPE pipe was installed directional boring techniques. Contractor’s supervisor shall be available during all pipe fusions to ensure that all required procedures are adhered to and to certify the quality of each joint.
- C. The Contractor shall provide records of butt-fusion of each joint including data recorded by a McElroyu Datalogger, or equal, within 48 hours of fusion and prior to pre-installation testing and directional boring pullback. Recorded data shall include the following information: date and time, joint number, operator identification, machine type, pipe use, pipe size and dimension ratio, ambient temperature, interfacial pressure during fusion and cooling, gauge pressure during fusion and cooling, fusion temperature, and heating, fusion and cooling times.

3.9 CLEANING AND FLUSHING

- A. Prior to field testing, the pipe shall be flushed so that the velocities of 10 feet per second are obtained sufficient to clean the entire length of pipe. The flushing operation shall be continued for a sufficient time to ensure thorough cleaning.

B. Provision shall be made for the proper disposal of water used for flushing and testing.

3.10 HYDROSTATIC TEST

A. Perform hydrostatic tests for all piping and attached appurtenances subjected to system working pressure and secure approval of test results from the Engineer:

1. General: Conduct pressure and leakage tests on all pipelines under observation of the Engineer. Furnish all necessary equipment and material and make all taps in the pipe as required. The Engineer will monitor the tests. All pipe testing is to be hydrostatic. Furnish the following equipment and material for the tests:

| <u>Amount</u> | <u>Description</u> |
|---------------|---|
| 2 | Approved graduated containers |
| 2 | Approved pressure gauges |
| 1 | Hydraulic force pump approved by the Engineer |
| | Suitable hose and suction pipe as required |

Gauges for testing shall be calibrated with a standardized test gauge at the start of each testing day. The calibration shall be witnessed by the Engineer. Conduct the tests on buried pipe after the trench has been completely backfilled. If field condition permit, partially backfill the trench and leave the joints open for inspection and conduct an initial test. The acceptance test shall not, however, be conducted until all backfilling has been completed. Conduct the tests on exposed piping after the piping has been completely installed, including all supports and hangers.

2. Pressure pipe procedure: After the pipe has been laid and backfilled and final compaction has been obtained, test pressure pipe between each valve section or pipe run. The pipe shall be slowly filled with water so that air is removed and the pipe shall be tested hydrostatically to a pressure of 50 psi above the working pressure and not less than 200 psi, at any point on the main or to pressure as required by the local authority. Pressure shall be maintained at +/- 5 psi for two (2) hours. Pressure loss shall be determined by a drop in gauge pressure. The test pressure shall be read from one of the following, located at the lowest elevation of the system or the portion of the system being tested 1) a gauge located at one of the hydrant outlets or 2) a gauge located at the lowest point where no hydrants are provided. Reaction blocking pipe restraints and the like shall be installed prior to test. All exposed pipe, fittings, valves and joints shall be examined during the test for seepage or other defects. Defects noted by this test shall be removed and replaced. Afterwards, the test shall be repeated to the satisfaction of the Engineer.
3. Where additional water is added to the system to maintain the test pressures required by section 3.10(A)(2) above, the amount of water shall be measured and shall not exceed the limits per the following equation:

$$\frac{L}{148,000} = \frac{SD(P)^2}{148,000}$$
 where: L = testing allowance (makeup water) gal/hr
 S = length of pipe tested (ft)
 D = nominal diameter of the pipe (in)
 P = average test pressure during the hydrostatic test (gauge psi)

If any test discloses leakage greater than specified, locate and repair the defective joints until the leakage is within the specified allowance.

4. Requirements for exposed pipelines: All exposed pipelines shall have no visible leakage during the specified test period. Any exposed pipeline with leakage shall be repaired or replaced.

3.11 DISINFECTION

- A. Disinfect new water piping system in accordance with AWWA C651.
- B. Maintain disinfectant in system for 24 hours. A residual of not less than 25 parts per million shall be produced in all parts of the line for the 24-hour period.
- C. Flush, circulate, and clean until required cleanliness is achieved.
- D. Provide bacteriological sampling, testing, and certification that water conforms to bacterial standards.

3.12 FINAL CLEANING

- A. Prior to final acceptance, all pipelines installed under this Section shall be flushed out of all accumulated construction debris and other foreign matter removed. Cleaning shall be done in a manner that will keep flushed debris from entering equipment and in a manner approved by the Engineer. Flush through hydrants, or other outlets. Provide a pipe velocity of 2.5 feet per second minimum.

3.13 MEASUREMENT AND PAYMENT

- A. Full compensation for connection of the new line to existing water line will be paid for at the lump sum contract price for **Connection to Existing Water Line**, which price shall include full compensation for furnishing all labor, tools, materials, and equipment, including all fittings, and for doing all the work involved in installing storm drains, including but not limited to, excavation and disposal of excavated materials; dewatering trench; contamination awareness; connections to existing lines; supporting or removal and disposal as necessary of existing utilities in the same trench; placing and compacting all required bedding and backfill including control density fill, if required; trench plates *as needed*; temporary trench paving; cleaning and flushing; all required testing; and coordination with the Sweetwater Springs Water District as needed and as specified these Special Provisions and indicated on the Plans, and no additional allowance will be made therefor.
- B. Full compensation for new 2' water line will be paid for at the contract price per linear foot of **New 2" Water Line** (as determined by measuring the total horizontal length installed), which price shall include full compensation for furnishing all labor, tools, materials, and equipment, including all couplings and fittings, and for doing all the work involved in installing the water line, including but not limited to, excavation and disposal of excavated materials; dewatering trench; contamination awareness; HDPE pipe; supporting or removal and disposal as necessary of existing utilities in the same trench; placing and compacting all required bedding and backfill including control density fill, if required; trench plates *as*

needed; temporary trench paving; replacement of street striping or pavement markings; cleaning and flushing; all required testing; and any other work required for the installation of HDPE water line as specified these Special Provisions and indicated on the Plans, and no additional allowance will be made therefor.

- C. Full compensation for new 1' water service line will be paid for at the contract price per linear foot of **New 1" Water Service Line** (as determined by measuring the total horizontal length installed), which price shall include full compensation for furnishing all labor, tools, materials, and equipment, including all couplings and fittings, and for doing all the work involved in installing the water line, including but not limited to, excavation and disposal of excavated materials; dewatering trench; contamination awareness; PE pipe; supporting or removal and disposal as necessary of existing utilities in the same trench; placing and compacting all required bedding and backfill including control density fill, if required; trench plates *as needed*; temporary trench paving; replacement of street striping or pavement markings; cleaning and flushing; all required testing; connections to existing meters and customer service lines; and any other work required for the installation of the water service line as specified these Special Provisions and indicated on the Plans, and no additional allowance will be made therefor.

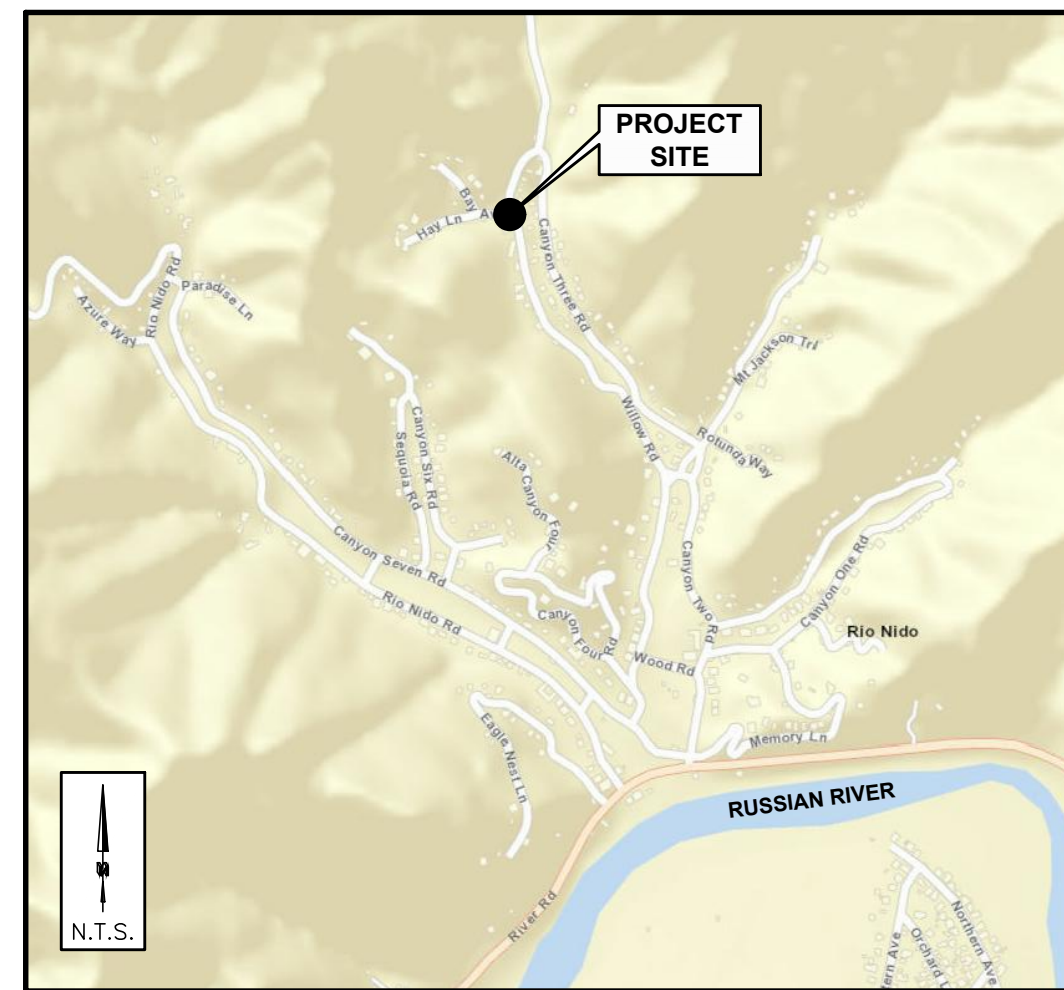
COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
PROJECT DRAWINGS FOR CONSTRUCTION OF

**RIO NIDO CULVERT INSTALLATIONS
MITIGATION PROJECT**

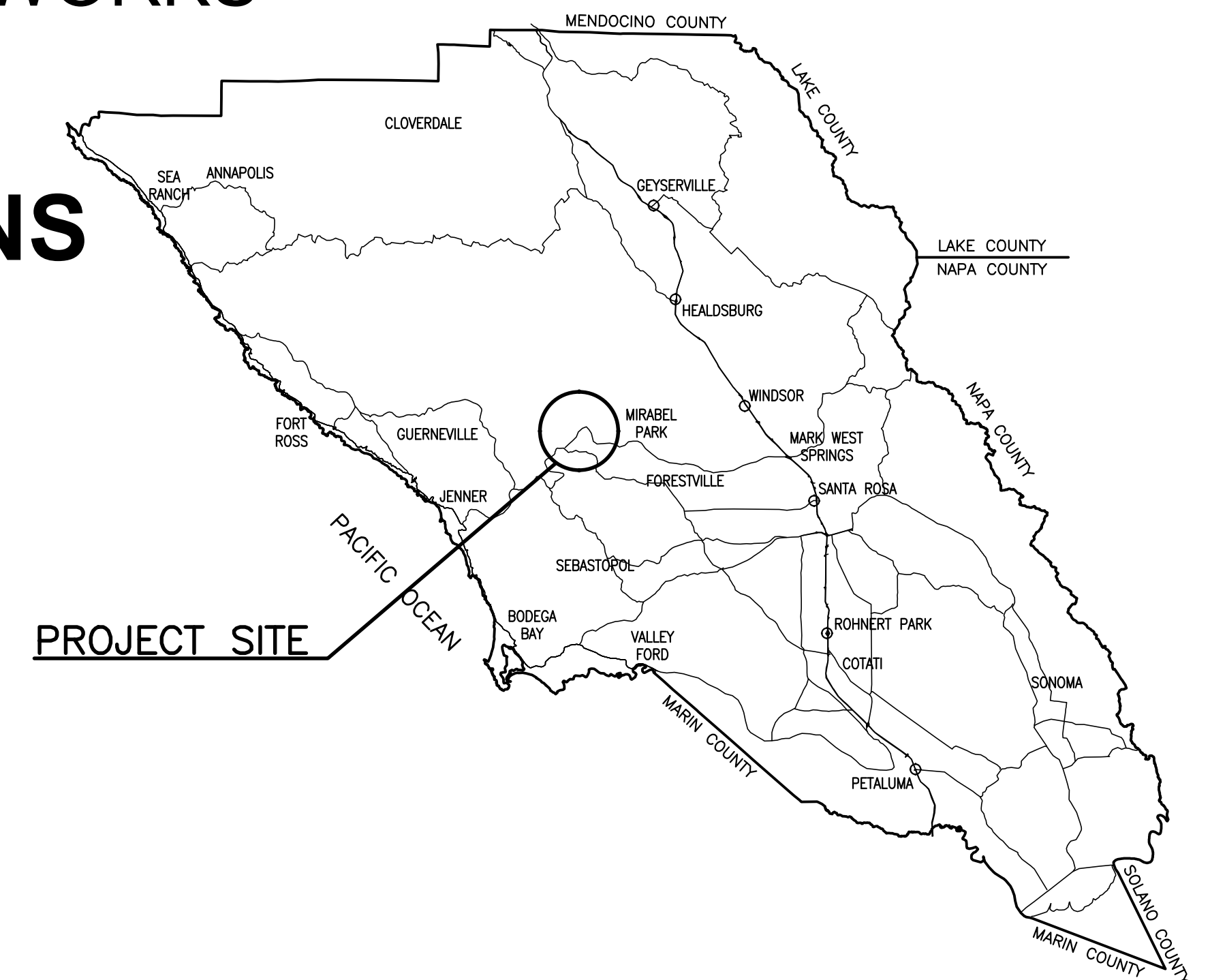
(COUNTY ROAD NO. 80052)

WILLOW ROAD

(PM. 10.53 INTERSECTION AT BAY AVE, COUNTY ROAD NO. 80056)



VICINITY MAP
NOT TO SCALE



INDEX OF SHEETS

- 1 TITLE SHEET
- 2 CONSTRUCTION NOTES/STAGING AREA
- 3 EXISTING CONDITIONS/DEMOLITION PLAN
- 4 UTILITY AND DRAINAGE IMPROVEMENTS
- 5 GRADING AND EROSION CONTROL PLAN
- 6 MISCELLANEOUS DETAILS
- 7 MISCELLANEOUS DETAILS

THE STANDARD PLANS LIST FOR THIS PROJECT IS INCLUDED IN THE SPECIAL PROVISIONS BOOK.

VERTICAL DATUM:

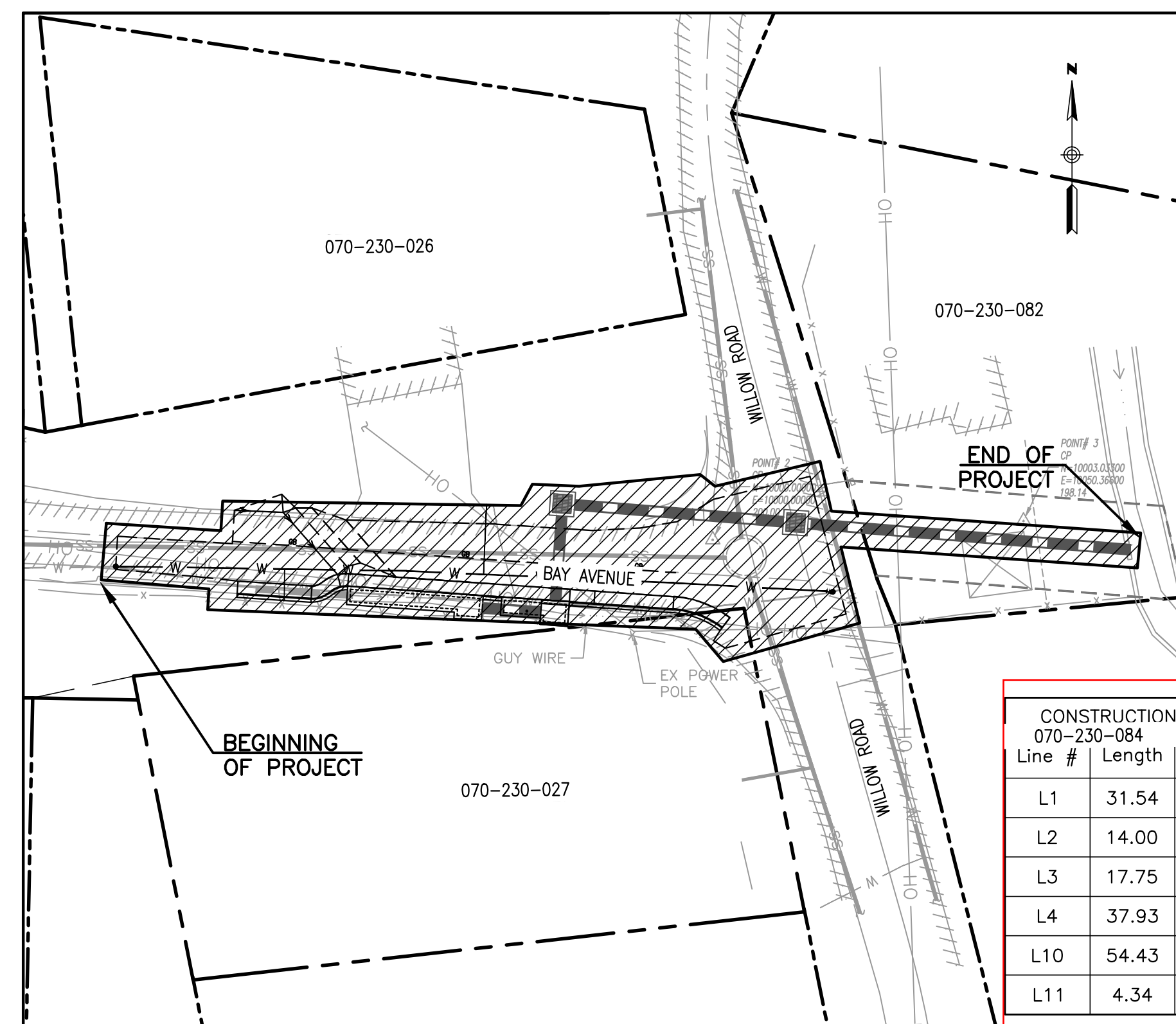
ELEVATIONS ARE BASED UPON AN ASSUMED DATUM.
BENCHMARK SET – MAG NAIL AND SHINER APPROXIMATELY 6’ NW OF SSMH AT INTERSECTION OF WILLOW ROAD AND BAY AVENUE.
ELEVATION =200.00’ (ASSUMED)

BASIS OF BEARINGS:

BASIS OF BEARING S14°45’E BETWEEN IRON PIPE FOUND BETWEEN LOTS 551 AND 550 IN THE EASTERLY LINE OF WILLOW ROAD AS SHOWN ON “PLAN OF MAP NO. 12, BEING WILLOW VALLEY SUBDIVISION, RIO NIDO” RECORDED AS PLAN 27M13.

NOTE:

THE CONTRACTOR SHALL POSSESS A CLASS A LICENSE AND A HAZARDOUS MATERIALS CERTIFICATE AT THE TIME OF AWARD.



LAYOUT PLAN
NOT TO SCALE

| CONSTRUCTION 070-230-084 | | |
|--------------------------|--------|----|
| Line # | Length | |
| L1 | 31.54 | \$ |
| L2 | 14.00 | \$ |
| L3 | 17.75 | \$ |
| L4 | 37.93 | \$ |
| L10 | 54.43 | \$ |
| L11 | 4.34 | \$ |

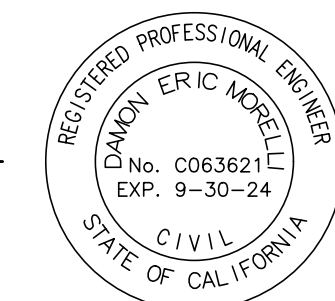
REMOVE FROM THIS SHEET.

APPROVED FOR CONSTRUCTION BY:

JOHANNES J. HOEVERTSZ, R.C.E. 67468 DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

YOASH TILLES, R.C.E. 76467 CIVIL ENGINEER DATE
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS

DAMON E MORELLI, P.E. C063621 DATE
EBA ENGINEERING, CIVIL ENGINEER



| DESIGN BY | AG | "RECORD DRAWING" INFORMATION TO BE COMPLETED AFTER CONSTRUCTION | DATE | REVISION | BY | APPROVED | ROAD NUMBER | 80052 |
|------------|-----|---|-------------------------|----------|----|----------|--------------|---------------|
| DRAWING BY | AG | | CONSTRUCTION COMPLETED: | | | | | BUDGET NUMBER |
| CHECKED BY | DEM | RESIDENT ENGINEER AS BUILT DRAWINGS BY: | | | | | FISCAL YEAR | 2022-23 |
| | | | | | | | SHEET NUMBER | 1 |
| | | | | | | | TOTAL SHEETS | 7 |

Note: 1. All drawings are the property of EBA Engineering, Inc. and shall remain confidential. 2. No part of these drawings may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of EBA Engineering, Inc. 3. The user of these drawings shall be deemed to have accepted the terms and conditions of the contract between the user and EBA Engineering, Inc. 4. EBA Engineering, Inc. is not responsible for any errors or omissions in these drawings. 5. The user shall be responsible for obtaining all necessary permits and approvals for the project. 6. The user shall be responsible for obtaining all necessary insurance for the project. 7. The user shall be responsible for obtaining all necessary bonds for the project. 8. The user shall be responsible for obtaining all necessary licenses for the project. 9. The user shall be responsible for obtaining all necessary permits for the project. 10. The user shall be responsible for obtaining all necessary approvals for the project. 11. The user shall be responsible for obtaining all necessary permits for the project. 12. The user shall be responsible for obtaining all necessary approvals for the project. 13. The user shall be responsible for obtaining all necessary permits for the project. 14. The user shall be responsible for obtaining all necessary approvals for the project. 15. The user shall be responsible for obtaining all necessary permits for the project. 16. The user shall be responsible for obtaining all necessary approvals for the project. 17. The user shall be responsible for obtaining all necessary permits for the project. 18. The user shall be responsible for obtaining all necessary approvals for the project. 19. The user shall be responsible for obtaining all necessary permits for the project. 20. The user shall be responsible for obtaining all necessary approvals for the project.

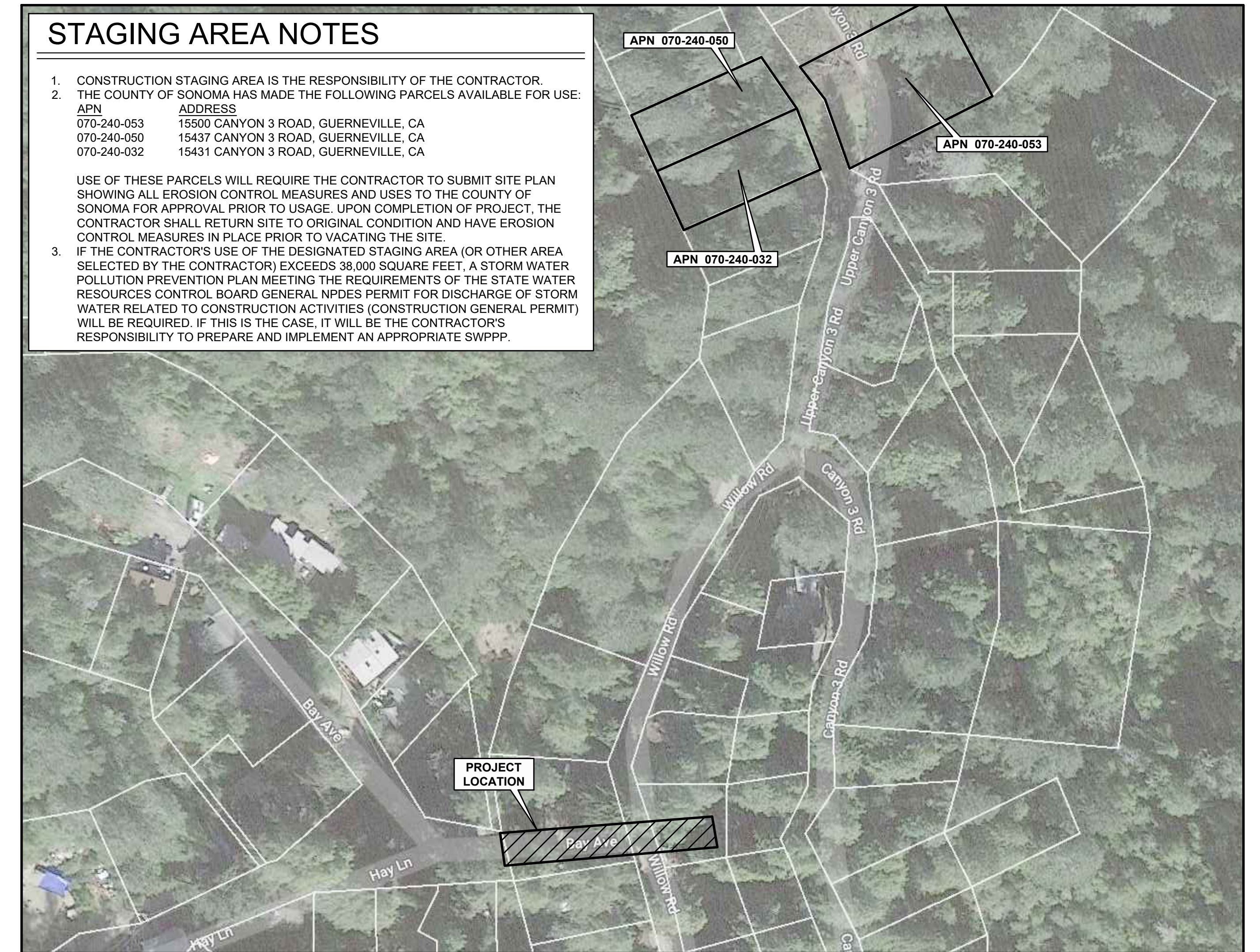
GENERAL NOTES

- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD COUNTY OF SONOMA AND EBA ENGINEERING HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- THE ENGINEER ASSUMES NO RESPONSIBILITY OTHER THAN FOR THE ADEQUACY OF THE DESIGN CONTAINED HEREIN.
- ALL MATERIALS TO BE USED ARE TO BE APPROVED BY THE COUNTY OF SONOMA PRIOR TO THEIR PLACEMENT. ANY MATERIALS INSTALLED PRIOR TO APPROVAL ARE SUBJECT TO REMOVAL.
- AFTER COMPLETION OF WORK, WORK AREAS SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- NO GUARANTEE IS INTENDED THAT UNDERGROUND CONSTRUCTIONS NOT SHOWN ON THE PLANS WILL NOT BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE AND THE CONTRACTOR IS CAUTIONED THAT THE ENGINEERS AND THE COUNTY OF SONOMA ASSUME NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN AND BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- ALL WORK SHALL CONFORM TO APPLICABLE SONOMA COUNTY CODES, STANDARDS, AND PROJECT SPECIAL CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMING SONOMA COUNTY DEPARTMENT OF FIRE SERVICES OF WORK PROGRESS SCHEDULES AND FOR OBTAINING NECESSARY INSPECTIONS/APPROVALS.
- THE COUNTY OF SONOMA SHALL PROVIDE THE NECESSARY MATERIAL AND SOILS TESTING INSPECTIONS AND OBSERVATIONS. THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE PRIOR TO REQUIRED TESTING.
- EXCESS EARTH MATERIAL SHALL BE PLACED IN AREAS DESIGNATED BY THE COUNTY OF SONOMA. INSPECTED/TESTED AS NECESSARY, SHOULD ANY MATERIAL NEED TO BE REMOVED FROM SITE, ALL OFFHAUL MATERIAL SHALL BE INCLUDED IN BID.
- THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES INCLUDING SEWERS AND STORM DRAINS PRIOR TO ANY TRENCHING TO ALLOW THE ENGINEER TO VERIFY THE GRADE AND ALIGNMENT OF THE UTILITIES, AND TO VERIFY DESIGN ASSUMPTIONS AND EXACT FIELD LOCATION. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENT MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS. THE CONTRACTOR IS CAUTIONED NOT TO ORDER PRECAST ITEMS OR INSTALL IMPROVEMENTS UNTIL ALL CONFLICTS ARE RESOLVED. ALL IMPROVEMENTS INSTALLED OR ORDERED PRIOR TO CONFLICT RESOLUTION SHALL BE DONE SOLELY AT THE CONTRACTORS RISK AND AT NO EXPENSE TO THE COUNTY OF SONOMA.

STAGING AREA NOTES

- CONSTRUCTION STAGING AREA IS THE RESPONSIBILITY OF THE CONTRACTOR.
- THE COUNTY OF SONOMA HAS MADE THE FOLLOWING PARCELS AVAILABLE FOR USE:

| APN | ADDRESS |
|-------------|--------------------------------------|
| 070-240-053 | 15500 CANYON 3 ROAD, GUERNEVILLE, CA |
| 070-240-050 | 15437 CANYON 3 ROAD, GUERNEVILLE, CA |
| 070-240-032 | 15431 CANYON 3 ROAD, GUERNEVILLE, CA |
- USE OF THESE PARCELS WILL REQUIRE THE CONTRACTOR TO SUBMIT SITE PLAN SHOWING ALL EROSION CONTROL MEASURES AND USES TO THE COUNTY OF SONOMA FOR APPROVAL PRIOR TO USAGE. UPON COMPLETION OF PROJECT, THE CONTRACTOR SHALL RETURN SITE TO ORIGINAL CONDITION AND HAVE EROSION CONTROL MEASURES IN PLACE PRIOR TO VACATING THE SITE.
- IF THE CONTRACTOR'S USE OF THE DESIGNATED STAGING AREA (OR OTHER AREA SELECTED BY THE CONTRACTOR) EXCEEDS 38,000 SQUARE FEET, A STORM WATER POLLUTION PREVENTION PLAN MEETING THE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD GENERAL NPDES PERMIT FOR DISCHARGE OF STORM WATER RELATED TO CONSTRUCTION ACTIVITIES (CONSTRUCTION GENERAL PERMIT) WILL BE REQUIRED. IF THIS IS THE CASE, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PREPARE AND IMPLEMENT AN APPROPRIATE SWPPP.



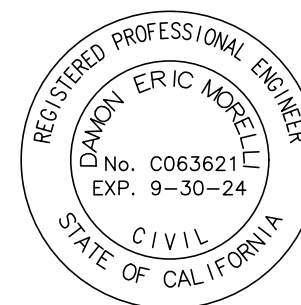
A DESIGNATED STAGING AREA
NOT TO SCALE

Note: 1. All drawings are the property of EBA Engineering. 2. All drawings are the property of EBA Engineering. 3. All drawings are the property of EBA Engineering. 4. All drawings are the property of EBA Engineering. 5. All drawings are the property of EBA Engineering. 6. All drawings are the property of EBA Engineering. 7. All drawings are the property of EBA Engineering. 8. All drawings are the property of EBA Engineering. 9. All drawings are the property of EBA Engineering. 10. All drawings are the property of EBA Engineering. 11. All drawings are the property of EBA Engineering. 12. All drawings are the property of EBA Engineering. 13. All drawings are the property of EBA Engineering. 14. All drawings are the property of EBA Engineering. 15. All drawings are the property of EBA Engineering. 16. All drawings are the property of EBA Engineering. 17. All drawings are the property of EBA Engineering. 18. All drawings are the property of EBA Engineering. 19. 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| DRAWING BY | AG |
| CHECKED BY | DEM |

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

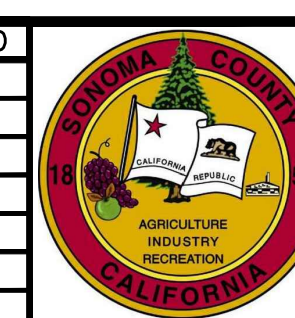


| "RECORD DRAWING" INFORMATION TO BE COMPLETED AFTER CONSTRUCTION | | | |
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CONSTRUCTION COMPLETED:

RESIDENT ENGINEER

AS BUILT DRAWINGS BY:



COUNTY OF SONOMA
 DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
 JOHANNES J. HOEVERTSZ, P.E., DIRECTOR

| CONSTRUCTION NOTES/STAGING AREA | | ROAD NUMBER | 80052 |
|--|--|---------------|---------|
| RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT | | BUDGET NUMBER | C20012 |
| | | FISCAL YEAR | 2022-23 |
| | | SHEET NUMBER | 2 |
| | | TOTAL SHEETS | 7 |

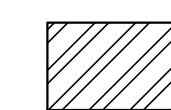

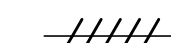

GENERAL NOTES

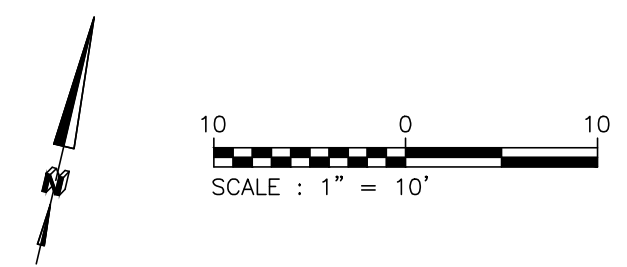
1. REFER TO PROJECT SPECIAL PROVISIONS & TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION NOT SHOWN.
2. ALL DISTURBED AREAS SHALL BE PROTECTED WITH EROSION CONTROL MEASURES. (SEE SHEET 5)
3. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS.

DEMOLITION NOTES

- R1 SAWCUT EXISTING AC/CONCRETE
- R2 REMOVE EXISTING FENCE NECESSARY FOR CONSTRUCTION & REPLACE IN KIND. REFER TO SHEET 4 FOR NEW LOCATION
- R3 REMOVE EXISTING TREE
- R4 EXISTING TENT STRUCTURE TO BE SALVAGED FOR REUSE. CONTRACTOR TO REPLACE TENT STRUCTURE AT PRIOR LOCATION AFTER COMPLETION OF CONSTRUCTION.
- R5 REMOVE EXISTING TREE STUMP
- R6 SAW CUT OPENING ON SIDE OF EXISTING CONCRETE CHANNEL FOR INSTALLATION OF NEW STORM DRAIN PIPE
- R7 REMOVE / ABANDON 2" WATER MAIN AS NECESSARY FOR CONSTRUCTION
- R8 REMOVE / ABANDON WATER SERVICE LINE AS NECESSARY FOR CONSTRUCTION
- R9 REMOVE EXISTING DRAINAGE CULVERT
- R10 LIMITS OF GRADING
- P1 PRESERVE EXISTING POWER POLE AND GUY WIRE
- P2 PRESERVE EXISTING SANITARY SEWER
- P3 PRESERVE EXISTING WATER MAIN
- P4 PRESERVE EXISTING WATER VALVE
- P5 PRESERVE EXISTING FENCE
- P6 PRESERVE EXISTING WATER METER AND BOX
- P7 PRESERVE EXISTING AC / CONCRETE
- P8 PRESERVE EXISTING CONCRETE CHANNEL

LEGEND

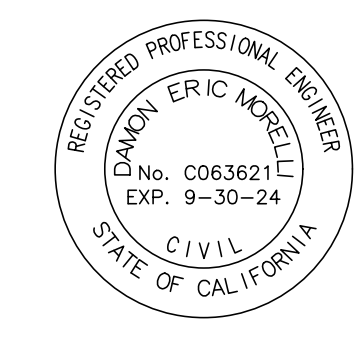
-  REMOVE EXISTING ASPHALT CONCRETE PAVEMENT & AGGREGATE BASE NECESSARY FOR CONSTRUCTION. ALL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR.
-  REMOVE EXISTING TREE
-  REMOVE EXISTING UTILITY / STRUCTURE
-  REFER TO KEYNOTE



Note: 1. All drawings are the property of the County of Sonoma. 2. All drawings are the property of the County of Sonoma. 3. All drawings are the property of the County of Sonoma. 4. All drawings are the property of the County of Sonoma. 5. All drawings are the property of the County of Sonoma. 6. All drawings are the property of the County of Sonoma. 7. All drawings are the property of the County of Sonoma. 8. All drawings are the property of the County of Sonoma. 9. All drawings are the property of the County of Sonoma. 10. All drawings are the property of the County of Sonoma.

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| DRAWING BY | AG |
| CHECKED BY | DEM |

REGISTERED CIVIL ENGINEER
 PLANS APPROVAL DATE _____



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| "RECORD DRAWING" INFORMATION TO BE COMPLETED AFTER CONSTRUCTION | | | |
| DATE | REVISION | BY | APPROVED |
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| CONSTRUCTION COMPLETED: | | | |
| RESIDENT ENGINEER _____ | | | |
| AS BUILT DRAWINGS BY: _____ | | | |

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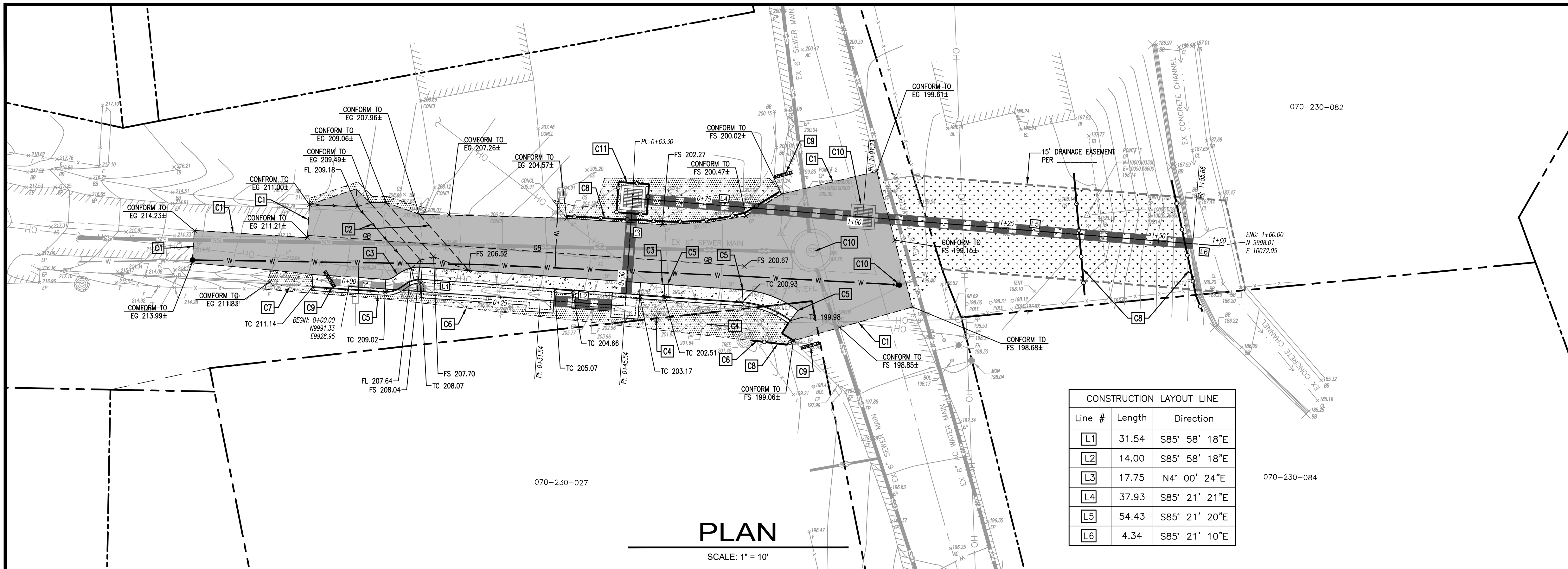


COUNTY OF SONOMA
 DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
 JOHANNES J. HOEVERTSZ, P.E., DIRECTOR

| | |
|-------------------------------------|---------|
| EXISTING CONDITIONS/DEMOLITION PLAN | |
| ROAD NUMBER | 80052 |
| BUDGET NUMBER | C20012 |
| FISCAL YEAR | 2022-23 |
| SHEET NUMBER | 3 |
| TOTAL SHEETS | 7 |

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|---------------|---------|
| ROAD NUMBER | 80052 |
| BUDGET NUMBER | C20012 |
| FISCAL YEAR | 2022-23 |
| SHEET NUMBER | 3 |
| TOTAL SHEETS | 7 |

RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT



| CONSTRUCTION LAYOUT LINE | | |
|--------------------------|--------|---------------|
| Line # | Length | Direction |
| L1 | 31.54 | S85° 58' 18"E |
| L2 | 14.00 | S85° 58' 18"E |
| L3 | 17.75 | N4° 00' 24"E |
| L4 | 37.93 | S85° 21' 21"E |
| L5 | 54.43 | S85° 21' 20"E |
| L6 | 4.34 | S85° 21' 10"E |

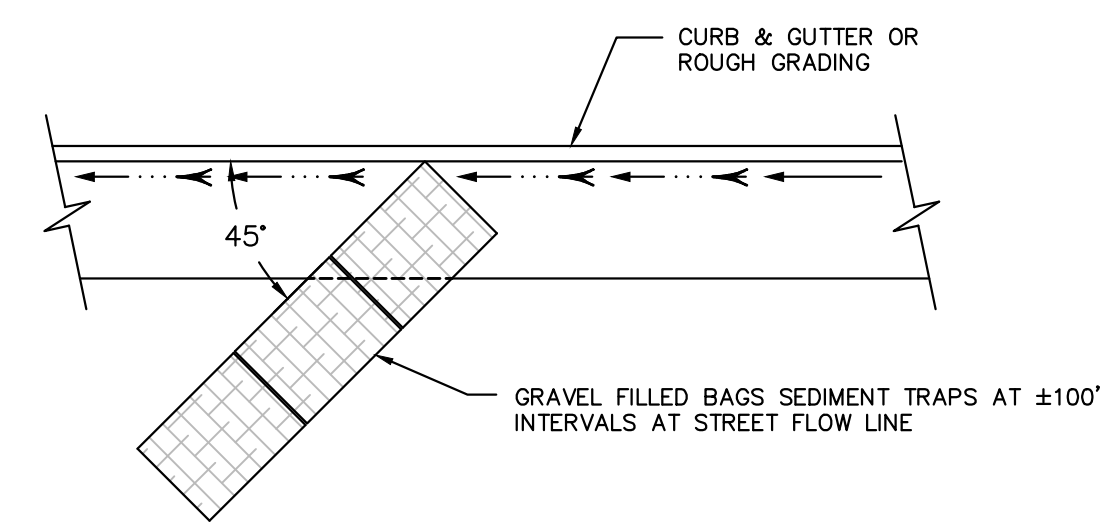
PLAN
SCALE: 1" = 10'

GENERAL NOTES

- REFER PROJECT SPECIAL PROVISIONS & TECHNICAL SPECIFICATIONS FOR ADDITIONAL INFORMATION NOT SHOWN.
- ALL DISTURBED AREAS SHALL BE PROTECTED WITH EROSION AND SEDIMENT CONTROL MEASURES.
- CONTRACTOR SHALL POT HOLE EXISTING UTILITIES PRIOR TO CONSTRUCTION TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS.

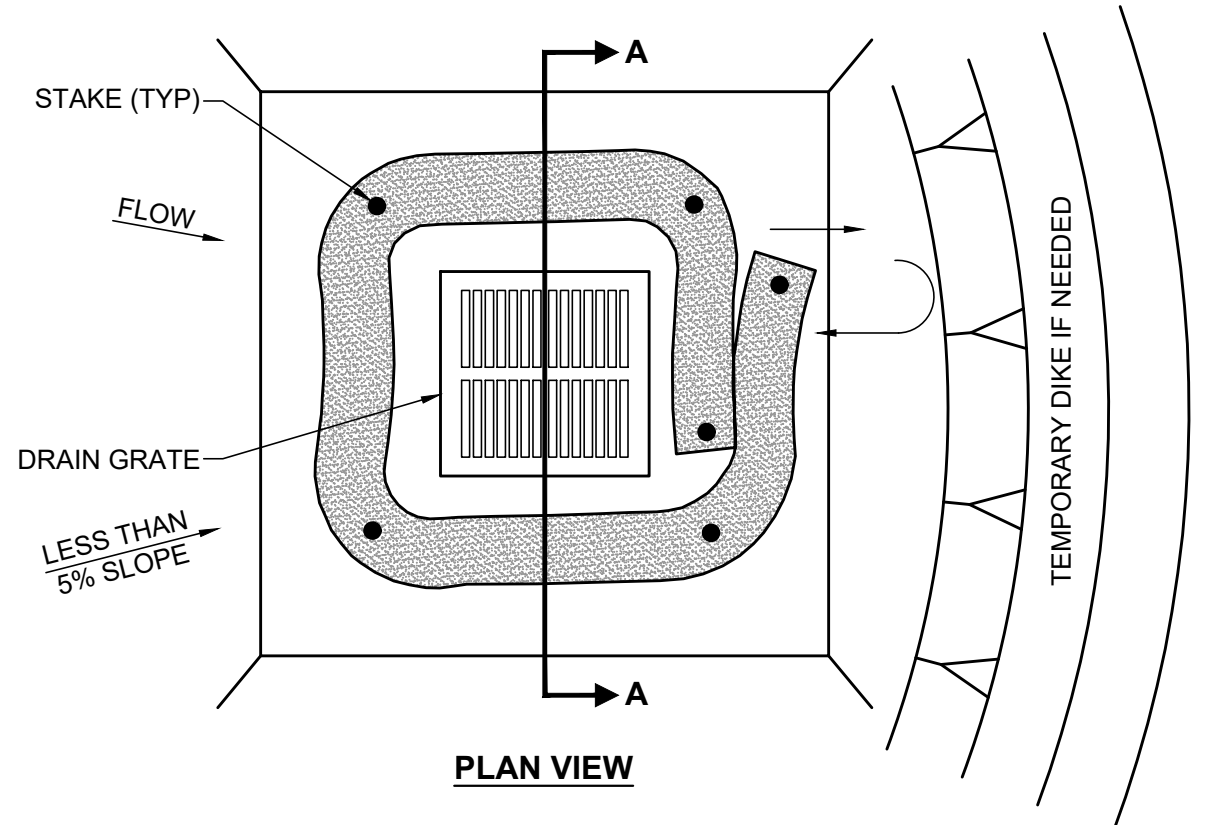
KEYNOTES

- C1 CONFORM TO EXISTING AC / CONCRETE
- C2 ASPHALT CONCRETE ROLLING DIP PER B
6
- C3 INSTALL CONCRETE CURB TYPE A2 (8" CURB HEIGHT) PER CALTRANS STANDARD PLAN A87A
- C4 PRESERVE EXISTING POWER POLE AND GUY WIRE
- C5 INSTALL CONCRETE CURB TYPE A2 (6" CURB HEIGHT) PER CALTRANS STANDARD PLAN A87A
- C6 REPLACE FENCE IN KIND
- C7 PROVIDE GRADE TRANSITION FROM SWALE TO GUTTER FLOWLINE
- C8 INSTALL STRAW WATTLE PER A
5
- C9 GRAVEL BAG FILTER B
5
- C10 ADJUST TO GRADE
- C11 INSTALL DROP INLET PROTECTION PER C
5

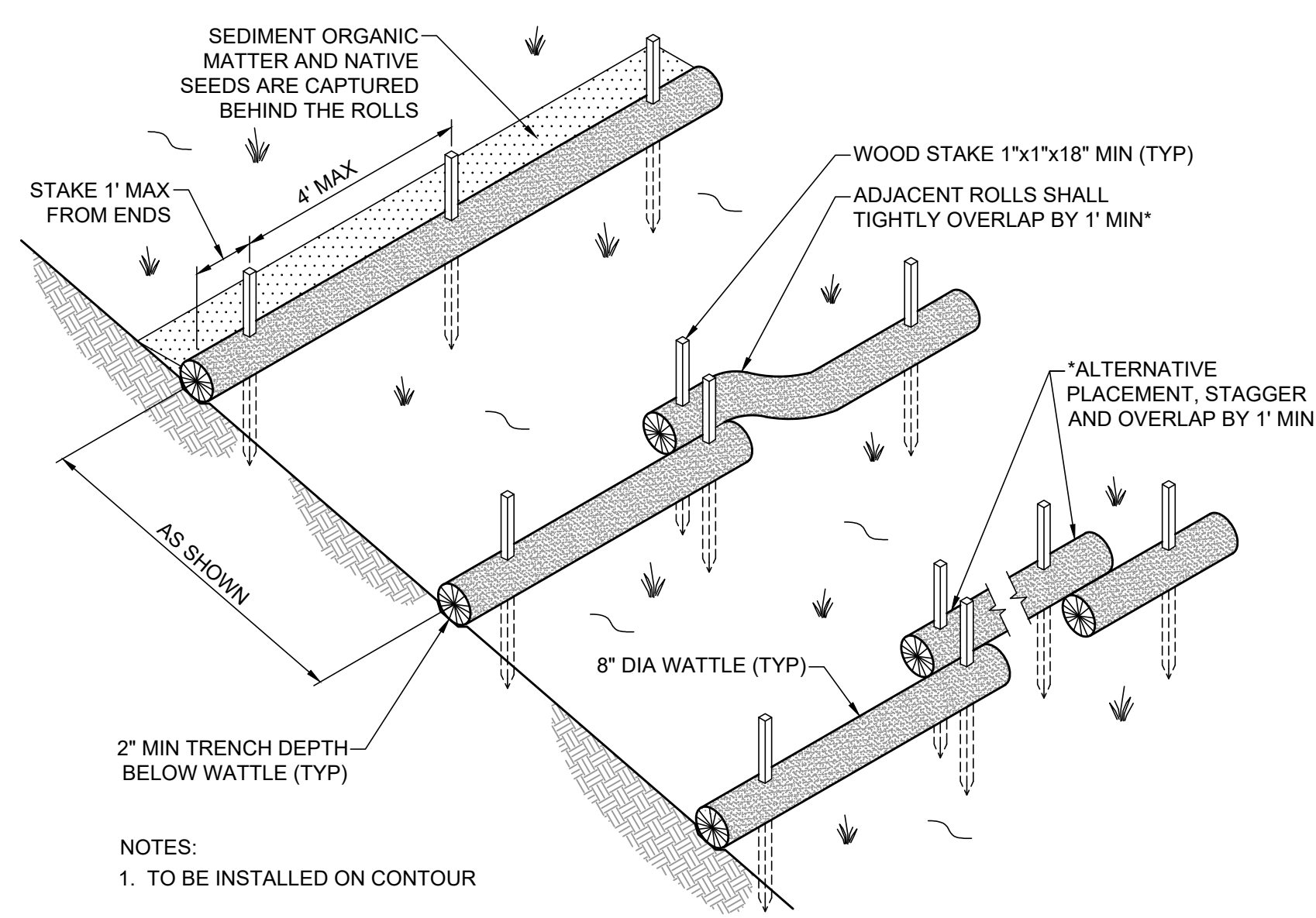
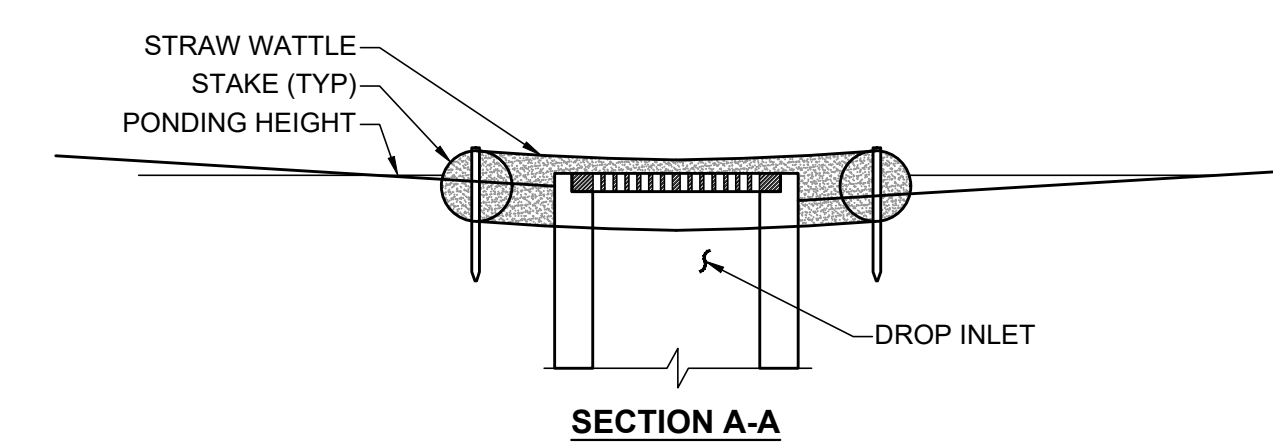


B GRAVEL BAG FILTER
NOT TO SCALE

- NOTES:
- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
 - USE 1X4 WOOD OR EQUIVALENT METAL STAKES, (3FT. MIN. LENGTH)
 - THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.
 - WATTLES SHALL BE COMPOSED OF COMPOSTABLE FILTER MATERIAL SUCH AS SILTSOXX AS MANUFACTURED BY FILTREXX (440-926-2067) OR EQUIVALENT



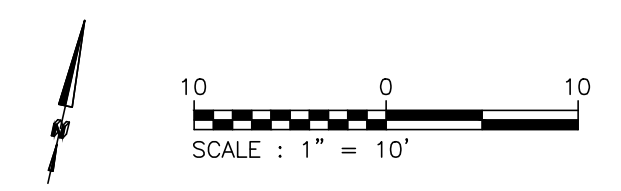
C DROP INLET PROTECTION
NOT TO SCALE



A STRAW WATTLE DETAIL
NOT TO SCALE

LEGEND

- ASPHALT CONCRETE SECTION PER A
6
- GRADED AREA - PROVIDE POSITIVE DRAINAGE
- HYDROSEED ALL GRADED AREAS PER SPECIFICATIONS
- STRAW WATTLE / DROP INLET PROTECTION
- GRAVEL BAG FILTER
- X REFER TO KEYNOTE



Note: 1. All drawings are the property of the County of Sonoma and shall remain confidential. 2. All drawings are the property of the County of Sonoma and shall remain confidential. 3. All drawings are the property of the County of Sonoma and shall remain confidential. 4. All drawings are the property of the County of Sonoma and shall remain confidential. 5. All drawings are the property of the County of Sonoma and shall remain confidential. 6. All drawings are the property of the County of Sonoma and shall remain confidential. 7. All drawings are the property of the County of Sonoma and shall remain confidential. 8. All drawings are the property of the County of Sonoma and shall remain confidential. 9. All drawings are the property of the County of Sonoma and shall remain confidential. 10. All drawings are the property of the County of Sonoma and shall remain confidential.

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| DRAWING BY | AG |
| CHECKED BY | DEM |

REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE



| "RECORD DRAWING" INFORMATION TO BE COMPLETED AFTER CONSTRUCTION | | | |
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CONSTRUCTION COMPLETED:

RESIDENT ENGINEER _____
AS BUILT DRAWINGS BY: _____

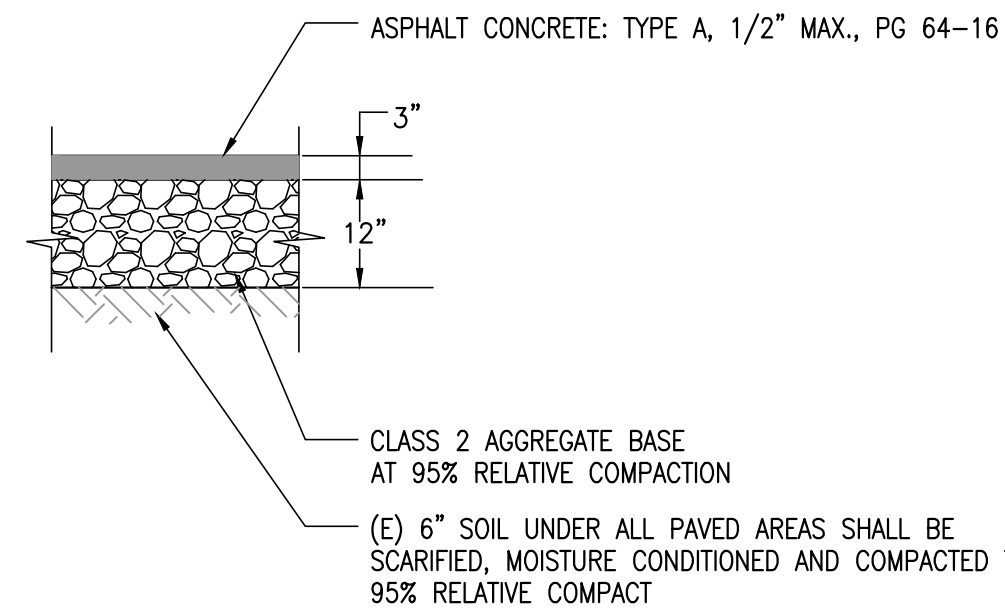
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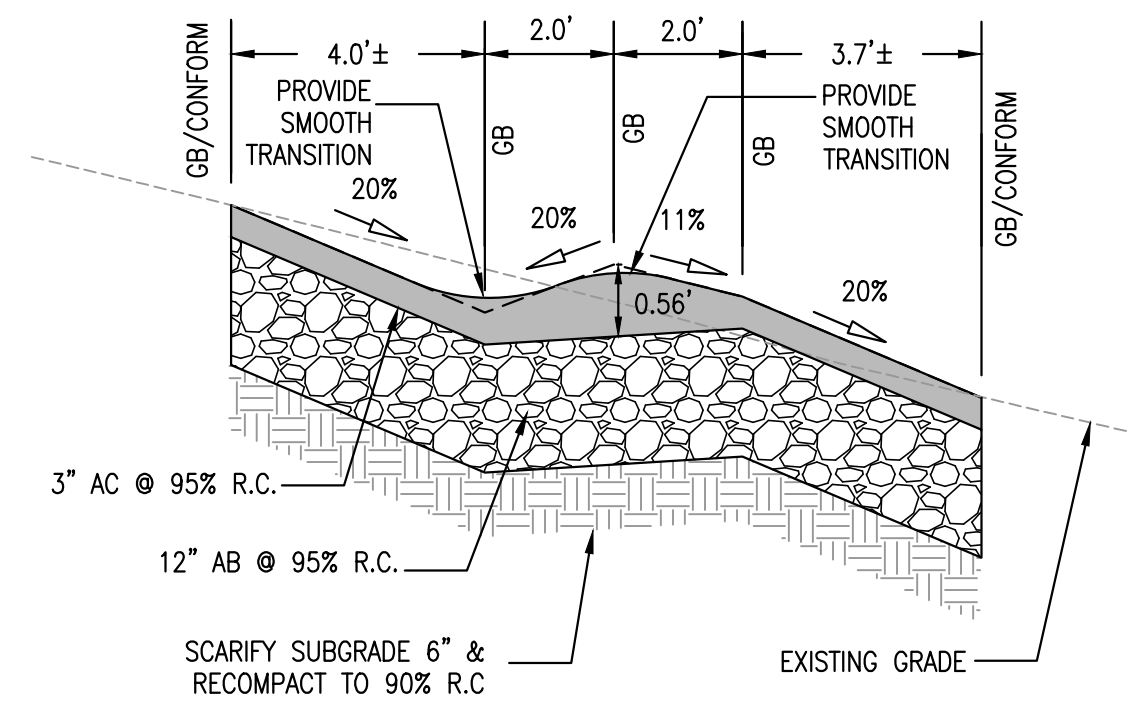
COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
JOHANNES J. HOEVERTSZ, P.E., DIRECTOR

GRADING AND EROSION CONTROL PLAN
RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT

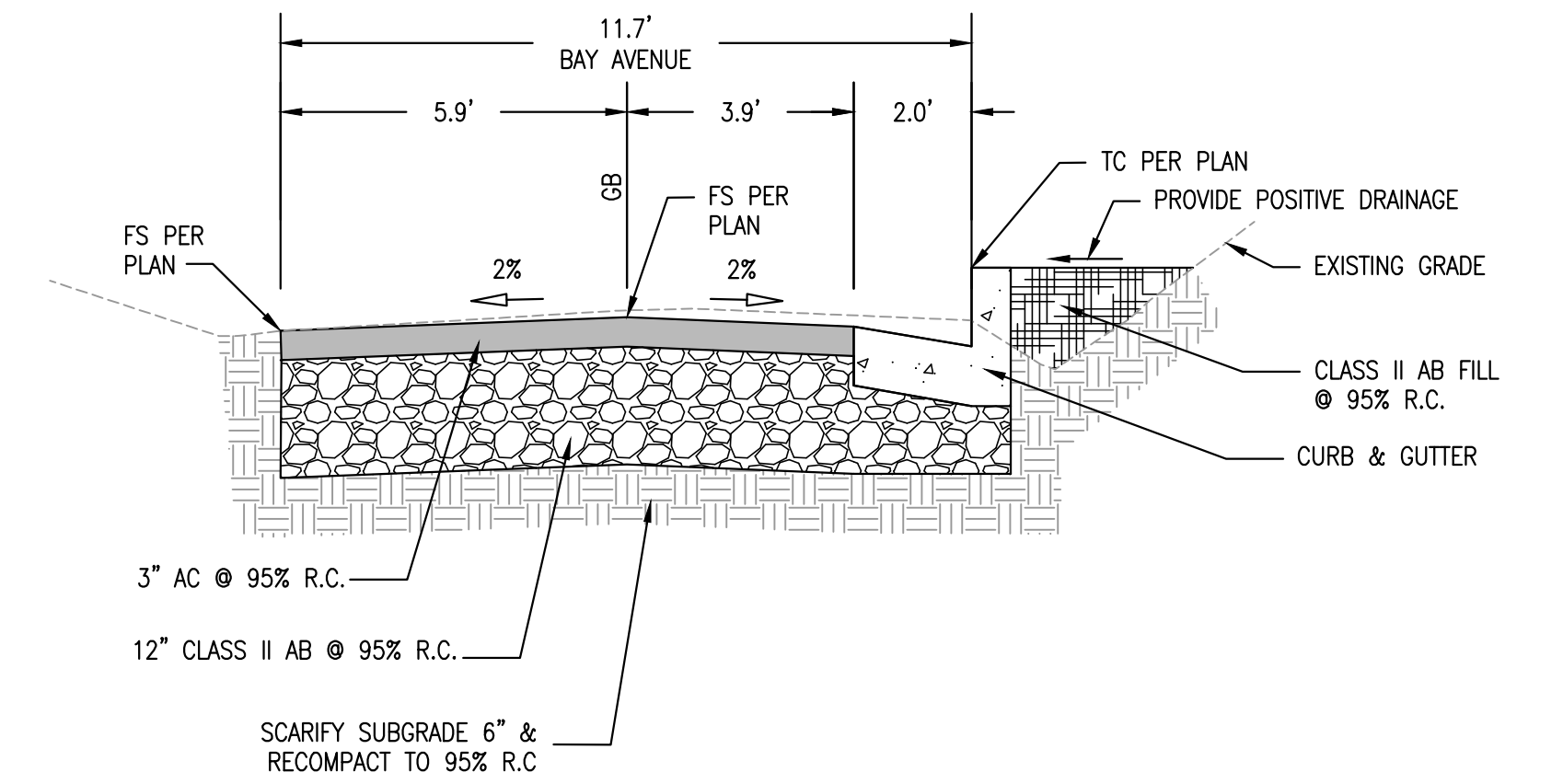
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| ROAD NUMBER | 80052 |
| BUDGET NUMBER | C20012 |
| FISCAL YEAR | 2022-23 |
| SHEET NUMBER | 5 |
| TOTAL SHEETS | 7 |



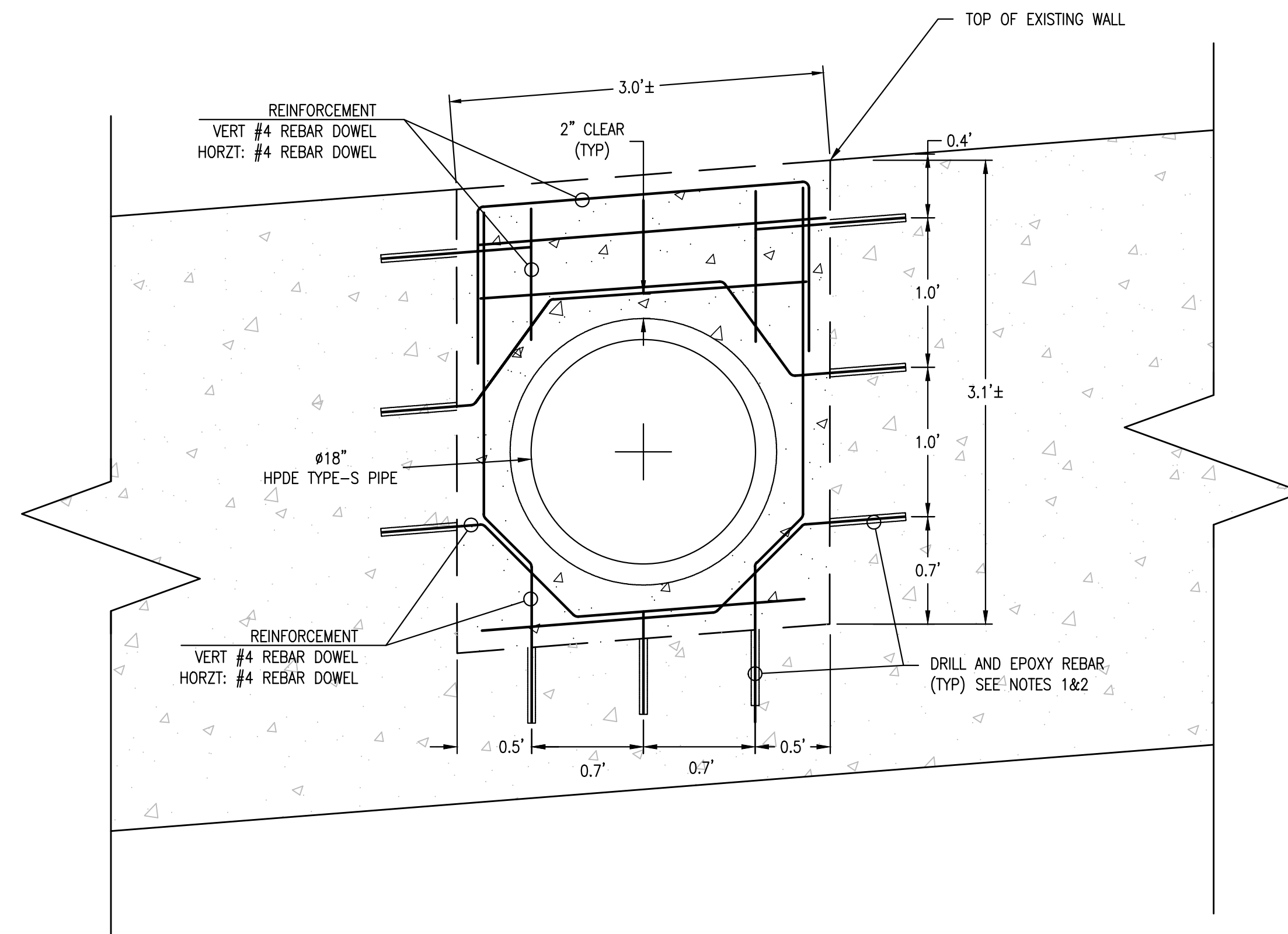
A TYPICAL SECTION
NOT TO SCALE



B TYPICAL SECTION CONCRETE ROLLING DIP
NOT TO SCALE



C BAY AVENUE TYPICAL SECTION
NOT TO SCALE



- NOTES
1. USE #4 GRADE 60, REBAR WITH 7.5" EMBEDMENT, USE 5/8" DRILL BIT AS PER MANUFACTURED RECOMMENDATIONS.
 2. USE HILTI HIT-HY 200 ADHESIVE WITH DEFORMED REINFORCING BARS (REBAR)
 3. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AFTER 28 DAY AND MAX SLUMP OF 4"
 4. EXISTING WALL THICKNESS = 6"±

D CONCRETE CHANNEL TIE-IN DETAIL
NOT TO SCALE

Note: All drawings are the property of the County of Sonoma. No part of these drawings may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the County of Sonoma.

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| DRAWING BY | AG |
| CHECKED BY | DEM |

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE



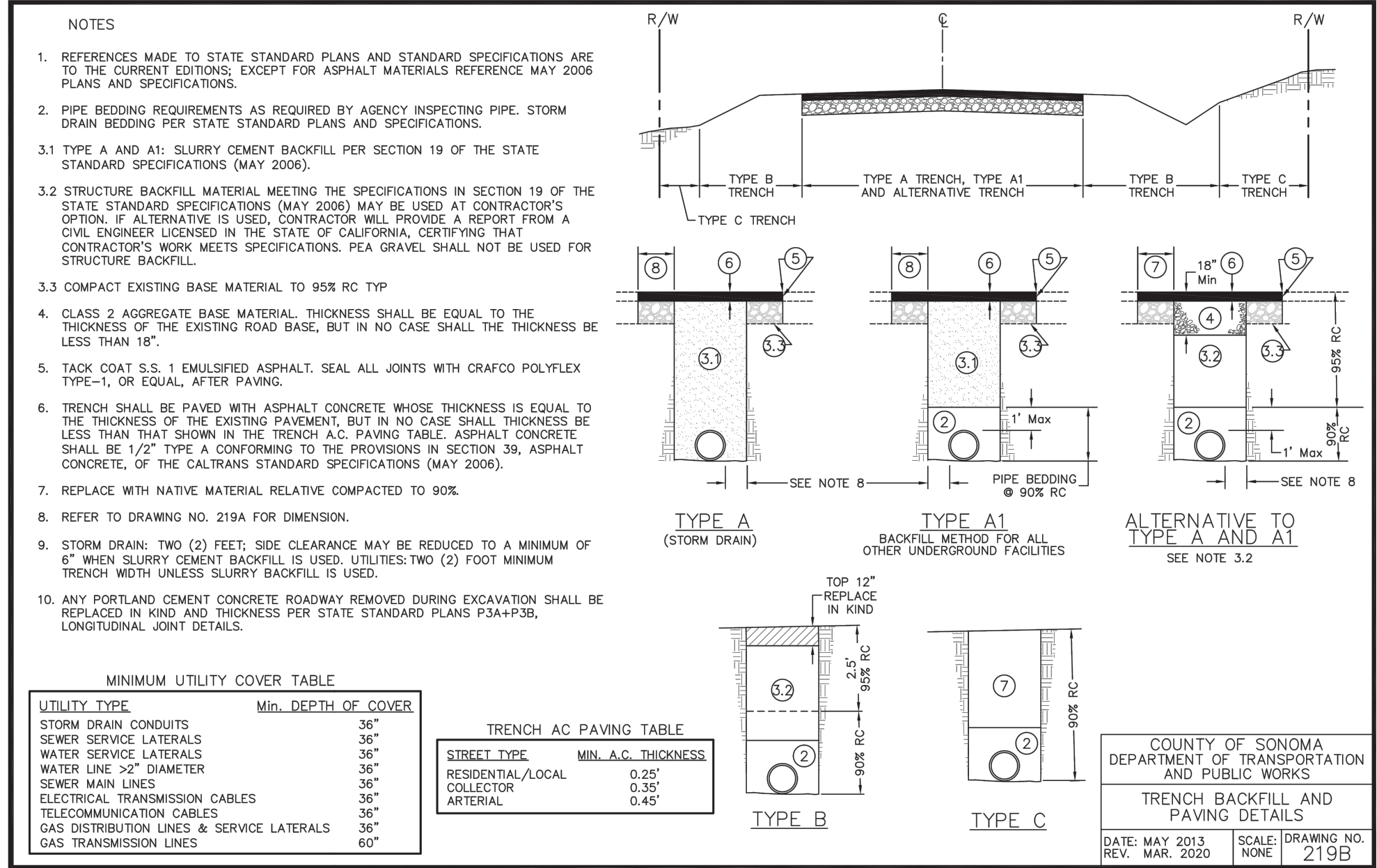
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| CONSTRUCTION COMPLETED: | |
| RESIDENT ENGINEER AS BUILT DRAWINGS BY: | |

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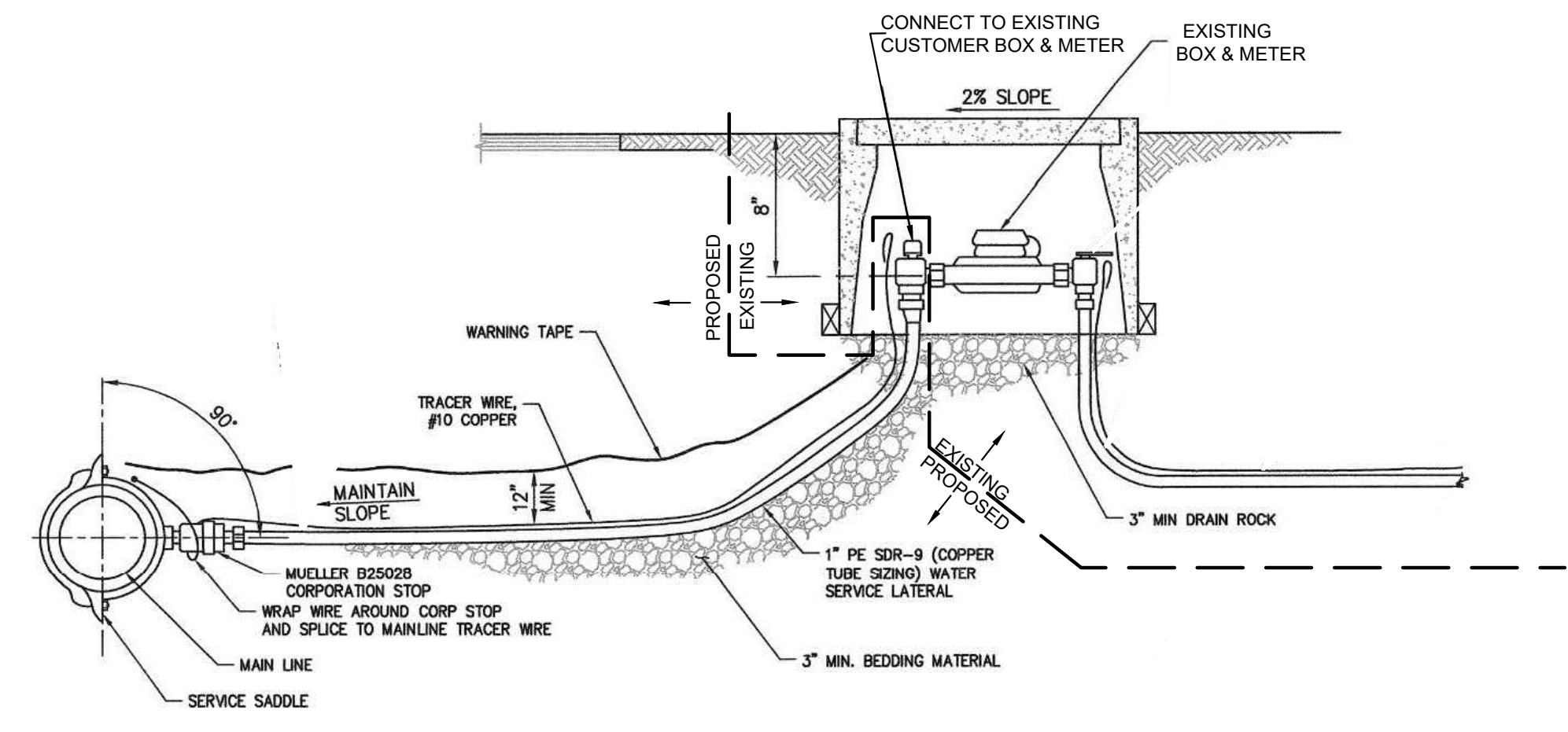


COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
JOHANNES J. HOEVERTSZ, P.E., DIRECTOR

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| MISCELLANEOUS DETAILS | | ROAD NUMBER | 80052 |
| RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT | | BUDGET NUMBER | C20012 |
| | | FISCAL YEAR | 2022-23 |
| | | SHEET NUMBER | 6 |
| | | TOTAL SHEETS | 7 |



A TRENCH BACKFILL AND PAVING DETAILS (STD 219B)
NOT TO SCALE



- NOTES:
- SLOPE FINISHED GRADE AWAY FROM METER BOX
 - STAINLESS STEEL INSERTS FOR POLYETHYLENE TUBING TO BE FORD INSERT-52
 - HDPE SERVICE SADDLE SHALL BE HDPE 4710, CLASS 200 ELECTROFUSION BRANCH SADDLE (IPS TO IPS), NSF 61 LISTED AND MEET OR EXCEED APPLICABLE ANSI/AWWA REQUIREMENTS MANUFACTURED BY GEORG FISHER (CENTRAL) OR APPROVED EQUAL. THE FITTINGS SHALL BE PROVIDED WITH BOTTOM UNDERCLAMPS OR LOADING TOOL AS SPECIFIED BY MANUFACTURER'S INSTALLATION PROCEDURE.

B NEW SINGLE WATER SERVICE FOR EXISTING METER
NOT TO SCALE

Note: 1. All drawings shall be prepared in accordance with the California State Board of Professional Engineers, Geologists, and Surveyors (BPEGS) rules and regulations. 2. All drawings shall be prepared in accordance with the California State Board of Professional Engineers, Geologists, and Surveyors (BPEGS) rules and regulations. 3. All drawings shall be prepared in accordance with the California State Board of Professional Engineers, Geologists, and Surveyors (BPEGS) rules and regulations. 4. All drawings shall be prepared in accordance with the California State Board of Professional Engineers, Geologists, and Surveyors (BPEGS) rules and regulations. 5. All drawings shall be prepared in accordance with the California State Board of Professional Engineers, Geologists, and Surveyors (BPEGS) rules and regulations.

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| DESIGN BY | AG |
| DRAWING BY | AG |
| CHECKED BY | DEM |

REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE



| DATE | REVISION | BY | APPROVED |
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CONSTRUCTION COMPLETED:

RESIDENT ENGINEER
AS BUILT DRAWINGS BY:

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COUNTY OF SONOMA
DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS
JOHANNES J. HOEVERTSZ, P.E., DIRECTOR

| MISCELLANEOUS DETAILS | |
|-----------------------|---------|
| ROAD NUMBER | 80052 |
| BUDGET NUMBER | C20012 |
| FISCAL YEAR | 2022-23 |
| SHEET NUMBER | 7 |
| TOTAL SHEETS | 7 |

| RIO NIDO CULVERT INSTALLATIONS MITIGATION PROJECT | |
|---|---------|
| ROAD NUMBER | 80052 |
| BUDGET NUMBER | C20012 |
| FISCAL YEAR | 2022-23 |
| SHEET NUMBER | 7 |
| TOTAL SHEETS | 7 |

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-D

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

Subject: Contract Meter Reader

RECOMMENDED ACTION:

Staff will provide an update on status of the open Contract Meter Reader position.

The draft Meter Reader Agreement has been prepared and is ready for review and discussion with the Board.

FISCAL IMPACT:

Approximately \$35,000 annually.

DISCUSSION:

Discussion/Action regarding contract meter reader position. Legal Counsel and the General manager have completed review of the contract for the Contract Meter Reader position. Included in the board packet is the Draft Contract for review and discussion.

**SERVICES AGREEMENT BETWEEN
THE SWEETWATER SPRINGS WATER DISTRICT AND**

FOR
METER READING SERVICES

THIS AGREEMENT for meter reading services is made by and between the Sweetwater Springs Water District, a county water district ("District"), and _____, a _____ ("Contractor") (together sometimes referred to as the "Parties") as of _____, 20__ (the "Effective Date").

Section 1. SERVICES. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to District the services described in the Scope of Work attached as Exhibit A at the time and place and in the manner specified therein. In the event of a conflict in or inconsistency between the terms of this Agreement and Exhibit A, the Agreement shall prevail.

- 1.1 **Term of Services.** The term of this Agreement shall begin on the Effective Date and continue until terminated by either Party in accordance with Section 8 herein or by mutual agreement in writing. The time provided to Contractor to complete the services required by this Agreement shall not affect the District's right to terminate the Agreement, as referenced in Section 8.
- 1.2 **Standard of Performance.** Contractor shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in which Contractor is engaged.
- 1.3 **Time.** Contractor shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary to meet the standard of performance provided in Subsection 1.2 above and to satisfy Contractor's obligations hereunder. Although the pace and rate of performing the services described herein are generally left to the discretion of Contractor, the parties agree that the amount of time required to perform the services described in Exhibit A, as well as anticipated "non-meter reading" activities that may be necessary from time to time, can be reasonably performed in less than 84 hours per month.

Section 2. COMPENSATION. In compensation for the Services, District shall pay Contractor One Dollar and Seventy Cents ("\$.70") for each meter accurately read. In the event that a meter was paid and later determined to be misread, District will make an adjustment in a subsequent pay period.

- 2.1 **Monthly Payment.** District shall make monthly payments for services satisfactorily performed. District shall determine the number of meters satisfactorily read and shall pay Contractor based on completed meter books for that month. District may make adjustments as necessary in subsequent months. Payment shall be made within 7 business days after each monthly Board meeting.

- 2.2 Reimbursable Expenses.** Contractor is responsible for their own expenses. Contractor shall not submit any expenses for reimbursement by the District, except as authorized by General Manager in writing.
- 2.3 Payment of Taxes.** Contractor is solely responsible for the payment of employment taxes incurred under this Agreement and any similar federal or state taxes.
- 2.4 Authorization to Perform Services.** The Contractor is not authorized to perform any services or incur any costs whatsoever under the terms of this Agreement unless authorized by District.
- 2.5 Payment Terms and Limitation on Hours Worked.** District agrees to pay Contractor for services actually performed in accordance with this Amendment, and in accordance with subsections 2.2 and 2.3 of the Agreement as full and complete compensation. In no event shall the number of hours worked by Contractor to complete the services contemplated hereunder exceed 900 hours in any calendar year.

Section 3. FACILITIES AND EQUIPMENT. Except as set forth herein, Contractor shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the services required by this Agreement, including the necessary vehicle.

Section 4. INSURANCE REQUIREMENTS. Before fully executing this Agreement, Contractor, at its own cost and expense, unless otherwise specified below, shall procure the types and amounts of insurance listed below against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work hereunder by the Contractor and its agents, representatives, employees, and subcontractors. Consistent with the following provisions, Contractor shall provide proof satisfactory to District of such insurance that meets the requirements of this section and under forms of insurance satisfactory in all respects, and that such insurance is in effect prior to beginning work to the District. Contractor shall maintain the insurance policies required by this section throughout the term of this Agreement. The cost of such insurance shall be included in the Contractor's proposal. VERIFICATION OF THE REQUIRED INSURANCE SHALL BE SUBMITTED AND MADE PART OF THIS AGREEMENT PRIOR TO EXECUTION.

4.1 Commercial General and Automobile Liability Insurance.

- 4.1.1 General Requirements.** Contractor, at its own cost and expense, shall maintain commercial general liability insurance for the term of this Agreement in an amount not less than **\$1,000,000** and automobile liability insurance for the term of this Agreement in an amount not less than **\$1,000,000** per occurrence, combined single limit coverage for risks associated with the work contemplated by this Agreement. If a Commercial General Liability Insurance or an Automobile Liability form or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit. Such coverage shall include but shall not be limited to, protection against claims arising from bodily and personal injury, including death resulting

therefrom, and damage to property resulting from activities contemplated under this Agreement, including the use of owned and non-owned automobiles.

4.1.2 Minimum Scope of Coverage. Commercial general coverage shall be at least as broad as Insurance Services Office Commercial General Liability occurrence form CG 0001 (most recent edition) covering comprehensive General Liability on an “occurrence” basis. Automobile coverage shall be at least as broad as Insurance Services Office Automobile Liability form CA 0001, Code 1 (any auto). No endorsement shall be attached limiting the coverage.

4.1.3 Additional Requirements. Each of the following shall be included in the insurance coverage or added as a certified endorsement to the policy:

- a. The Insurance shall cover on an occurrence or an accident basis, and not on a claims-made basis.
- b. District, its officers, officials, employees, and volunteers are to be covered as additional insureds as respects: liability arising out of work or operations performed by or on behalf of the Contractor; or automobiles owned, leased, hired, or borrowed by the Contractor .
- c. Contractor hereby agrees to waive subrogation which any insurer or contractor may require from vendor by virtue of the payment of any loss. Contractor agrees to obtain any endorsements that may be necessary to affect this waiver of subrogation.
- d. For any claims related to this Agreement or the work hereunder, the Contractor’s insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the District, its officers, officials, employees, or volunteers shall be excess of the Contractor’s insurance and shall not contribute with it.

4.1.4 Submittal Requirements. To comply with Subsection 4.1, Contractor shall submit the following:

- a. Certificate of Liability Insurance in the amounts specified in the section;
- b. Additional Insured Endorsement as required by the section;
- c. Waiver of Subrogation Endorsement as required by the section; and
- d. Primary Insurance Endorsement as required by the section.

4.2 Policy Requirements.

- 4.2.1 Acceptability of Insurers.** All insurance required by this section is to be placed with insurers with a Bests' rating of no less than A:VII.
- 4.2.2 Deductibles and Self-Insured Retentions.** Contractor shall disclose to and obtain the written approval of District for the self-insured retentions and deductibles before beginning any of the services or work called for by any term of this Agreement. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- 4.2.3 Wasting Policies.** No policy required by this Section 4 shall include a "wasting" policy limit (i.e. limit that is eroded by the cost of defense).
- 4.2.4 Endorsement Requirements.** Each insurance policy required by Section 4 shall be endorsed to state that coverage shall not be canceled by either party, except after 30 days' prior written notice has been provided to the District.

Section 5. INDEMNIFICATION AND CONTRACTOR'S RESPONSIBILITIES.

Contractor shall indemnify, defend with counsel acceptable to District, and hold harmless District and its officers, elected officials, employees, agents and volunteers from and against any and all liability, loss, damage, claims, expenses, and costs (including without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Contractor's performance of the services called for or its failure to comply with any of its obligations contained in this Agreement, except such Liability caused by the active negligence or willful misconduct of District.

The Contractor's obligation to defend and indemnify shall not be excused because of the Contractor's inability to evaluate Liability or because the Contractor evaluates Liability and determines that the Contractor is not liable to the claimant. The Contractor must respond within 30 days to the tender of any claim for defense and indemnity by the District. If the Contractor fails to accept or reject a tender of defense and indemnity within 30 days, in addition to any other remedy authorized by law, so much of the money due the Contractor under and by virtue of this Agreement as shall reasonably be considered necessary by the District, may be retained by the District until disposition has been made of the claim or suit for damages, or until the Contractor accepts or rejects the tender of defense, whichever occurs first.

Section 6. STATUS OF CONTRACTOR .

- 6.1 Independent Contractor.** At all times during the term of this Agreement, Contractor shall be an independent contractor and shall not be an employee of District. District shall have the right to control Contractor only insofar as the results of Contractor's services rendered pursuant to this Agreement; however, otherwise District shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Notwithstanding any other District, state, or federal policy, rule, regulation,

law, or ordinance to the contrary, Contractor and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by District, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of District and entitlement to any contribution to be paid by District for employer contributions and/or employee contributions for PERS benefits.

- 6.2 **Contractor Not an Agent.** Except as District may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of District in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, pursuant to this Agreement to bind District to any obligation whatsoever.

Section 7. LEGAL REQUIREMENTS.

- 7.1 **Compliance with Applicable Laws.** Contractor shall comply with all laws and regulations applicable to the performance of the work hereunder. Contractor's failure to comply with any law(s) or regulation(s) applicable to the performance of the work hereunder shall constitute a breach of contract.
- 7.2 **Nondiscrimination and Equal Opportunity.** Contractor shall comply with all applicable federal, state, and local laws, policies, rules, and requirements related to equal opportunity and nondiscrimination in employment, contracting, and the provision of any services that are the subject of this Agreement, including but not limited to the satisfaction of any positive obligations required of Contractor thereby.

Section 8. TERMINATION AND MODIFICATION.

- 8.1 **Termination.** District may cancel this Agreement at any time and without cause upon written notification to Contractor.

Contractor may cancel this Agreement upon 60 days' written notice to District and shall include in such notice the reasons for cancellation.

In the event of termination, Contractor shall be entitled to compensation for services performed to the effective date of termination; District, however, may condition payment of such compensation upon Contractor delivering to District any or all documents and other materials provided to Contractor or prepared by or for Contractor or the District in connection with this Agreement.

- 8.2 **Amendments.** The Parties may amend this Agreement only by a writing signed by all the Parties.
- 8.3 **Assignment and Subcontracting.** Contractor may not assign or subcontract this Agreement or any interest or obligation therein.

8.4 **Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between District and Contractor shall survive the termination of this Agreement.

SIGNATURES ON FOLLOWING PAGE

The Parties have executed this Agreement as of the Effective Date. The persons whose signatures appear below certify that they are authorized to sign on behalf of the respective Party.

SWEETWATER SPRINGS WATER DISTRICT

[NAME OF CONTRACTOR]

Eric Schanz, General Manager

[NAME, TITLE]

Approved as to Form:

_____, General Counsel

Exhibit A
Scope of Services

1. Read all meters within the District service area and record all readings accurately and timely pursuant to District procedure. This includes uncovering and pumping flooded meters as necessary. Meters blocked by vehicles or inaccessible shall be marked on the meter books for reading by the District or estimated for billing. Meter reader shall notify the District office immediately when there is a leak and note, damaged meter boxes or similar problems in services lines. District shall continue to read meters for change in billing, shutoffs, and turn-ons.

a. Hours of work. Contractor may determine his own hours of work. However, meters shall not be read prior to 7:00 a.m. nor after sunset.

b. Timeframe to complete reads: Meters for the cycle must be read after the 15th of the previous month and completed prior to the 8th day of the month in which billed. If the cycle is not read by the 8th day of the billing month, Contractor shall be deemed to have materially breached this Contract.

c. Reread: Meters not read that will not be estimated will be gathered and sent out for reread. Rereads must be completed and returned to the office by the end of the business day on the 13th of the billing month.

d. Uniform. While meter reading, contractor must carry a District-issued Contractor I.D. and/or wear a District T-shirt. A reflective vest or jacket must be worn at all times while reading meters.

2. To avoid excessive rereads, note with a "XX" all meter reads that seem high as compared to previous meter reads and check for a leak on meter dial.

3. Meters that cannot be read due to obstruction (for example, a car over or brush over) shall be so noted with a post-it in the meter book.

4. District will supply the following tools/equipment:

a. Meter books, post-its, hand pump, meter stick, and District-issued Contractor ID, reflective vest and t-shirts.

5. Contractor to supply own vehicle, gasoline, and any other tools/equipment Contractor wishes to use other than Section 4, above.

5302647.1

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-E

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

SUBJECT: MUNI-LINK BILLING SYSTEM UPDATE

RECOMMENDED ACTION:

(Discussion item only.)

FISCAL IMPACT:

\$11,000 implementation fee; \$1,195 monthly cost

DISCUSSION:

At past meetings, the District approved moving forward with the Muni-Link billing system. Staff has added line items to our budget for the costs to implement the billing system, as well as the monthly software fees.

Since our last meeting there are no new updates. Muni-Link continues to work with District staff to sort through issues they encountered regarding setting up our rate structure. Staff continues to work on transitioning to a new online payment vendor that has experience working with Muni-Link (NCR). We did receive a cost estimate from NCR that compares favorably to our current online payment vendor (TSYS/Authorize.net).

Our original GoLive date was February 20, 2023. Our current GoLive date continues to be the end of March. Muni-Link and District staff continue to work hard to bring this project to the finish line.

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-F

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

Subject: FY 2023-24 Budget

RECOMMENDED ACTION:

Discussion/Action by the Board of Directors for the preparation of the FY 2023-24. Staff is recommending the formation of the Budget Sub Committee to start work on the draft FY 2023-2024 budget.

FISCAL IMPACT:

Provides financial direction for FY 2023-2024.

DISCUSSION:

Staff is currently in the review process for the FY 2023-24 budget. There are currently several items to consider for this fiscal year's budget preparation. Inflation has caused increases in the cost of goods and services. This year's budget preparation will require a closer look at the increased cost to operations. At the same time there has been a decrease in water sales.

Items for Discussion/Action include:

- Formation of the Budget Sub Committee.
- Discussion of timeline.
- Rate Increase/inflation
- CIP Budget

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-G

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

Subject: Board subcommittee reports

RECOMMENDED ACTION:

Receive updates from active Board subcommittees.

FISCAL IMPACT:

Varies.

DISCUSSION:

This item is a standing placeholder for any Board subcommittee updates that have not been addressed in a separate item.

The Web Site Subcommittee met on February 24, 2023, to discuss and review the web site survey taken by Board members. Attached is an update on the survey results for further discussion.

Survey of Website Addition Priorities, 2-20-2023

After our meeting on Monday, February 17th, we restructured the Priority List as such:

[Action List Priorities from 1 (High Priority) to 8 (Low Priority):]

1 - Website Update Calendar - We discussed that the Home Page on the Website would be a good place to post a Calendar List of coming events or activities. This would include meetings, meter reading dates, flushing dates, MAC Meetings, LAFCO, etc.

2 - Water Rights History
- Inclusion of recent study. Possible need to vet with Legal to post publicly.
- Easy to load?

3 - Addition of Authorizing Statute / Enabling Act, etc, that Eric already has obtained about Sweetwater Springs.

This is a public document, so probably no need to vet

further. I think it's a good idea to post this, until we have a clear District history section.

More available at LAFCO? Yes, and also at the BOS and the Registrar of Voters. I want to follow up on these. I don't necessarily see posting all these documents, but they're good source material for a nice description of how and why the District was formed.

The enabling resolution (12/6/88 BOS 88-2184) refers to one LAFCO resolution 8/4/88 #1063 (determination and approving formation of District with conditions). It also references other resolutions 7/19/88 BOS 88-1267 (initiating LAFCO proceedings), 8/9/88 BOS 88-1459 (forming the District and boundaries) and 88-1460 (authorizing ordinance for a special tax for operating expenses) as well as 2 measures that voters approved on the 11/8/88 General Election Measure N (forming the District) and Measure O (authorizing a special tax for operating expenses).

4 - Add Resolutions and Ordinances (signed copies optional)

5 - Add more Board Meeting Packets to the website.

6 - Election Info / Special District Info
- Just post link to State and County Voter Registrar pages and list any specific requirements we have – like directors must reside and vote in the District.
- Design and add an Introduction Statement to the information about both items.

7 - Add Brown Act documentation
- Just post link to State Legislation. (To clear up why the Board's duties are like they are!) and maybe a link to changes for 2023, such as <https://www.procopio.com/brown-act-changes-starting-january-1-2023/>

8 - Add Municipal Service Review to site. Being of both low and priority and the lack of necessity for the document, this item could be left off altogether.

Additional subjects might still be of interest:

Surplus Land Management and Disposition – *I don't want to post this list. We're not trying to get rid of surplus land. I would rather that a group or person who's interested in our land to come to us and we deal with them on a one-by-one basis.*

Grant Application and Document Page

Maps and Diagrams of Systems and Process

Others – *Policies and Procedures – some to be posted internally (e.g. SOPs, Position Descriptions, etc.), others for the public (certain Board policies and customer service policies)*

Thanks,

Larry

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-H

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

**SUBJECT: SDRMA BOARD OF DIRECTORS NOMINATIONS and
CSDA BOARD OF DIRECTORS NOMINATIONS (SEAT C)**

RECOMMENDED ACTION:
(Discussion item only.)

FISCAL IMPACT:
None.

DISCUSSION:

The District received the attached Notification of Nominations regarding the 2023 SDRMA Board of Directors Election. This letter was provided as Correspondence at the February meeting, but at the request of Director Robb-Wilder has been added as an item for discussion at this Board meeting.

Since the February meeting, the District also received a similar Call for Nominations from CSDA. That correspondence is also attached.

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. V-H

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

**SUBJECT: SDRMA BOARD OF DIRECTORS NOMINATIONS and
CSDA BOARD OF DIRECTORS NOMINATIONS (SEAT C)**

RECOMMENDED ACTION:
(Discussion item only.)

FISCAL IMPACT:
None.

DISCUSSION:

The District received the attached Notification of Nominations regarding the 2023 SDRMA Board of Directors Election. This letter was provided as Correspondence at the February meeting, but at the request of Director Robb-Wilder has been added as an item for discussion at this Board meeting.

Since the February meeting, the District also received a similar Call for Nominations from CSDA. That correspondence is also attached.

Notification of Nominations – 2023 Election
SDRMA Board of Directors

January 18, 2023

Ms. Sukey Robb-Wilder
Board President
Sweetwater Springs Water District
Post Office Box 48
Guerneville, California 95446-0048

Dear Ms. Robb-Wilder:

Notice of Nominations for the Special District Risk Management Authority (SDRMA) Board of Directors 2023 Election is being provided in accordance with the SDRMA Sixth Amended and Restated Joint Powers Agreement. The following nomination information has been posted to the SDRMA website: Nomination Packet Checklist, Board of Director Fact Sheet, Nomination/Election Schedule, SDRMA Election Policy No. 2022-06, Sample Resolution for Candidate Nomination and Candidate Statement of Qualifications.

General Election Information - Three (3) Directors seats are up for election. The nomination filing deadline is Monday, May 1, 2023. Nomination submissions must be received by 4:30 pm at the SDRMA office on May 1, 2023, in original format with wet signatures. *Digital/Electronic signatures will not be accepted.* Ballots will be mailed to all SDRMA member agencies in mid-May. Mail-in ballots will be due Tuesday, August 8, 2023.

Nominee Qualifications - Nominees must be a member or the agency's governing body or full-time management employee (see SDRMA Election Policy 2022-06, Section 4.1) and be an active member agency of both SDRMA's property/liability and workers' compensation programs. Candidates must be nominated by resolution of their member agency's governing body and complete and submit a "Statement of Qualifications".

Nomination Documents and Information - Nomination documents (Nominating Resolution and Candidates Statement of Qualifications) and nomination guideline information may be obtained on SDRMA's website at www.sdrma.org. To obtain documents electronically:

From the SDRMA homepage, click on the "2023 Nomination & Election Information" button. All necessary nomination documents and election information may be downloaded and printed.



Nomination Filing Deadline – Nomination documents must be received in SDRMA’s office no later than 5:00 P.M. on Monday, May 1, 2023.

Please do not hesitate to contact us memberplus@sdrma.org or 800-537-7790, if you have any questions regarding the 2023 SDRMA Board of Director Nominations or the election process.

Sincerely,
Special District Risk Management Authority

A handwritten signature in blue ink, which appears to read 'Ellen Doughty', is placed below the typed name.

Ellen Doughty, ARM
Chief Member Services Officer



**California Special
Districts Association**

Districts Stronger Together

DATE: January 30, 2023

TO: CSDA Voting Member Presidents and General Managers

FROM: CSDA Elections and Bylaws Committee

**SUBJECT: CSDA BOARD OF DIRECTORS CALL FOR NOMINATIONS
SEAT C**

The Elections and Bylaws Committee is looking for Independent Special District Board Members or their General Managers who are interested in leading the direction of the California Special Districts Association for the 2024 - 2026 term.

The leadership of CSDA is elected from its six geographical networks. Each of the six networks has three seats on the Board with staggered 3-year terms. Candidates must be affiliated with an independent special district that is a CSDA Regular Member in good standing and located within the geographic network that they seek to represent.
(See attached CSDA Network Map)

The CSDA Board of Directors is the governing body responsible for all policy decisions related to CSDA's member services, legislative advocacy, education and resources. The Board of Directors is crucial to the operation of the Association and to the representation of the common interests of all California's special districts before the Legislature and the State Administration. Serving on the Board requires one's interest in the issues confronting special districts statewide.

Commitment and Expectations:

- Attend all Board meetings, usually 4-5 meetings annually, at the CSDA office in Sacramento.
- Participate on at least one committee, meets 3-5 times a year at the CSDA office in Sacramento.
(CSDA reimburses Directors for their related expenses for Board and committee meetings as outlined in Board policy).
- Attend, at minimum, the following CSDA annual events: Special Districts Legislative Days - held in the spring, and the CSDA Annual Conference - held in the fall.
*(CSDA does **not** reimburse expenses for the two conferences even if a Board or committee meeting is held in conjunction with the event)*
- Complete all four modules of CSDA's Special District Leadership Academy within 2 years of being elected.
*(CSDA does **not** reimburse expenses for the Academy classes even if a Board or committee meeting is held in conjunction with the event).*



California Special Districts Association

DISTRICT NETWORKS





**California Special
Districts Association**
Districts Stronger Together

2023 BOARD OF DIRECTORS NOMINATION FORM

Name of Candidate: _____

District: _____

Mailing Address: _____

Network: _____ (see map)

Telephone: _____
(PLEASE BE SURE THE PHONE NUMBER IS ONE WHERE WE CAN REACH THE CANDIDATE)

Fax: _____

E-mail: _____

Nominated by (optional): _____

Return this form, a Board resolution/minute action supporting the candidate, and Candidate Information Sheet by mail or email to:

CSDA
Attn: Amber Phelen
1112 I Street, Suite 200
Sacramento, CA 95814
(877) 924-2732

amberp@csla.net

DEADLINE FOR RECEIVING NOMINATIONS:

March 31, 2023 at 5:00 p.m.



2023 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information **MUST** accompany your nomination form and Resolution/minute order:

Name: _____

District/Company: _____

Title: _____

Elected/Appointed/Staff: _____

Length of Service with District: _____

1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):

2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):

3. List local government involvement (such as LAFCo, Association of Governments, etc.):

4. List civic organization involvement:

****Candidate Statement** – Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. **Any statements received in the CSDA office March 31, 2023, after 5:00 p.m. will not be included with the ballot.**

SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors

AGENDA NO. VI

FROM: Eric Schanz, General Manager

Meeting Date: March 2, 2023

Subject: GENERAL MANAGER'S REPORT

RECOMMENDED ACTION: Receive report from the General Manager.

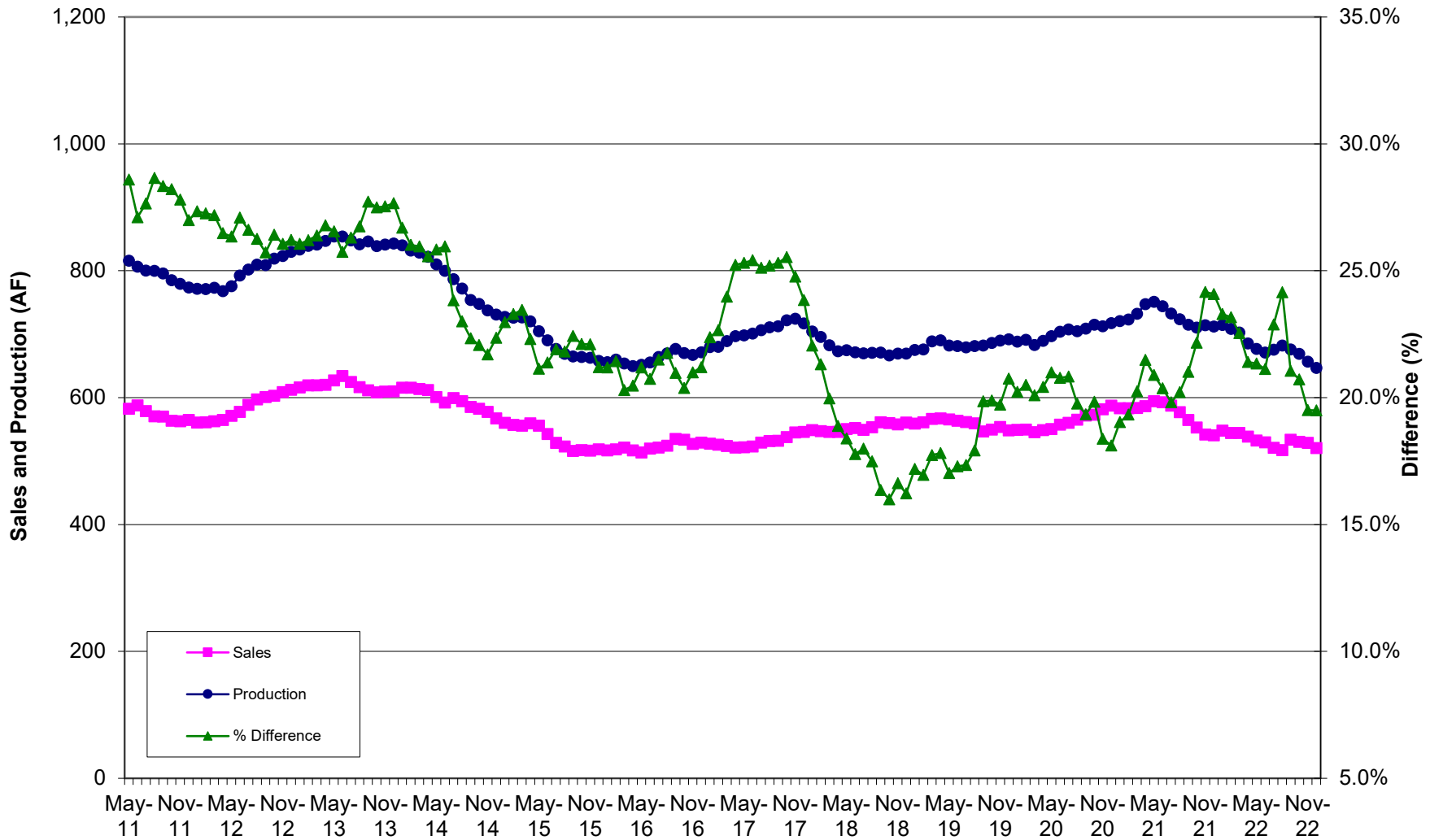
FISCAL IMPACT: None

DISCUSSION:

- 1. Laboratory Testing/ Regulatory Compliance:** Water quality tests confirm that all SSWD water meets all known State and Federal water quality standards.
- 2. Water Production and Sales:** Water sales in January were 11,236 Units (Monte Rio Cycle) and in February were 13,139 units (Guerneville cycle). Water use continues to trend down overall and is concerning as revenues have decreased. This is the lowest recorded water sales going back 20 years and reflects an overall downward trend over the past several months. Total combined Monte Rio and Guerneville water production for January were 42.29 AF.
- 3. Leaks:** There were a total of 2 watermain repairs in January requiring 11 work hours total, and 2 service leaks requiring 44 work hours total. The total number of leaks continues to trend down slightly and remains consistent to previous months. (Figure2).
- 4. In-House Construction Projects:** Due to the storms in early January, potential flooding and power outages staff was largely focused on maintaining pumping equipment, storm damage clean up.
- 5. CIP 2021 Old River Road/Woodland Drive:** Final Construction Walk through was completed with Coastland Engineering and Piazza Construction. Coastland Engineering has informed the district that the project is now substantially complete. The Notice of Completion has been recorded awaiting Board resolution to file.
- 6. Grants:** CDWR is in the process of reviewing invoices for partial reimbursement under terms of the grant agreement (Harrison Tank Replacement/Monte Rio Well Rehab/Monte Rio Bridge pipeline replacement design). The grant review process is taking some time to

complete due to the CDWR requirement to update invoices from Coastland Engineering. Coastland is in the process of reviewing and making the necessary updates.

**Figure 1. Water Production and Sales 12 Month Moving Averages
Sweetwater Springs Water District Since May 2011**



**Figure 2. Sweetwater Springs Water District Main and Service Pipeline Breaks
Moving Annual Average Since January 2011**

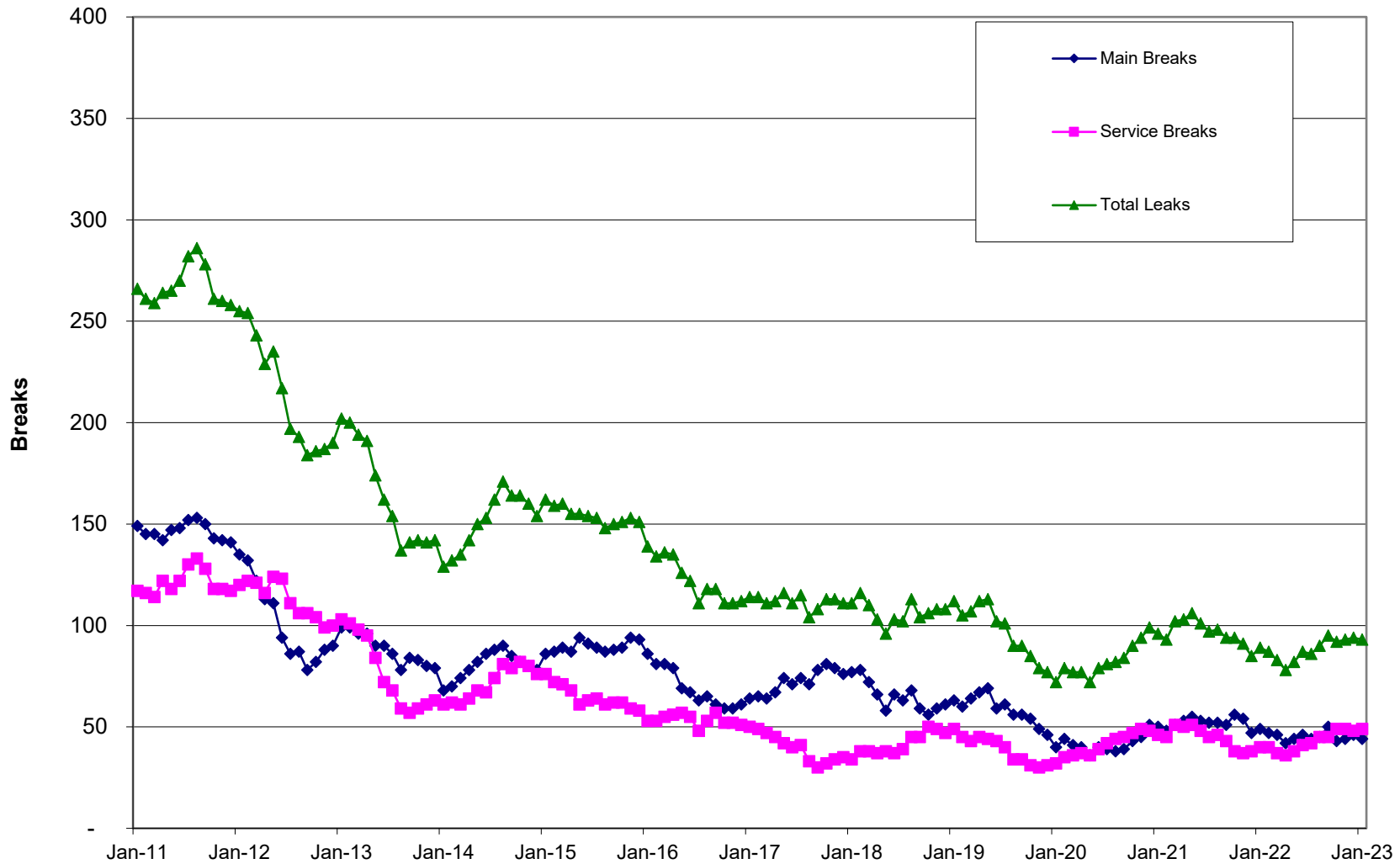
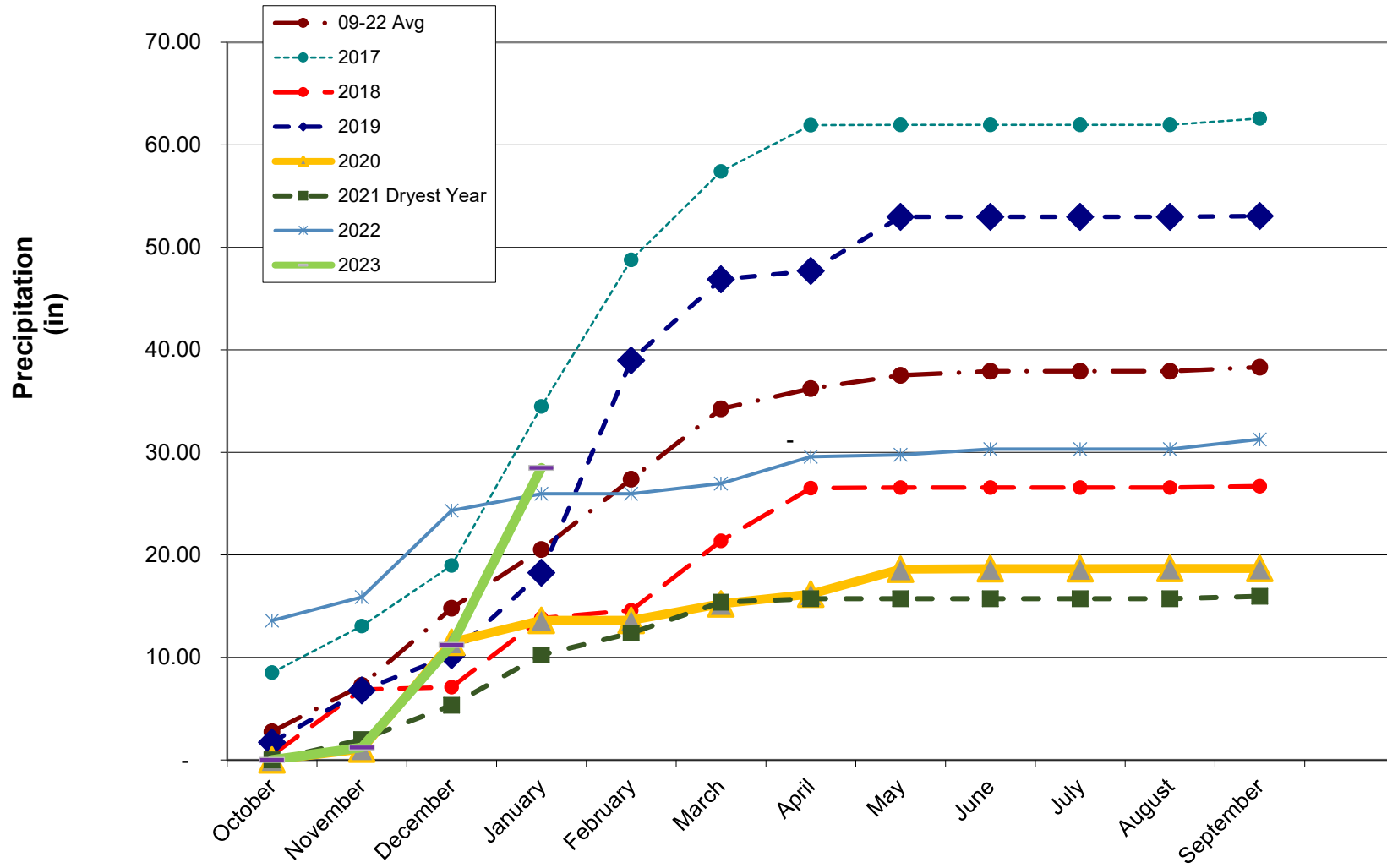
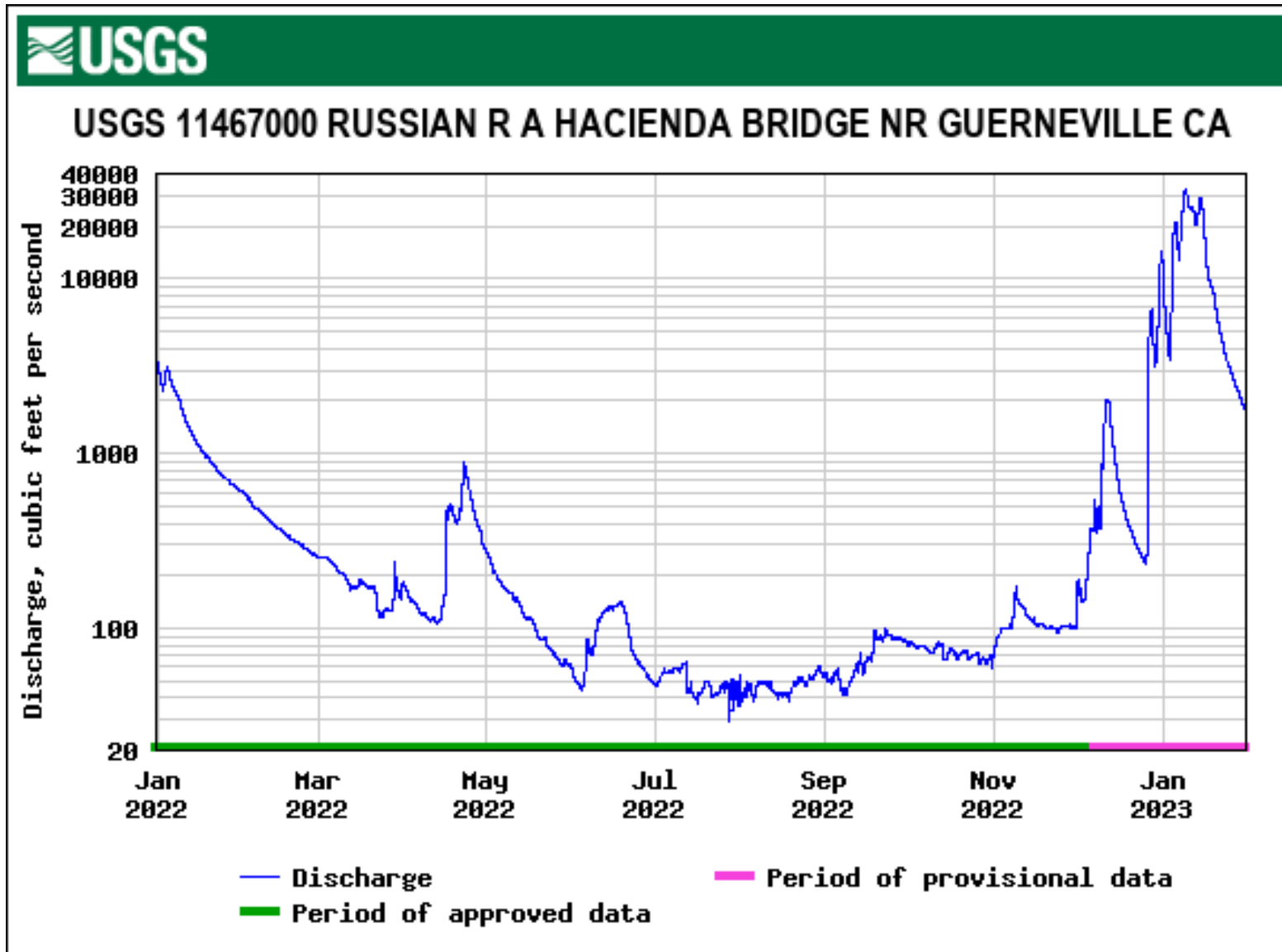


Figure 3. Guerneville Cumulative Monthly Rainfall





NUMBER OF WATER UNITS SOLD FY 22 - 23

| | FY01-02 | FY02-03 | FY03-04 | FY04-05 | FY05-06 | FY 06-07 | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11-12 | FY 12-13 | FY 13-14 | FY 14-15 | FY 15-16 | FY 16-17 | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 |
|---------------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| JULY | 34,371 | 26,447 | 26,355 | 33,578 | 22,195 | 27,469 | 27,147 | 28,091 | 21,035 | 17,808 | 20,061 | 22,850 | 25,890 | 22,074 | 16,377 | 19,044 | 19,608 | 20,255 | 19,273 | 22,297 | 21,558 | 20,306 |
| AUGUS | 39,803 | 37,750 | 42,080 | 41,615 | 37,799 | 41,863 | 37,202 | 37,907 | 34,878 | 32,328 | 28,486 | 33,190 | 29,163 | 32,208 | 26,070 | 26,811 | 29,485 | 28,325 | 27,419 | 28,582 | 26,302 | 22,555 |
| SEPTEN | 33,723 | 34,532 | 36,056 | 35,309 | 29,823 | 35,984 | 31,721 | 32,753 | 30,320 | 29,673 | 26,091 | 29,829 | 26,157 | 24,091 | 21,678 | 22,893 | 24,037 | 25,805 | 24,886 | 27,175 | 22,746 | 21,271 |
| OCTOB | 40,672 | 34,063 | 37,008 | 38,553 | 38,707 | 37,900 | 36,493 | 34,938 | 32,282 | 32,334 | 32,091 | 33,727 | 31,628 | 27,724 | 24,606 | 29,333 | 29,495 | 32,827 | 27,310 | 30,099 | 24,731 | 31,859 |
| NOVEM | 28,272 | 28,729 | 26,973 | 27,839 | 26,680 | 24,076 | 24,444 | 25,746 | 23,111 | 24,160 | 21,350 | 22,218 | 20,729 | 19,489 | 20,101 | 19,462 | 21,884 | 21,351 | 22,640 | 23,173 | 17,984 | 16,472 |
| DECEM | 25,380 | 27,758 | 27,283 | 25,508 | 23,925 | 25,550 | 21,556 | 24,762 | 21,116 | 20,802 | 20,299 | 22,818 | 23,452 | 21,256 | 20,873 | 18,070 | 21,297 | 20,468 | 22,288 | 25,982 | 21,110 | 20,372 |
| JANUA | 16,091 | 19,287 | 16,799 | 15,416 | 16,127 | 15,862 | 13,309 | 14,631 | 14,764 | 13,734 | 14,645 | 16,242 | 16,316 | 11,914 | 12,727 | 13,676 | 14,146 | 15,335 | 12,925 | 15,529 | 15,062 | 11,588 |
| FEBRU | 21,697 | 23,010 | 20,689 | 19,695 | 22,716 | 20,963 | 18,647 | 21,199 | 19,233 | 18,386 | 16,641 | 18,372 | 20,967 | 17,770 | 17,189 | 16,504 | 17,693 | 16,950 | 17,284 | 15,506 | 18,727 | 13,139 |
| MARCH | 17,207 | 15,092 | 17,374 | 14,985 | 15,456 | 16,693 | 14,556 | 14,417 | 14,414 | 12,387 | 12,569 | 13,884 | 13,772 | 12,351 | 13,058 | 12,315 | 11,657 | 12,653 | 12,827 | 12,846 | 11,236 | |
| APRIL | 17,728 | 19,527 | 21,406 | 21,089 | 18,825 | 21,047 | 19,227 | 18,414 | 17,611 | 17,129 | 17,936 | 17,914 | 17,053 | 16,636 | 17,748 | 16,809 | 16,279 | 18,547 | 16,886 | 17,038 | 17,024 | |
| MAY | 19,118 | 16,237 | 19,793 | 16,372 | 13,921 | 15,402 | 15,721 | 15,861 | 14,273 | 14,134 | 14,880 | 15,075 | 14,514 | 16,120 | 14,217 | 13,083 | 13,011 | 13,319 | 14,602 | 15,866 | 13,375 | |
| JUNE | 29,799 | 27,074 | 28,882 | 22,512 | 24,108 | 25,457 | 29,211 | 26,259 | 19,143 | 20,871 | 23,765 | 26,850 | 22,092 | 20,436 | 19,020 | 19,198 | 21,220 | 20,612 | 21,453 | 24,720 | 21,975 | |
| | | | | | | | | | | | | | | | | | | | | | | |
| Total | 323,861 | 309,506 | 320,698 | 312,471 | 290,282 | 308,266 | 289,234 | 294,978 | 262,180 | 253,746 | 248,814 | 272,969 | 261,733 | 242,069 | 223,664 | 227,198 | 239,812 | 246,447 | 239,793 | 258,813 | 231,830 | 157,562 |