

PLANS AND SPECIFICATIONS
FOR
TOWN PROJECT #19-813-0236
Crosswalk Improvements on State Route 9 at
Massol Avenue

Bid Opening
Wednesday, July 1, 2020

Approved by Town Council for the Town of Los Gatos

Recommended by:



Lisa Petersen, P.E.

Assistant Director/Town Engineer

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NOTICE TO CONTRACTORS

NOTICE TO CONTRACTORS

Due to COVID-19, only electronic bids will be received on the Town of Los Gatos plan room at www.losgatosplanroom.com until

2:00 PM

WEDNESDAY

July 1, 2020

for the following project:

**Project #19-813-0236
Crosswalk Improvements on State Route 9 at Massol Avenue**

at which time they will be opened electronically. After the bid opening, bid bonds from the lowest three responsible bidders must be submitted to the Town of Los Gatos Parks and Public Works Director at 41 Miles Avenue, Los Gatos, CA 95030 and be postmarked within three days of the bid opening date.

This following information is presented to indicate the size of the project and no warrant is made or intended as to final quantities:

The project includes crosswalk improvements on State Route 9 at Massol Avenue in the Town of Los Gatos. Work includes, but is not limited to, replacing existing flashing beacons with rectangular rapid flashing beacons, installation of a landscaped median island (including irrigation), a new streetlight foundation and pole, installation of green thermoplastic bike lanes and other pavement markings, as shown on the Plans.

All contractors and subcontractors have been required since April 1, 2015 to be registered with the Department of Industrial Relations (DIR). No contractor or subcontractor may be listed on a bid proposal or may work on a public works project unless registered with DIR.

All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement). For additional information, visit the DIR website at: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>.

Each bid must be accompanied by a cashier's check, certified check, or Bidder's Bond executed by a corporate surety authorized to engage in such business in the State of California, payable to the Town of Los Gatos, in an amount not less than ten percent (10%) of the amount of the Base Bid. The successful bidder will be required to furnish a Performance Bond in an amount equal to one-hundred percent (100%) of the contract price, and a Labor and Material Bond in an amount equal to one-hundred percent (100%) of the contract price. Said bonds shall also be executed by a corporate surety authorized to engage in such business in the State of California and be made payable to the Town of Los Gatos. Original Bidder's Bond with surety seal must accompany the bid.

If the successful bidder fails, neglects, or refuses for TEN (10) calendar days after the award of the contract to enter into the contract to perform the work, the cashier's check, certified check, or Bidder's Bond accompanying the bid and the amount therein named, shall be declared forfeited to the Town and shall be collected by it and paid into its general fund. No bidder may withdraw his/her bid for a period of SIXTY (60) calendar days after the date set for the opening thereof, and the same shall be subject to acceptance by the Town during this period.

The Town reserves the right to reject any or all bids, waive any irregularities in any bids and its determination as to which bid is the lowest responsible bid and is for the best interest of the Town shall be final. The Town shall have SIXTY (60) calendar days from and after the opening of the bids within which to make its determination.

The Contractor receiving the award of the contract shall begin work within FIFTEEN (15) calendar days after receipt of the Notice to Proceed and shall diligently prosecute the same to completion within the time restrictions as listed in the technical specifications and all work shall be completed by the time allotted in the technical specifications.

The Contractor shall have **forty (40) working days** to complete this project. Working days will be counted upon the Contractor's receipt of the Notice to Proceed, as noted above.

At the time the Contractor's bid proposal is submitted, the Contractor shall possess a Class A or Class C-10 California General Contractor's License. The Contractor shall also possess a valid Town of Los Gatos Business License at the time the contract is awarded.

The Town of Los Gatos hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, sex, religion, age or disability. **The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract, or such other remedy as recipient deems appropriate.**

Prevailing Wage. This project is subject to the requirements of Section 1720 et seq. of the California Labor Code requiring the payment of prevailing wages, the training of apprentices and compliance with other applicable requirements. Contractors and all subcontractors who perform work on the project are required to comply with these requirements. Prevailing wages apply to all projects over \$1,000 which are defined as a "public work" by the State of California. This includes: construction, demolition, repair, alteration, maintenance, and the installation of photovoltaic systems under a Power Purchase Agreement when certain conditions are met under Labor Code Section 1720.6. This include service and warranty work on public buildings and structures.

For any moneys earned by the Contractor and withheld by the Town to ensure the performance of the contract, the Contractor may, at the Contractor's request and expense, substitute securities equivalent to the amount withheld in the form and manner and subject to the conditions provided in Article 8, (commencing with Section 10263), Chapter 1, Part 2, Division 2 of the Public Contract Code of the State of California.

Plans and Specifications may be viewed at no cost via the internet at www.printscharlesrepro.com (Plan Room). Plans and Specifications may also be purchased at no cost by calling or e-mailing Prints Charles Reprographics at (408) 240-3330 or incoming@printscharlesrepro.com. Bidders requesting that Plans and Specifications be mailed/shipped to them will be charged at no cost. Plans, Specifications, and Plan Holder's list may also be viewed at the website noted above.

ATTEST:



Town Clerk

BID DOCUMENTS

BID FORM

**TO: The Town of Los Gatos, County of Santa Clara,
State of California, herein called Owner**

FROM: _____, herein called Contractor

A. UNIT PRICE SCHEDULE

Pursuant to and in compliance with your Notice to Contractors and the Contract Documents relating to the **PROJECT #19-813-0236 Crosswalk Improvements on State Route 9 at Massol Avenue**, including Addenda No. _____, _____, _____, _____, _____, the undersigned bidder, having become thoroughly familiar with the terms and conditions of the Contract Documents and with the local conditions affecting the performance and the costs of the Work at the place where the Work is to be done, and having inspected the site in all particulars, hereby proposes and agrees to fully perform the work within the time stated and in strict accordance with the Contract Documents (including the furnishing of any and all labor and materials) and do all the work required to construct and to complete said work in accordance with the Contract Documents, and that Contractor will take in full payment therefore the amounts shown on the following unit price schedule:

SCHEDULE OF QUANTITIES

Project #19-813-0236 Crosswalk Improvements on State Route 9 at Massol Avenue

ITEM NO.	SPEC. SECTION	ITEM DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	EXTENSION
1.	10-2	Traffic Control	L.S.	1		
2.	10-2	Changeable Message Signs	Ea.	2		
3.	10-3	Adjust Sanitary Sewer Manhole to Grade	Ea.	1		
4.	10-4	Install Curb (Type A1-8)	L.F.	167		
5.	10-7	Detail 25A Striping - Thermoplastic	L.F.	168		
6.	10-7	"Yield" Legend - Thermoplastic	Ea.	2		
7.	10-8	"Green Bike Lane Symbol with Arrow" Legend - TLG Std. TR-A - Thermoplastic	Ea.	4		
8.	10-8	5.0' Wide Dashed Green Bike Lane - Thermoplastic	L.F.	468		
9.	10-9	Install New R1-5 (CA) Sign on New Post	Ea.	2		
10.	10-10	Electrical Systems	L.S.	1		
11.	10-11	Irrigation Systems	L.S.	1		
12.	10-12	Landscape Planting	L.S.	1		
13.	10-13	Remove Tree	Ea.	2		

GRAND TOTAL BID (ITEMS #1-13): \$ _____

A Class **A** or **C-10** California Contractor's License is required.

B. BID FORM

The quantities shown on this bid form are approximate only, being given as a basis for the comparison of bids, and the Owner does not, expressly or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount or class or portion of the work as may be deemed necessary or advisable by the Director of Parks & Public Works. This bid will be rejected if bidder fails to provide a bid for each item. The Owner reserves the right to make a comparison of bids based on any combination of the above alternate bid items.

C. RESERVATION

It is understood that the Owner reserves the right to reject this bid, but that this bid shall not be withdrawn for a period of 60 days from the date prescribed for its opening.

D. SUBCONTRACTORS

Attached hereto and incorporated herein is the complete and entire list of subcontractors to be employed by the undersigned in the performance of the work.

E. NOTICE

If written notice of the acceptance of this bid is mailed or delivered personally to the undersigned within 60 days after the date set for the opening of this bid, or at any time thereafter before it is withdrawn, the undersigned bidder shall execute and deliver the Contract Documents to Owner in accordance with this bid as accepted, and will also furnish and deliver to Owner the Performance Bond, Labor and Material Bond as specified, and proof of insurance coverage as required in Part I, under "Construction Agreement," of these Specifications, all within 10 calendar days after personal delivery or after deposit in the mails, of the notification of acceptance of this bid. The above mentioned bonds shall be satisfactory to, and on the forms approved by Owner.

Notice of acceptance or request for additional information may be addressed to the undersigned at the address set forth below.

F. DISCLOSURE

The undersigned declares that this bid is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization or corporation; that the bid is genuine and not collusive or sham; that the undersigned has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid and has not directly or indirectly colluded or agreed with any bidder or anyone else to put in a sham bid or to refrain from bidding; that the undersigned has not directly or indirectly sought by agreement, communication or conference with anyone to fix his/her bid price or the bid price of any other bidder, or to fix any overhead, profit or cost element of such bid price or of that of any other bidder, or to secure any advantage against the Town of Los Gatos or anyone interested in the proposed Contract; that the only persons or parties interested in this bid as principals are those named herein; that all statements contained in this bid are true; that the undersigned has not directly or indirectly, submitted his/her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any other persons, partnership, corporation, or association except to such person or persons as have a direct financial interest in bidder's general business; and that the undersigned has not accepted any bid from any subcontractor or materialperson through any bid

depository, the Bylaws, Rules or Regulations of which prohibit or prevent the undersigned from considering any bid from any subcontractor or materialperson, which is not processed through said bid depository, or which may prevent any subcontractor or materialperson from bidding to any general contractor who does not use the facilities of or accept bids from or through such bid depository; and that the undersigned has not paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

G. WORDS AND PHRASES

Wherever in this bid an amount is stated in both words and figures, in case of discrepancy between words and figures, the words shall prevail; if all or any portion of the proposal is required to be given in unit prices and totals and a discrepancy exists between any such unit prices and totals so given, the unit prices shall prevail.

H. CERTIFICATION

The undersigned certifies that the Contract Documents have been thoroughly read and understood and that, except as may be specifically noted and contained in addenda, there are no discrepancies or misunderstandings as to the meaning, purpose or intent of any provision in the Contract Documents or as to the interpretation of the same. The undersigned hereby incorporates by reference, the same as though set out in full, all provisions of the Notice to Contractors and Information for Bidders published by Owner and pertaining to the work described in this bid.

Accompanying this bid is _____ [insert words "cash", "cashier's check", "certified check", or "bidder's bond", as the case may be], in amount equal to at least 10% of total of the bid, naming the Owner as Obligee or Payee, as applicable.

The names of all persons interested in the foregoing bid as principals are as follows:

IMPORTANT NOTICE: If bidder or other interested person is a corporation, give legal name of corporation, state where incorporated and names of the president and secretary thereof; if a partnership, give name of the firm, also names of all individual co-partners composing firm; if bidder or other interested person is an individual, give first and last names in full.

I. LICENSING

The undersigned is licensed in accordance with State Law providing for the registration of Contractors, License No. _____. [A class "A" General Contractor's License or "C-10" Specialty Contractor's License is required.] The License expiration date is _____. No payment for work or material under this Contract will be made by Owner unless and until the Owner receives verification from the State Registrar of Contractors that the records of the Contractor's State License Board indicate the successful bidder was properly licensed at the time the Contract was awarded.

Any bidder not so licensed shall be subject to all legal penalties imposed by law, including, but not limited to, an appropriate disciplinary action by the Contractor's State License Board.

In addition, failure of the bidder to obtain and maintain proper and adequate licensing for the Contract shall constitute a failure to execute or perform this Contract and shall result in the forfeiture of the security of the bidder. The representations made herein are under penalty of perjury.

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth below, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if bidder is a co-partnership, the name of the firm shall be set forth below, together with the signatures of the partner or partners authorized to sign contracts in behalf of the co-partnership; and if bidder is an individual, his/her signature shall be placed below.

I declare under penalty of perjury that I have the authority to execute this bid form and that the foregoing is true and correct.

BIDDER: _____
(FIRM NAME)

SIGNATURE: _____ PRINTED NAME: _____

TITLE: _____ DATE: _____

ADDRESS / TELEPHONE / E-MAIL: _____

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: _____

BIDDER'S BOND

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____ as Principal, and _____ as Surety, are held and firmly bound unto the Town of Los Gatos, a municipal corporation of the State of California (hereinafter called "Town") in the penal sum of 10% of the total aggregate amount of the bid of the Principal above named, submitted by said Principal to the Town for the Project listed below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. In no case shall the liability of the Surety hereunder exceed the sum of _____ (\$ _____) dollars.

Project #19-813-0236 Crosswalk Improvements on State Route 9 at Massol Avenue

The condition of this obligation is such that a bid to the Town for this project, for which bids are to be opened on **Thursday, July 2, 2020 at 2:00 p.m.**, has been submitted by Principal to Town:

BID TOTAL from BID SCHEDULE: _____

The quantities shown on the bid form are approximate only, being given as a basis for the comparison of bids, and the Owner does not, expressly or by implication agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount or class or portion of the work as may be deemed necessary or advisable by the Director of Parks & Public Works.

NOW THEREFORE, if the Principal is awarded the Contract and within the time and manner required under the Specifications, after the prescribed forms are presented to the Principal for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files 2 bonds with the Town, to guarantee faithful performance of the Contract and to guarantee payment for labor and materials as provided by law as well as files insurance certificates and equal employment opportunity documentation required under the bid, then this obligation shall be null and void; otherwise, it shall remain in full force.

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

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

PRINCIPAL:

SURETY:

(Seal)

(Seal)

(Seal)

(Seal)

(Seal) (Principal)

(Seal) (Principal)

(Address)

(Address)

(City, State, Zip)

(City, State, Zip)

(Phone Number)

(Phone Number)

NOTE: Attach Notary Acknowledgment for signatures of those executing for **PRINCIPAL** (owner) and **SURETY**.

CONTRACT DOCUMENTS

CONSTRUCTION AGREEMENT

This Agreement is dated for identification this ____ day of _____, 2020, and is made by and between the TOWN OF LOS GATOS, a California municipal corporation, whose address is 110 East Main Street, Los Gatos, California 95030 (hereinafter "TOWN"), and (CONTRACTOR NAME), whose address is (CONTRACTOR ADDRESS) (hereinafter "CONTRACTOR").

NOW, THEREFORE, the parties agree:

ARTICLE I: WORK TO BE DONE AND DOCUMENTS FORMING THE CONTRACT.

That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the said TOWN, and under the conditions expressed in the two bonds hereunto annexed, the said CONTRACTOR agrees with the said TOWN, at his own proper cost and expense, to do all the work and furnish all the materials and equipment necessary to construct and complete, in accordance with the plans and specifications hereinafter mentioned, in a good, workmanlike and substantial manner, under the supervision of the Town Engineer, or his, of the TOWN OF LOS GATOS, California, all the works and improvements described, mentioned and set forth in those plans and specifications on file in the Office of the Parks and Public Works of said TOWN, entitled:

"Plans and Specifications for
Project #19-813-0236 Crosswalk Improvements on State Route 9 at Massol Avenue"

which said plans and specifications and all the documents therein contained, including the TOWN OF LOS GATOS's Standard Provisions, are hereby specially referred to and by such reference made part of this contract.

ARTICLE II: CONTRACTOR'S ACCEPTANCE

CONTRACTOR agrees to receive and accept the prices shown on Exhibit "A," which is attached hereto and incorporated by reference herewith, as full compensation for furnishing all materials and equipment and for doing all the work described in the contract documents; also for all loss or damage as provided in the contract documents in the prosecution of the work until its acceptance by the Town Council of the TOWN OF LOS GATOS, and for well and faithfully completing the work, and the whole thereof, in the manner and according to the contract documents, plans and specifications, and the requirements of the Town Engineer.

ARTICLE III: ACCEPTANCE BY TOWN

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

ARTICLE IV: COMPLETION OF AGREEMENT

Reference is made to Part I – Page 1 of the TOWN's Project Specifications Notice to Contractors which are hereby made a part of this contract. Inasmuch as the work called for under this contract concerns a needed public improvement, the time of performance and completion of this work is of the essence of this contract. It is expressly understood and agreed by the parties hereto that all the work called for under this contract, in all its parts and requirements, shall be completed forty (40) working days from Notice to Proceed.

ARTICLE V: HOURS OF LABOR

The CONTRACTOR shall forfeit, as a penalty, to the TOWN, Twenty-Five Dollars (\$25) for each workman employed in the execution of the contract by him or by any subcontractor for each calendar day during which any workman is required or permitted to labor more than eight (8) hours in violation of the provisions of Sections 1810-1815 inclusive of the Labor Code and all amendments thereto.

ARTICLE VI: APPRENTICES

Attention is directed to the provisions in Sections 1777.5, 1777.6 and 1777.7 of the Labor Code governing the employment of apprentices by the CONTRACTOR or any subcontractor under him. CONTRACTOR and any of his subcontractors shall comply with the requirements of said sections of the Labor Code; CONTRACTOR shall have full responsibility for compliance with the said sections regardless of any other contractual or employment relationships alleged to exist.

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

ARTICLE VII: NONDISCRIMINATION

The CONTRACTOR sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. CONTRACTOR shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts.

Failure by CONTRACTOR to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as recipient deems appropriate.

ARTICLE VIII: INDEPENDENT CONTRACTOR

It is agreed that CONTRACTOR is an independent contractor, and all persons working for or under the direction of CONTRACTOR are CONTRACTOR's agents, servants and employees, and said persons shall not be deemed agents, servants or employees of TOWN.

ARTICLE IX: OWNERSHIP OF DATA AND DOCUMENTS

CONTRACTOR agrees that all records, specifications, data, maps, designs, graphics, writings, recordings and other tangible materials regardless of form or format, including, without limitation, electronically transmitted documents and ACAD files, and other collateral materials collected, compiled, drafted, prepared, produced and/or generated in the performance of this Agreement shall be the property

of TOWN. CONTRACTOR shall regularly provide such documents to TOWN upon TOWN's request. In the event that this Agreement is terminated prior to completion of the scope of work, CONTRACTOR shall provide all such data and documents to TOWN forthwith.

ARTICLE X: INSURANCE

a. Commercial General Liability/Automobile Liability Insurance:

CONTRACTOR shall obtain and maintain Commercial General Liability insurance and Automobile Liability insurance in the amount of One Million Dollars (\$1,000,000) per occurrence. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this contract or the general aggregate limit shall be twice the required occurrence limit. CONTRACTOR's insurance coverage shall be written on an occurrence basis.

b. Workers' Compensation Insurance:

CONTRACTOR shall obtain and maintain statutory Workers' Compensation insurance and Employer's Liability insurance in the amount of One Million Dollars (\$1,000,000) per accident.

CONTRACTOR is familiar with the Workers' Compensation laws of California (generally contained in Section 3700 of the Labor Code), including those provisions which provide for specific exemptions from the requirement that all employers must carry Workers' Compensation insurance, and CONTRACTOR maintains they are exempted under the law from the requirement to maintain Workers' Compensation insurance coverage.

In addition, during the term of any work for TOWN under said agreement: (1) CONTRACTOR will not employ any person in any manner so as to become subject to the Workers' Compensation laws of California, or (2) should CONTRACTOR become subject to the Workers' Compensation provisions of Section 3700 of the Labor Code for any reason, CONTRACTOR shall forthwith comply with those provisions and send evidence of financial compliance to TOWN.

c. Acceptability of Insurers: Insurance is to be placed with insurers with a current *Best Rating* of A:VII unless otherwise acceptable to TOWN.

d. Verification of Coverage: Insurance, deductibles or self-insurance retentions shall be subject to TOWN's approval. Original Certificates of Insurance with endorsements shall be received and approved by TOWN before work commences, and insurance must be in effect for the duration of the contract. The absence of insurance or a reduction of stated limits shall cause all work on the project to cease. Any delays shall not increase costs to TOWN or increase the duration of the project.

e. Other Insurance Provisions:

(1) The TOWN OF LOS GATOS, its officers, officials, employees and volunteers are to be covered as additional insured by Endorsement CG 20 10 11 85 or other endorsement approved by Town Attorney for Commercial General and Automobile Liability coverage.

(2) For any claims related to this project, CONTRACTOR's insurance coverage shall be primary and any insurance or self-insurance maintained by TOWN, its officers, officials, employees and volunteers shall not contribute to it.

(3) Each insurance policy required shall be endorsed that a thirty (30) day notice be given to TOWN in the event of cancellation or modification to the stipulated insurance coverage.

(4) In the event CONTRACTOR employs subcontractors as part of the work covered by this Agreement, it shall be the responsibility of CONTRACTOR to ensure that all subcontractors comply with the same insurance requirements that are stated in this Agreement.

(5) Approval of the insurance by TOWN or acceptance of the Certificate of Insurance by TOWN shall not relieve or decrease the extent to which CONTRACTOR may be held responsible for payment of damages resulting from CONTRACTOR's services or operation pursuant to this Agreement, nor shall it be deemed a waiver of TOWN's rights to insurance coverage hereunder.

(6) If, for any reason, CONTRACTOR fails to maintain insurance coverage that is required pursuant to this contract, the same shall be deemed a material breach of contract. TOWN, at its sole option, may terminate this contract and obtain damages from CONTRACTOR resulting from said breach. Alternately, TOWN may purchase such required insurance coverage, and without further notice to CONTRACTOR, TOWN may deduct from sums due to CONTRACTOR any premium costs advanced by TOWN for such insurance.

ARTICLE XI: HOLD HARMLESS

CONTRACTOR hereby agrees to and shall hold TOWN, its elective and appointive boards, commissions, officers, agents, registered volunteers, and employees harmless from any liability for damage or claims for damage for personal injury, including death, as well as from claims for property damage and any other claims of any sort whatsoever, including, but not limited to, any liabilities, claims, losses, or expenses in any manner caused by, arising out of, or in connection with, either directly or indirectly, the construction or installation of the work, the guarding of the work, the use of improper materials in construction of the work, or the negligent, willful, or intentional acts or omissions by CONTRACTOR or CONTRACTOR's subcontractors, agents, or employee operations under this Agreement, whether such operations by CONTRACTOR or by any of CONTRACTOR's subcontractors, or by any one or more persons directly or indirectly employed by, or acting as agent for CONTRACTOR or any of CONTRACTOR's subcontractors during the progress of the work or at any time before its completion and final acceptance, excepting suits and actions brought by the CONTRACTOR for default of this Agreement or arising from the sole active negligence or willful misconduct of the TOWN. The Town Council may retain so much of the money due to the CONTRACTOR as shall be reasonably necessary to protect the TOWN, until disposition has been made of such suits or claims for damages as aforesaid.

CONTRACTOR agrees to and shall pay TOWN's cost of defense (or, at the sole option of the TOWN, CONTRACTOR shall defend with counsel approved by the TOWN Attorney) and indemnify TOWN and its elective and appointive boards, commissions, officers, agents, and employees from any suits or actions at law or in equity arising out of the execution, adoption or implementation of this Agreement (exclusive of any such actions brought by CONTRACTOR), such indemnification to include all costs of defense, judgments, and any awards of attorneys' fees.

Should any accident or incident causing death, personal injury or property damage occur between the date CONTRACTOR is notified that its General Liability and/or Workers Compensation Insurance is canceled and the effective date of such cancellation, CONTRACTOR's obligation to indemnify, defend and save harmless the TOWN, as provided for hereinabove, shall in no manner be affected by the fact that the TOWN had not received the notice of cancellation prior to the date of such accident or incident.

ARTICLE XII: BONDING REQUIREMENT

CONTRACTOR agrees to post a Faithful Performance Bond and a payment bond for Labor and Materials, or other guarantees, in the required amounts upon bond forms provided by the TOWN, guarantying the performance of the terms of this Agreement. Surety issuing bonds for CONTRACTOR shall be approved by the U.S. Department of Treasury's Financial Management Service and shall be listed on the most current Treasury Circular 570 as contained in the Federal Register.

Contractor agrees to allow five percent of the faithful performance bond to remain in effect for a period of two years following Town Council project acceptance as guarantee for any needed repair or replacement caused by defective materials and workmanship.

ARTICLE XIII: MAINTENANCE AND GUARANTY

CONTRACTOR shall promptly repair, replace, restore, or rebuild, as the TOWN may determine, any finished product in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during a two (2) year period subsequent to the date of final acceptance.

This article does not in any way limit the guaranty on any items for which a longer guaranty is specified or on any items which a manufacturer gives a guaranty for a longer period, nor does it limit the other remedies of the TOWN in respect to a latent defect, fraud or implied warranties. CONTRACTOR shall furnish the TOWN all appropriate guaranties or warranty certificates upon completion of the project.

ARTICLE XIV: SHORING FOR TRENCHES

If the contract specifies an expenditure of Twenty-Five Thousand Dollars (\$25,000) or greater for trenching, and if the depth of the trench is five feet (5') or more, then Section 6705 of the Labor Code shall also be applicable.

ARTICLE XV: APPLICABLE LAWS AND ATTORNEY'S FEES

This Agreement shall be construed and enforced pursuant to the laws of the State of California. Should any legal action be brought by a party for breach of this Agreement or to enforce any provision herein, the prevailing party of such action shall be entitled to reasonable attorneys' fees, court costs, and such other costs as may be fixed by the court. Reasonable attorneys' fees of the TOWN Attorney's Office, if private counsel is not used, shall be based on comparable fees of private attorneys practicing in Santa Clara County.

ARTICLE XVI: LIQUIDATED DAMAGES

It is mutually agreed by CONTRACTOR and TOWN that in the event that completion of the construction by CONTRACTOR under this Agreement is delayed beyond DATE, TOWN will suffer damages and will incur other costs and expenses of a nature and amount which is difficult or impractical to determine. The Parties agree that by way of ascertaining and fixing the amount of damages, costs and expenses, and not by way of penalty, CONTRACTOR shall pay to TOWN the sum of One Thousand Dollars (\$1,000.00) per day in liquidated damages for each and every calendar day such delay in completion of the services under this Agreement continues beyond DATE. In the event that the liquidated damages are not paid, CONTRACTOR agrees that TOWN may deduct the amount of unpaid damages from any money due or that may become due to CONTRACTOR under this Agreement.

ARTICLE XVII: INTERPRETATION OF CONTRACT

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

ARTICLE XVIII: AMENDMENTS AND CHANGE ORDERS

This Agreement may be amended from time to time as necessary by formal and written amendment or authorized change order executed by the Town Manager or designee and principal acting on behalf of the CONTRACTOR.

ARTICLE XIX: DBE RESPONSIBILITIES

For projects that are State or Federal funding; With respect to Disadvantaged Business Enterprises, CONTRACTOR shall do the following:

(1) Pay each subcontractor under this prime contract for satisfactory performance of its contract no later than ten (10) days from the receipt of each payment the prime contractor receives from TOWN. Any delay or postponement of payment from the above-referenced time frame may occur only for good cause following written approval of TOWN. This clause applies to both DBE and non-DBE subcontractors.

(2) Release all retainage owed to a subcontractor for satisfactory completion of the accepted work within thirty (30) days after TOWN's payment to CONTRACTOR. Any delay or postponement of payment from the above-referenced time frame may occur only for good cause following written approval of TOWN. This clause applies to both DBE and non-DBE subcontractors.

ARTICLE XX: PREVAILING WAGES

Prevailing Wage. This project is subject to the requirements of Section 1720 et seq. of the California Labor Code requiring the payment of prevailing wages, the training of apprentices and compliance with other applicable requirements. Contractors and all subcontractors who perform work on the project are required to comply with these requirements. Prevailing wages apply to all projects over \$1,000 which are defined as a "public work" by the State of California. This includes: construction, demolition, repair, alteration, maintenance and the installation of photovoltaic systems under a Power Purchase Agreement when certain conditions are met under Labor Code Section 1720.6. This include service and warranty work on public buildings and structures.

1. The applicable California prevailing wage rate can be found at www.dir.ca.gov and are on file with the Town of Los Gatos Parks and Public Works Department, which shall be available to any interested party upon request. The contractor is also required to have a copy of the applicable wage determination posted and/or available at each jobsite.
2. Specifically, contractors are reminded of the need for compliance with Labor Code Section 1774-1775 (the payment of prevailing wages and documentation of such), Section 1776 (the keeping and submission of accurate certified payrolls) and 1777.5 in the employment of apprentices on public works projects. Further, overtime, weekend and holiday pay, and shift pay must be paid pursuant to applicable Labor Code section.

3. The public entity for which work is being performed or the California Department of Industrial Relations may impose penalties upon contractors and subcontractors for failure to comply with prevailing wage requirements. These penalties are up to \$200 per day per worker for each wage violations identified; \$100 per day per worker for failure to provide the required paperwork and documentation requested within a 10-day window; and \$25 per day per worker for any overtime violation.
4. As a condition to receiving progress payments, final payment and payment of retention on any and all projects on which the payment of prevailing wages is required, the contractor agrees to present to the TOWN, along with its request for payment, all applicable and necessary certified payrolls (for itself and all applicable subcontractors) for the time period covering such payment request. The term “certified payroll” shall include all required documentation to comply with the mandates set forth in Labor Code Section 1720 et seq, as well as any additional documentation requested by the Agency or its designee including, but not limited to: certified payroll, fringe benefit statements and backup documentation such as monthly benefit statements, employee timecards, copies of wage statements and cancelled checks, proof of training contributions (CAC2 if applicable), and apprenticeship forms such as DAS-140 and DAS-142.
5. In addition to submitting the certified payrolls and related documentation to the TOWN, the contractor and all subcontractors shall be required to submit certified payroll and related documents electronically to the California Department of Industrial Relations. Failure to submit payrolls to the DIR when mandated by the project parameters shall also result in the withholding of progress, retention and final payment.
6. No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
7. No contractor or subcontractor may be awarded a contract for public work on a public works project, unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Contractors MUST be a registered “public works contractor” with the DIR AT THE TIME OF BID. Where the prime contract is less than \$15,000 for maintenance work or less than \$25,000 for construction alternation, demolition or repair work, registration is not required.
8. Should any contractor or subcontractors not be a registered public works contractor and perform work on the project, Contractor agrees to fully indemnify the TOWN for any fines assessed by the California Department of Industrial Relations against the TOWN for such violation, including all staff costs and attorney’s fee relating to such fine.
9. The TOWN shall withhold any portion of a payment; including the entire payment amount, until certified payroll forms and related documentation are properly submitted, reviewed and found to be in full compliance. In the event that certified payroll forms do not comply with the requirements of Labor Code Section 1720 et seq., the TOWN may continue to hold sufficient funds to cover estimated wages and penalties under the contract.

ARTICLE XXI: ENTIRE AGREEMENT

This Agreement contains the entire understanding between the parties with respect to the subject matter herein. There are no representations, agreements or understandings (whether oral or written)

between or among the parties relating to the subject matter of this Agreement which are not fully expressed herein.

ARTICLE XXII: PUBLIC RECORDS

The parties recognize and acknowledge that TOWN is subject to the California Public Records Act, California Government Code Section 6250 and following. Public records are subject to disclosure.

ARTICLE XXIII: NOTICES

Any notice required to be given to CONTRACTOR shall be deemed to be duly and properly given if mailed to CONTRACTOR, postage prepaid, addressed to:

CONTRACTOR NAME
ADDRESS
CITY, STATE ZIP

or personally delivered to CONTRACTOR at such address or at such other addresses as CONTRACTOR may designate in writing to TOWN.

Any notice required to be given TOWN shall be deemed to be duly and properly given if mailed to TOWN, postage prepaid, addressed to:

Lisa Petersen, P.E.
Town Engineer
TOWN OF LOS GATOS
41 Miles Avenue
Los Gatos, California 95030

or personally delivered to TOWN at such address or at such other addresses as TOWN may designate in writing to CONTRACTOR.

ARTICLE XXIV: SECTION 7106 FORM

Attached to the Agreement is a fully executed and sworn non-collusion affidavit as required by Section 7106 of the California Public Contracts Code. Said affidavit is incorporated herein by this reference.

IN WITNESS WHEREOF, the parties to these presents have hereunto set their hands the year and date first written above.

APPROVED AS TO CONTENT:

"TOWN":
TOWN OF LOS GATOS

Matt Morley
Director of Parks and Public Works

By: _____
Laurel Prevetti
Town Manager

APPROVED AS TO FORM:

Robert Schultz
Town Attorney

Attest: _____
Shelley Neis
Town Clerk

CONTRACTOR:

By: _____

Name: _____

Title: _____

Address: _____

By: _____

Title: _____

Tax ID No. or SSAN:

CONTRACTOR'S BOND FOR LABOR AND MATERIAL

KNOW ALL MEN BY THESE PRESENTS:

That _____, as Principal, and

_____ ,
incorporated under the laws of the State of _____,
and authorized to execute bonds and undertakings as Surety, are held and firmly bound unto any and all
materialmen, persons, companies or corporations furnishing materials, provisions, provender or other
supplies used in, upon, for or about the performance of the work contracted to be executed or performed
under the contract hereinafter mentioned, and all persons, companies or corporations renting implements
or machinery, or hiring crews, for or contributing to said work to be done, and all persons who perform
work or labor upon the same, and all persons who supply both work and materials, and whose claim has
not been paid by the contractor, company, or corporations in the just and full sum of
_____ Dollars (\$ _____), for the payment whereof, well and truly to be
made, said Principal and Surety bind themselves, their administrators, successors and assigns, jointly and
severally firmly by these presents.

The condition of the foregoing obligation is such that; WHEREAS, the above-bounden Principal
has entered into a certain contract attached hereto and incorporated herein by reference as though fully set
forth, with the TOWN OF LOS GATOS, to do and perform the following work; to wit:

Project #19-813-0236 Crosswalk Improvements on State Route 9 at Massol Avenue

as required by the plans and specifications, pursuant to the award made to said contractor by the Council
of the TOWN OF LOS GATOS, on _____, 2020, as will more fully appear by reference to the
minutes of said Council of said TOWN of said date.

NOW, THEREFORE, if the above-bounden Principal, contractor, person, company, or
corporation, or his agent, or the subcontractors, fails to pay for any materials, provisions, provender, or
other supplies, or crews used in, upon, for, or about the performance of the work contracted to be done, or
for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance
Act with respect to such work or labor, or for any amount required to be deducted, withheld, and paid
over to Franchise Tax Board, from the wages of employees of the contractor or subcontractor, pursuant to
Section 18806 of the Revenue and Tax Code, then the Surety of this bond will also pay the same in an
amount not exceeding the sum specified in the bond; and also, in case suit is brought upon this bond, a
reasonable attorney's fee, which shall be awarded by the court to the prevailing party in said suit, said
attorney's fee to be taxed as costs in said suit and to be included in the judgment therein rendered.

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

This bond is executed and filed to comply with the provisions of Sections 3247, *et seq.*, of the
Civil Code.

Signed and sealed this _____ day of _____, 2020.

BY: _____

CONTRACTOR

(CORPORATE SEAL)

BY: _____

SURETY (Address and Phone No.)

(SURETY SEAL)

The amount of the within obligation is hereby fixed by the TOWN Council in the sum of (CONTRACT AMOUNT) Dollars (\$XXXXXX), that sum being one hundred percent (100%) of the contract price, is by said TOWN Council deemed adequate, and is the sum fixed by it for that purpose and the TOWN Manager is hereby authorized to approve said bond.

APPROVED AS TO FORM:

Robert Schultz, Town Attorney

Laurel Prevetti, Town Manager

ATTEST: _____
Shelley Neis, Town Clerk

CONTRACTOR'S BOND FOR FAITHFUL PERFORMANCE

KNOW ALL MEN BY THESE PRESENTS:

That _____, as Principal, and _____, incorporated under the laws of the State of _____, and authorized to execute bonds and undertakings as Surety, are held firmly bound unto the TOWN OF LOS GATOS, a municipal corporation of the State of California, in the sum of _____ Dollars (\$_____), for payment whereof, well and truly to be made, said Principal and Surety bind themselves, their administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that: WHEREAS, the above-bounden Principal has entered into a certain contract attached hereto and incorporated herein by reference as though fully set forth, with the TOWN OF LOS GATOS, to do and perform the following work; to wit:

Project # 19-813-0236 Crosswalk Improvements on State Route 9 at Massol Avenue

as required by the plans and specifications, pursuant to the award made to said contractor by the Council of the TOWN OF LOS GATOS, on _____, 2020, as will more fully appear by reference to the minutes of said Council of said date.

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

NOW, THEREFORE, if the above-bounden Principal shall well and truly perform the work contracted to be performed under said contract, then this obligation shall be void; otherwise, to remain in full force and effect.

Signed and sealed this _____ day of _____, 2020.

BY: _____

CONTRACTOR

(CORPORATE SEAL)

BY: _____

SURETY (Address and Phone No.)

(SURETY SEAL)

The amount of the within obligation is hereby fixed by the TOWN Council in the sum of (CONTRACT AMOUNT) Dollars (\$XXXXXX), that sum being one hundred percent (100%) of the contract price, is by said TOWN Council deemed sufficient and adequate, and is the sum fixed by it for that purpose.

APPROVED AS TO FORM:

Robert Schultz, Town Attorney

Laurel Prevetti, Town Manager

ATTEST:

Shelley Neis, Town Clerk



TOWN OF LOS GATOS

STANDARD SPECIFICATIONS Part II

For Further Information, Contact:

Department of Parks and Public Works
Engineering Division
41 Miles Avenue
Los Gatos, CA 95030
(408) 399-5770

Section 1

DEFINITIONS AND TERMS

1-1.01 DEFINITIONS

Wherever in these Specifications and other Contract Documents the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

A. *Contract Documents.* The Notice to Contractors, Information for Bidders, Bid Form, Designation of Subcontractors, Agreement, Bidder's Bond, Performance Bond, Labor and Materialperson's Bond, Progress Schedule, General Conditions, Equal Employment Opportunity Conditions if applicable, Technical Provisions, Plans, Specifications, and such provisions of the Standard Specifications of the State of California, Department of Transportation, dated 2010, except as specifically noted in the Technical Specifications, are hereby incorporated by reference.

B. *Contractors.* The person, firm, partnership, or corporation to whom this Contract is awarded by Owner and who is subject to the terms thereof.

C. *Director of Parks and Public Works.* The Director of Parks and Public Works of the Town of Los Gatos and the representative of the Director of Parks and Public Works, duly authorized and appointed by the Director of Parks and Public Works.

D. *Engineer.* The Town Engineer of the Town of Los Gatos, or the representative of the Town Engineer duly authorized and appointed by the Town Engineer. In the event Owner has hired any person or corporation as an independent Contractor to act in lieu of the Town Engineer, the term "Engineer" shall be deemed to include such person or corporation.

E. *Governing Body of the Owner.* The Town Council of the Town of Los Gatos.

F. *Inspector.* The Inspector employed by Owner to perform inspection during construction of the work, under the direction of the Director of Parks and Public Works.

G. *Owner.* The Town of Los Gatos, a municipal corporation in the State of California.

H. *Plans.* The Official Plans, working drawings or exact reproductions thereof, approved by the Governing Body of the Owner which show the location, character, dimensions and details of the work on the Project and the work to be done. The Plans are to be considered as a part of the Contract Documents, complementary to the Specifications.

I. *Project.* The entire public improvement proposed by Owner to be constructed in whole or in part, pursuant to this Contract.

J. *Revocable.* Items noted as "Revocable" in the Proposal may be deleted entirely or in part at the sole discretion of the Town. The provision of Section 4-1.03B, "Increased or Decreased Quantities," shall not apply to entire or partial deletion of Revocable items.

J. *Specifications.* The directions, provisions, and requirements contained herein, or contained in any Specifications referred to herein, pertaining to the method and manner of performing the work on the Project, or to the quantities, or the quality of materials to be furnished under the Contract.

K. *Subcontractor*. A person, firm, partnership, or corporation having a direct contract with Contractor and not with Owner, for the performing of work or labor or the rendering of service to Contractor for the work.

L. *Surety*. Any persons, firm, partnership, or corporation that executes as Surety on Contractor's Performance Bond or Contractor's Labor and Materialperson's Bond or Bidder's Bond.

M. *Work*. Work to be performed on the Project under this Contract, including work normally done at the site of the Project plus labor and materials.

1-1.02 SPECIFICATIONS

Wherever in these Specifications the term "Standard Specifications" is used, it shall mean the State of California, Department of Transportation, Standard Specifications, dated 2010, except as specifically noted in the Technical Specifications. In case of conflict between the State of California Standard Specifications and these Specifications, these Specifications shall take precedence over and be used in lieu of such conflicting portions.

Any item not covered in these Specifications shall be performed in accordance with the appropriate section of the Standard Specifications. Whenever in the Standard Specifications the following terms are used, they shall be understood to mean and refer to the following:

A. *Department of Public Works or Department of Transportation*. The Town of Los Gatos, Department of Parks and Public Works.

B. *Director of Parks and Public Works*. The Town of Los Gatos, Director of Parks and Public Works.

C. *Engineer*. The Engineer is defined as the Director of Parks and Public Works, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

D. *Laboratory*. The designated laboratory authorized by the Town of Los Gatos to test materials and work involved in the Contract.

E. *State*. The Town of Los Gatos.

1-1.03 GENERAL

All work shall be done in conformance with the applicable provisions of the Standard Specifications except as modified herein. Payment for work, equipment and materials not specifically covered herein shall be included in the payment for related items of work. No additional payment will be made for work, equipment or materials not covered in these plans and specifications, but necessary to insure a completed project as specified. Any plan or method of work suggested by the Owner or the Engineer to Contractor but not specified or required, if adopted or followed by Contractor in whole or in part, shall be used at the risk and responsibility of Contractor; and the Owner and the Engineer shall assume no responsibility therefor and in no way be held liable for any defects in the work which may result from or be caused by use of such plans or method of work.

1-1.04 STATEMENT OF WORK

Furnish all labor, equipment and materials and perform all work called for in the Contract Documents and as necessary to furnish to the Town a complete project ready for use.

1-1.05 DRAWINGS

Two sets of the Contract Drawings and Specifications will be furnished without charge to the Contractor to whom the contract for the work is awarded. Additional sets will be furnished to Contractor on request, as needed. The work shall conform to the drawings which shall form a part of these Specifications, and are available at the Office of the Director of Parks and Public Works, Engineering Division, 41 Miles Avenue, Los Gatos, California.

1-1.06 BUSINESS LICENSE

All Contractors, whether they be general Contractors or subcontractors, who transact or carry on business in the Town of Los Gatos, shall acquire a Business License in conformance with Chapter 14 of the Los Gatos Town Code.

1-1.07 MINORITY AND WOMEN BUSINESS ENTERPRISES

It is the policy of the Town of Los Gatos to encourage the participation of Minority and Women Business Enterprises in the bidding process for all Town contracts. Any reference using the word "his" is to be construed as meaning "his, hers or its".

1-1.08 PROOF OF COMPETENCY OF BIDDER

Any bidder may be required to furnish evidence satisfactory to Owner that he/she and his/her proposed subcontractors have sufficient means and experience in the type of work called for to insure completion of the contract in a satisfactory manner.

1-1.09 SPECIAL NOTICE

Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the work will be or is now performed, and, so far as possible, the successful bidder must employ such methods and means in carrying out his/her work as will not cause any interruption or interference with any other Contractor.

Section 2

PROPOSAL REQUIREMENTS AND CONDITIONS

2-1.01 EXAMINATION OF PLANS, SPECIFICATIONS AND SITE WORK

Before submitting a bid, each bidder shall carefully read the Specifications and all other Contract Documents. The bidder shall visit the site of the Project and shall fully inform himself/herself as to all existing conditions and limitations under which the work is to be performed, and he/she shall include in his/her bid a sum to cover the cost of all items necessary to perform the work as set forth in the Contract Documents. No allowance of any kind whatsoever will be made to any bidder because of lack of such examination or knowledge. The submission of a bid shall be conclusive evidence that the bidder has made such an examination.

2-1.02 CONTENTS OF BID

In order to receive consideration, all bids shall be made in accordance with the following instructions:

A. Bids shall be made upon the form provided therefor, properly executed and with all items filled out; the signature of all persons signing shall be in longhand.

B. Blank spaces in the bid must be properly filled in, and the phraseology thereof must not be changed. Additions must not be made to the items mentioned therein. Any unauthorized conditions, limitations or provisions attached to a proposal may cause its rejection. Alterations by erasures or interlineation must be explained or noted in the bid over the signature of the bidder.

C. Late bids will be returned to the bidder unopened.

D. Due to COVID-19, only electronic bids will be received on the Town of Los Gatos plan room at www.losgatosplanroom.com on or before the day and hour set for the opening of bids. It is the sole responsibility of the bidder to see that the bid is received in proper time. After the bid opening, bid bonds from the lowest three responsible bidders must be submitted to the Town of Los Gatos Parks and Public Works Director at 41 Miles Avenue, Los Gatos, CA 95030 and be postmarked within three days of the bid opening date.

2-1.03 WITHDRAWAL OF BID

Any bidder may withdraw his/her bid, either personally or by a written request, at any time prior to the scheduled time for opening of bids.

2-1.03.A WITHDRAWAL OF BIDS AFTER OPENING

No bidder may withdraw his/her bid for a period of 60 calendar days after the date set for the opening thereof, and the same shall be subject to acceptance by the Owner during this period.

2-1.03.B BIDDERS INTERESTED IN MORE THAN ONE BID

No person, firm or corporation shall be allowed to make or file or be interested in more than 1 bid for the same work, unless alternate bids are called for. A person, firm or corporation submitting a sub-proposal to a bidder, or who has quoted prices on materials to a bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders.

2-1.04 SUBMISSION OF BIDS; AGREEMENT TO ASSIGN

In accordance with Government Code §4552, the bidder shall conform to the following requirements. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, he/she/it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under §4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act [Chapter 2 (commencing with §16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchase of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

2-1.05 LIST OF SUBCONTRACTORS

Bidders must submit a list of their proposed subcontractors in compliance with §§4100-4113 of the Public Contract Code of the State of California. Forms for this designation are furnished in the Bid Documents, Part I.

2-1.06 INSURANCE

At or prior to the delivery of the signed Agreement, Contractor shall deliver to Owner the policies of insurance or insurance certificates as are required by the Plans and Specifications. All policies or certificates of insurance shall be approved by the Director of Parks and Public Works of the Town of Los Gatos before the successful bidder may proceed with the work. Failure or refusal to furnish insurance policies or certificates in the form satisfactory to the Director of Parks and Public Works of the Town of Los Gatos shall subject the bidder to penalties for delay in commencement of the Work.

2-1.07 BIDDER'S BOND

Each bid shall be accompanied by cash, a certified or cashier's check, or a bidder's bond in the sum of not less than 10% of the total aggregate of the bid, and said checks or bond shall be made payable to the order of the Town of Los Gatos (herein after referred to as "Owner") as defined in Part I, Section 1-1.01 of these Specifications. Cash and certified or cashier's checks shall not be accepted unless accompanied by a waiver of all interest on the amount paid to the Town. In case the successful bidder fails to file satisfactory bonds or provide the insurance required by the Contract Documents, or refuses to enter into a contract within the specified time, he/she shall be liable for any difference by which the cost of procuring the work exceeds the amount of his/her bid and the bond or the amount of cash or check shall be available to offset such difference. If the bid is not accepted by Owner within 60 calendar days after the date set for the opening of bids, or if the bidder to whom the contract is awarded executes and delivers to Owner the required Contract Documents and insurance, the cash or the amount of the certified or cashier's check without interest shall be returned to the bidder.

2-1.08 GUARANTEE OF MATERIALS AND EQUIPMENT

All materials and equipment furnished and the work performed under these Specifications and/or drawings, shall be guaranteed in writing for a period of 2 years from the date of final acceptance against defective material, design and workmanship. In addition, the Contractor shall guarantee in writing that the system as a whole shall be free of defects for a period of 2 years from the date of final acceptance, the system shall operate perfectly, and all apparatus shall perform in accordance with their individual Specifications.

Contractor shall allow 10% of the faithful performance bond to remain in effect for a period of two years

following Town Council project acceptance as guarantee for any needed repair or replacement caused by defective materials and workmanship.

Section 3

AWARD AND EXECUTION OF CONTRACT

3-1.01 AWARD OR REJECTION OF BIDS

The Contract, if awarded, will be awarded to the lowest responsible bidder subject to Owner's right to reject any or all bids and to waive any informality in the bids or the bidding.

3-1.02 REJECTION OF PROPOSALS

The Town, at its sole discretion, may reject all bids. Additionally, individual proposals may be rejected if (among other things) they any alteration of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind, or a disproportionate amount of payment being made on any item of work during any phase of the project, or fail to provide a price on all bid items, including all alternates or proposals submitted which are in strict compliance with the directions in the Notice to Contractors. The Town may, in its sole discretion, waive any informalities or minor irregularities in the bid or proposal.

Proposals not submitted in strict compliance with the directions in the Notice to Contractors may, in Town's sole discretion, be deemed non-responsive and rejected on that basis.

When proposals are signed by an agent, other than the officer or officers of a corporation authorized to sign contracts on its behalf or a member of a co-partnership, a "Power of Attorney" must be on file with the Town Clerk prior to opening bids or shall be submitted with the proposal; otherwise, the proposal may be rejected at the Town's sole discretion as irregular and unauthorized.

Proof of authority of the person or persons signing on behalf of the bidder shall be provided to the Town upon request after the bid opening.

3-1.03 SUBSTITUTION OF SUBCONTRACTORS

No contractor whose bid is accepted shall:

1. Substitute any person as subcontractor in place of the subcontractor listed in the original bid, except where the Town, or its duly authorized officer, may, except as otherwise provided, have consented to the substitution in any of the following situations:

a. When the subcontractor listed in the bid after having had a reasonable opportunity to do so fails or refuses to execute a written contract, when that written contract, based upon general terms, conditions, plans and specifications for the project involved or the terms of that subcontractor's written bid, is present to the subcontractor by the Contractor.

b. When the listed subcontractor becomes bankrupt or insolvent.

c. When the listed subcontractor fails or refuses to perform its subcontract.

d. When the listed subcontractors fails or refuses to meet the bond requirements of the Contractor.

e. When the Contractor demonstrates to the Town that the name of the subcontractor was listed as the result of an inadvertent clerical error.

f. When the listed subcontractor is not licensed at the time of bid pursuant to the Contractor License Law on non-federally funded projects or at the time of award on federally funded projects.

g. When the Town determined that the work performed by the listed subcontractor is substantially unsatisfactory and not in substantial accordance with the plans and specifications, or that the subcontractor is substantially delaying or disruption the progress of the work.

Prior to approve of the Contractor's request for a substitution of subcontractor, the Town shall give notice in writing to the listed subcontractor of the Contractor's request to substitute and of the reasons for the request. The notice shall be served by certified or registered mail to the last known address of the subcontractor. The listed subcontractor who has been notified shall have 5 working days within which to submit written objections to the substitution to the Town. Failure to file these written objections shall constitute the listed subcontractor's consent to the substitution.

If written objection are filed, the Town shall give notice in writing of at least 5 working days to the listed subcontractor of a hearing by the Town on the Contractor's request for substitution.

2. Permit any subcontractor to be voluntarily assigned or transferred or allow it to be performed by anyone other than the subcontractor listed in the original bid, without consent of the Town.

3. Other than in the performance of change orders causing changes or deviations from the original contract, sublet or subcontract any portion of the work in excess of 1/2 of one percent of the prime contractor's total bid as to which the Contractor's original bid did not designate a subcontractor.

3-1.04 PERFORMANCE BOND AND LABOR AND MATERIALS BOND

At or prior to the delivery of the signed Agreement, Contractor shall deliver to Owner the Performance Bond and Labor and Materialperson's Bond as are required by Part 1, Section 2 of these Specifications. All bonds shall be on forms provided by Owner, and each shall be in an amount equal to 100% of the contract price. All bonds shall be approved by the Director of Parks and Public Works of the Town of Los Gatos before the successful bidder may proceed with the Work. Failure or refusal to furnish bonds in the form satisfactory to the Director of Parks and Public Works of the Town of Los Gatos shall subject the bidder to penalties for delay in commencement of the Work or revocation of the Award of Contract.

Pursuant to California Public Contract Code §22300, the Contractor will be permitted, at its request and sole expense, to substitute securities for any monies withheld by the Town to ensure performance under the contract. Said securities will be deposited either with the Town or with the state or federally chartered bank as escrow agent. Securities eligible for this substitution are those listed in California Government Code §16430 or bank or savings and loan certificate of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other mutually agreed to by Contractor and the Owner. The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

3-1.05 EXECUTION OF AGREEMENT

The form of agreement which the successful bidder, as Contractor, will be required to execute is included in the Contract Documents and must be carefully examined by each bidder. The bidder to whom the Contract is awarded by Owner shall, within 10 calendar days after *Notice of Award*, execute and deliver to Owner 1 original and 1 counterpart of the Agreement.

3-1.06 NOTIFICATION BY CONTRACTOR

A. The Contractor shall notify the Director of Parks and Public Works and the project inspector at least 24 hours prior to commencing work and shall comply with any Notifications or approvals mentioned in the Specifications, Part IV.

B. Immediately after the award of Contract by the Town of Los Gatos and where applicable and required by the Plans and Specifications, the Contractor shall notify the following agencies:

AT&T Broadband
1900 S. Tenth Street
San Jose, CA 95112
Telephone: (408) 918-3200

Pacific Gas and Electric Co.
10900 N. Blaney Avenue
Cupertino, CA 95014
Telephone: (408) 725-2011
FAX: (408) 725-2034

San Jose Water Company
1221 So. Bascom Ave.
San Jose, CA 95128
Telephone: (408) 279-7866
FAX: (408) 292-7868

Santa Clara Water District
5750 Almaden Expressway
San Jose, CA 95118
Telephone: (408) 395-8121 ext.
2132
FAX: (408) 395-3627

U.S.A. Cable Locator
(Notify two weeks prior)
Telephone: 1 (800) 227-2600

Verizon
15900 Los Gatos Boulevard
Los Gatos, CA 95030
Telephone: (408) 358-6757
FAX: (408) 356-8756

West Valley Sanitation District
100 E. Sunnyoaks Avenue
Campbell, CA 95005
Telephone: (408) 378-2407
FAX: (408) 364-1821

C. The Contractor shall notify residents and business owners adjacent to the Work, as noted in the Special Provisions of these Specifications.

Section 4

SCOPE OF WORK

4-1.01 LOCATION OF WORK

The Town reserves the right to add or delete from quantities of work during the project and to add or delete locations (see Part I, Section 9-1.01). Locations of work for this project are set out in *Plans & Specifications* and incorporated herein.

4-1.02 CHANGES TO THE WORK

The bidder's attention is directed to the provisions of Section 4 of the Standard Specifications and the following modifications, all of which are applicable to this Contract:

A. Owner, without invalidating the Contract, may order additions to or deductions from the Work, the Contract Sum being adjusted accordingly. Any claim for extension of time cause thereby shall be adjusted at the time of ordering such change. See Section 9-1.01A of these Specifications regarding measurement and payment for increased or decreased quantities.

B. Any alteration or alterations made in the *Plans & Specifications* which are a part of this Contract, or any provision of this Contract shall not operate to release any surety or sureties from liability on any bond or bonds attached hereto and made a part hereof, and consent to make such alterations is hereby given, and the sureties to said bonds hereby waive the provisions of Civil Code §2819.

C. In giving instructions, the Engineer shall have authority to issue written change orders not inconsistent with the purpose of the Work. All change orders require issuance of a purchase order. Except in an emergency endangering life and property, no extra work or change shall be made unless in pursuance of such written order, and no claim for an addition to the Contract Sum shall be valid unless the additional work was so ordered.

D. Any change order that is in excess of the original Contract amount, plus any contingency, must be approved in the same manner as the original Contract.

E. Any change order exceeding the amount of the approved budget is invalid unless and until a budget adjustment has been approved by the Town Council.

F. Unit prices in any change order shall be the same as those unit prices in the original Contract.

4-1.03 NOTIFICATION OF CHANGE IN CONDITION

Pursuant to Public Contracts Code §7104, when trenches or other excavations must be dug pursuant to this Contract that extend deeper than 4 feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the Owner in writing of any:

A. Material that the Contractor believes may be material that is hazardous waste, as defined in Health & Safety Code §25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; or,

B. Subsurface or latent physical conditions at the site differing from those indicated; or,

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

The Owner will promptly investigate the conditions identified by the Contractor, and if the Owner finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Owner's cost of, or the time required for, performance of any part of the work will issue a change order under the procedures described in the Contract Documents.

In the event a dispute arises between the Owner 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 Documents, but shall proceed with all work to be performed under the Contract Documents. The Contractor shall retain any and all rights provided either by the Contract Documents or by law which pertain to the resolution of disputes and protects between the contracting parties.

Section 5 CONTROL OF WORK

5-1.01 CONTROL OF WORK

The bidder's attention is directed to the provisions of Section 5 of the Standard Specifications, all of which are applicable to this Contract.

5-1.02 INTERPRETATION OF DRAWINGS AND DOCUMENTS PRIOR TO BIDDING

If any person contemplating submitting a bid for the construction of the Project is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents, or finds discrepancies in, or omissions from the Plans or Specifications, he/she may submit to Owner a written request for an interpretation or correction thereof not later than 5 working days before the date bids will be opened. The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the Contract Documents will be made only by addendum and will be mailed or delivered to each person receiving a set of such documents. Owner will not be responsible for any other explanation or interpretation of the Contract Documents.

Section 6

CONTROL OF MATERIALS

6-1.01 CONTROL OF MATERIALS

The bidder's attention is directed to the provisions of Section 6 of the Standard Specifications and the following modifications, all of which are applicable to this Contract. At the option of the Director of Parks and Public Works, the Contractor shall provide testing from Owner's list of certified labs at the Contractor's own expense.

Section 7

LEGAL RELATIONS AND RESPONSIBILITY

7-1.01 WAGES

Workers employed in the work must be paid at rates at least equal to the then current prevailing wage scale as determined by the State Director of the Department of Industrial Relations. A copy is usually on file in the Office of the Director of Parks and Public Works.

Pursuant to California Labor Code §1770, any Contractor who is awarded a public works project and intends to use a craft of classification not shown on the general prevailing wage determinations, may be required to pay the wage rate of that craft of classification most closely related to it as shown in the general determinations effective at the time of the calls for bids.

Statutory provisions for penalties for failure to pay prevailing wages and for failure to comply with state wage and hour laws will be enforced. Eight hours of labor constitutes a day's work. The Contractor must comply with the statutory requirements relating to certified copies of payroll records, including the maintenance of the records, their certification and their availability for inspection.

7-1.02 ADDITIONAL SURETIES

If at any time during the continuance of the Contract the Sureties, or any of them, shall, in the opinion of the Owner, become irresponsible, the Owner shall have the right to require additional and sufficient Sureties which the Contractor shall furnish to the satisfaction of the Owner within 10 working days after notice.

7-1.03 LEGAL RELATIONS AND RESPONSIBILITY

The bidder's attention is directed to the provisions of Section 7 of the Standard Specifications and the following modifications, all of which are applicable to this Contract, with the exception that the Town shall not pay for any of the requirements covered by this section, the cost of which, if any, shall be considered as included in the bid items.

A. *Notices.* Any notice from one party to the other under this Contract shall be in writing and shall be dated and signed by the party giving such notice, or by a duly authorized representative of such party. Any such notice shall not be effective for any purpose whatever unless served in the following manner:

1. If the notice is given to Owner, it must be by personal delivery thereof to the Director of Parks and Public Works or by depositing the same in the United States mails, enclosed in a sealed envelope, addressed to Owner for the attention of said Director of Parks and Public Works, 110 E. Main Street, Los Gatos, California 95031, postage prepaid and registered;

2. If the notice is given to the Contractor, it must be by personal delivery thereof to the Contractor, or to the Contractor's foreman at the site of the work, or by depositing the same in the United States mails, enclosed in a sealed envelope addressed to the Contractor at the Contractor's regular place of business or at such other address as may have been established for the conduct of the work, postage prepaid and registered; or

3. If the notice is given to the Surety or any other person, by personal delivery to such

Surety or by depositing the same in the United States mails, enclosed in a sealed envelope, addressed to such Surety or person at the address of such Surety or person last communicated by him to the party giving the notice, postage prepaid and registered; and

4. The effective date of such notice(s) shall be the date personal delivery is made or the date shown on the return receipt of the registered mailed notice.

B. *Entire Contract.* No verbal agreement or conversation with any officer, agent or employee of Owner, either before, during or after the execution of this Contract, shall affect or modify any of the terms or obligations contained in the Contract Documents, nor shall such verbal agreement or conversation entitle the Contractor to any additional payment whatsoever under the terms of this Contract.

C. *Failure to Complete the Work on Time (Liquidated Damages).* If the Work is not completed by Contractor in the time specified herein above, or within any period of extension as above authorized, it is understood that the Owner will suffer damage; and it being impracticable and infeasible to determine the amount of actual damage, it is agreed that the Contractor shall pay to the Owner, as fixed and liquidated damages, and not as a penalty, the sum as stated in the Contract, and the Contractor and the Contractor's Surety shall be liable for the amount thereof; provided, however, that the Contractor shall not be charged liquidated damages because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (including, but not restricted to, Acts of God or of the public enemy, acts of the Government, acts of the Owner, fires, floods, epidemics, quarantine restrictions, strikes and freight embargoes).

The Contractor shall, within 10 calendar days from the beginning of any such delay, notify the Owner in writing of the cause of the delay and the amount of time extension requested, if any; whereupon the Owner shall ascertain the facts and the extent of the delay and extend the time for completing the Work when, in its judgment and for the amount of time if any, the findings of fact justify such an extension. The Director of Parks and Public Works' determination shall be final and binding on the parties hereto.

7-1.04 EMPLOYMENT OF APPRENTICES

A. Attention is directed to the provisions of Labor Code §§1777.5 and 1777.6 concerning the employment of apprentices by the Contractor or any subcontractor under Contractor. Section 1777.5 only does not apply to contracts of general Contractors or specialty Contractors not bidding for work through a general or prime contractor involving less than \$30,000 or 20 working days.

B. Section 1777.5, requires the Contractor or subcontractor employing tradepersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project, and which administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeypersons that will be used in the performance of the contract. Section 1777.5 also requires submission of specified award information to the committee.

The ratio of apprentices to journeypersons in such cases shall not be less than 1 to 5, except that the joint committee may grant a certificate, subject to the approval of the Administrations of Apprenticeship, exempting a Contractor from the 1 to 5 ratio when it finds that any one of the following conditions are met;

1. In the event unemployment for the previous 3 month period in such area exceeds an average of 15%, or

2. In the event the number of apprentices in training in such area exceeds a ratio of 1 to 5, or

3. If there is a showing that the apprenticeable craft or trade is replacing at least 1/13th of its journeyman annually through apprenticeship training, either on a statewide basis, or on a local basis, or

4. If assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize apprentice's life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman

C. The Division of Apprenticeship Standards may grant a certificate exempting the Contractor from the 1 to 5 ratio upon proper showing by the Contractor that it employs apprentices in a specific apprenticeable craft or trade in the state on all its contracts on an annual average if not less than 1 apprentice to each 5 journeymen.

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

E. The Contractor and any subcontractor under Contractor shall comply with the requirements of §§1777.5 and 1777.6 in the employment of apprentices.

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

G. Responsibility for compliance with this section and this section's reference to the Standard Specifications lies with the Contractor.

7-1.05 STORM WATER POLLUTION PREVENTION

The Contractor shall be responsible for ensuring that all work conforms to "Best Management Practices for the Construction Industry" from the Santa Clara Valley Urban Runoff Pollution Prevention Program in the Specifications, Part IV, as well as the Town Code.

7-1.06 PUBLIC WORKS CONTRACTS; ASSIGNMENT TO AWARDING BODY

In accordance with California Public Contract Code §7103.5, the Contractor and subcontractors shall conform to the following requirements. The Contractor and its subcontractors offer and agree to assign to the Owner all rights, title, and interest in and to all causes of action it may have under §4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act [Chapter 2 (commencing with §16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods services, or materials pursuant to the public works Contract or its subcontracts. This assignment shall be made and become effective at the time the Owner tenders final payment to the Contractor, without further acknowledgment by the parties.

7-1-07 UNFAIR BUSINESS PRACTICE CLAIMS

Pursuant to Public Contract Code § 7103.5, the Contractor agrees to assign all unfair business practices claims under the Clayton Act and the Cartwright Act to the Town of Los Gatos.

7-1.08 TRAFFIC CONTROL PLAN AND DEVICES

The Contractor shall supply, place, and maintain all necessary traffic control devices during construction in accordance with the applicable requirements of the Standard Specifications.

7-1.09 INSURANCE

Bidders' attention is directed to the insurance requirements below. It is highly recommended that bidders confer with their respective insurance carriers or brokers to determine in advance of bid submission the availability of insurance certificates and endorsements as prescribed and provided herein. If an apparent low bidder fails to comply strictly with the insurance requirements, that bidder may be disqualified from award of the contract.

The Contractor shall procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, Contractor's agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid and shall not be otherwise recoverable from Owner.

A. *Minimum Scope of Insurance.* Coverage shall be at least as broad as:

1. Insurance Services Office form number GL 0002 (Ed. 1/73) covering Comprehensive General Liability and Insurance Services Office form number GL 0404 covering Broad Form Comprehensive General Liability; or Insurance Services Office Commercial General Liability coverage ("occurrence" form GC 0001).
2. Insurance Services Office form number CA 0001 (Ed. 1/78) covering Automobile Liability, code 1 "any auto" and endorsement CA 0025.
3. Worker's Compensation insurance as required by the Labor Code of the State of California and Employers Liability insurance.

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

1. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this Project/Location or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
3. Workers' Compensation and Employers Liability: Worker's compensation limits as required by the Labor Code of the State of California and Employers Liability limits of \$1,000,000 per accident.

C. *Deductibles and Self-insured Retentions.* Any deductibles or self-insured retentions must be

declared to and approved by the Town of Los Gatos. At the option of the Town of Los Gatos, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Town of Los Gatos, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

D. *Other Insurance Provision.* The policies are to contain, or be endorsed to contain the following provision:

1. General Liability and Automobile Liability Coverages

a. The Town of Los Gatos, its officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor, products and completed operations of the Contracts, premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Town of Los Gatos, its officers, officials, employees, or volunteers.

b. The Contractor's insurance coverage shall be primary insurance as respects the Town of Los Gatos, its officers, officials, employees, and volunteers. Any insurance or self-insurances maintained by the Town of Los Gatos, its officers, officials, employees, or volunteers shall be excess of the Contractor's Insurance and shall not contribute with it.

c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Town of Los Gatos, its officers, officials, employees, or volunteers.

d. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. Workers' Compensation and Employers Liability Coverage. The insurer shall agree to waive all rights of subrogation against the Town of Los Gatos, its officers, officials, employees, or volunteers for losses arising from work performed by the Contractor for the Town of Los Gatos.

3. All Coverages. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after 30 days prior written notice by certified mail, return receipt required, has been given to the Town of Los Gatos.

E. *Acceptability of Insurers.* Insurance is to be placed with insurers with a Best's rating of no less than B+.

F. *Verification of Coverage.* The Contractor shall furnish the Town of Los Gatos with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by the Town of Los Gatos. Where by statute, the Town of Los Gatos' workers' compensation-related forms cannot be used, equivalent forms approved by the State Insurance Commissioner are to be substituted. All certificates and endorsements are to be received and approved by the Town of Los Gatos before work commences. The Town of Los Gatos reserves the right to require complete, certified copies of all required insurance policies, at any time.

G. *Subcontractors.* The Contractor shall include all subcontractors as insureds under its policies

or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

H. *Indemnification.* The Contractor shall save, keep and hold harmless indemnify and defend the Town its officers, agent, employees and volunteers from all damages, liabilities, penalties, costs, or expenses in law or equity that may at any time arise or be set up because of damages to property or personal injury received by reason of, or in the course of performing work which may be occasioned by a willful or negligent act or omissions of the Contractor, or any of the Consultant's officers, employees, or agents or any subcontractor.

7-1.10 CONTRACT DOCUMENTS ON SITE

The Contractor shall maintain on the job site an official set of Contract Documents, available at all times to the Director of Parks and Public Works, Inspector, or their representatives.

7-1.11 COORDINATION OF WORK WITH OTHER CONTRACTS

The Contractor must ascertain to the Contractor's own satisfaction the scope of the Work and the nature of any other Contracts that have been or may be awarded by the Owner in the prosecution of the Work, to the end that the Contractor may perform this Contract in the light of such other Contracts, if any. Nothing herein contained shall be interpreted as granting to the Contractor exclusive occupancy of the site of the work. The Contractor shall not cause any unnecessary hindrance or delay to any other Contractor working on any project which encompasses the Work. If the performance of any Contract for the work is likely to be interfered with by the simultaneous execution of some other Contract or Contracts, the Owner shall decide which the Contractor shall cease work temporarily and which the Contractor shall continue or whether the work can be coordinated so that the Contractors may proceed simultaneously. The Owner shall not be responsible for any damage suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award or performance or accepted performance of any other Contract or Contracts on the Work or caused by any decision or omission of Owner respecting the order of precedence in the performance of the Contracts awarded for the completion of the Work.

The Owner reserves the right to do the Work with its own forces or to let other Contracts for work on or contiguous to the Work set forth in the *Plans and Specifications*.

7-1.12 EQUAL EMPLOYMENT OPPORTUNITY POLICY

From and after the award of the Contract and during the course of the work on the project, the Contractor shall comply with the following Equal Employment Opportunity Conditions. The Contractor adopts and accepts as its operating policy the following statement:

"It is the policy of this company to assure that applicants are employed and that employees are treated during employment without regard to their race, religion, sex, color, or national origin. Such action shall include employment, upgrading, demotion, transfer, recruitment and recruitment advertising, termination, pay, and selection for training, including apprenticeship."

7-1-12.A EQUAL EMPLOYMENT OPPORTUNITY OFFICER

The Contractor shall designate and make known to the Director of Parks and Public Works an Equal Employment Opportunity Officer capable of administering and promoting an active Contractor program of equal opportunity who will be assigned adequate authority and responsibility to do so.

7-1.12.B DISSEMINATION OF POLICY

All members of the Contractor's organization with authority to hire, supervise, promote, and terminate employees, or who recommend such action, shall be made fully cognizant of and shall implement the Contractor's Equal Employment Opportunity policy: The following actions shall be taken as a minimum:

A. Periodic meetings of supervisory personnel shall be conducted before start of work and at least once every 3 months for the purpose of reviewing and explaining the Contractor's Equal Employment Opportunity Policy and its implementation. The meetings shall be conducted by the Equal Employment Opportunity Officer or other knowledgeable company officials.

B. All new supervisory employees shall be indoctrinated as to the Contractor's Equal Employment Opportunity obligations within 30 calendar days following their reporting for duty with the Contractor.

C. The Equal Employment Opportunity Officer or appropriate company official will instruct all employees engaged in recruitment and hiring as to the methods followed by the Contractor in recruiting and hiring qualified employees.

7-1.12.C RECRUITMENT

A. When advertising for employees, the Contractor shall include in all advertisements for employees the notation *An Equal Opportunity Employer*. It shall insert all such advertisements in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

B. If the Contractor does not restrict individuals who are hired as employees exclusively to those who are related by blood or marriage to persons possessing an ownership interest in the Contractor's business, in those case where the Contractor is not precluded therefor by a valid collective bargaining agreement, systematic and direct recruitment shall be conducted through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the Contractor shall, through its Equal Employment Opportunity Officer, identify sources of potential minority group employees and establish with such identified sources procedures whereby minority group applicants may be referred to the Contractor for employment consideration.

C. If the Contractor does not restrict individuals who are hired as employees exclusively to those who are related by blood or marriage to persons possessing an ownership interest in the Contractor's business, the Contractor shall encourage present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants shall be provided to such employees.

7-1.12.D PERSONNEL ACTIONS

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

A. The Contractor shall conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

B. The Contractor shall periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

C. The Contractor shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

D. The Contractor shall investigate all complaints of alleged discrimination made to the Contractor in connection with its obligations under this contract, shall attempt to resolve such complaints, and shall take appropriate corrective action. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor shall inform every complainant of all of his/her avenues of appeal.

7-1.12.E TRAINING AND PROMOTION

If the Contractor does not restrict individuals who are hired as employees exclusively to those who are related by blood or marriage to persons possessing an ownership interest in the Contractor's business, programs designed to increase the skills of all employees and applicants for employment shall be promoted as follows:

A. Consistent with its manpower requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs, such as pre-apprenticeship, apprenticeship, and/or on-the-job training programs for the geographical area of contract performance.

B. The Contractor shall advise employees and applicants for employment of available training programs and entrance requirements for each.

C. The Contractor shall periodically review the training and promotion potential of employees and shall encourage eligible employees to apply for such training and promotion.

7-1.12.F UNIONS

If the Contractor relies in whole or in part upon unions as a source of Contractor's work force, the Contractor shall use its best efforts to incorporate an Equal Employment Opportunity clause into all union agreements which defines responsibilities for non-discrimination in hiring, referral, up-grading and training, and otherwise implements an affirmative anti-discrimination program in terms of the union's specific areas of skill and geography, to the end that all qualified workers will be available and given an equal opportunity for employment, and such unions will be contractually bound to refer applicants without regard to their race, color, religion, sex or national origin.

In the event a union is unable to refer applicants as requested by the Contractor within the time limit set forth within the union agreement, the Contractor shall, through its recruitment procedures, fill the employment vacancies without regard to race, color, religion, sex or national origin, making full efforts to obtain qualified persons.

7-1.12.G SUBCONTRACTING

The Contractor shall use its best efforts to assure subcontractor compliance with their Equal Employment Opportunity obligations.

7-1.12.H DEBARRED CONTRACTORS AND SUBCONTRACTORS

Pursuant to Public Contract code § 6109, contractors and subcontractors who are ineligible pursuant to Labor Code §§ 1777.1 and 1777.7 are prohibited from work on the project

7-1.12.I NOTICES AND POSTERS

The Contractor shall make known its Equal Employment Opportunity responsibilities under this Contract by the following methods:

A. Executed copies of the Contractor's *Fair Employment Practices Statement* shall be:

- 1. Conspicuously posted in all areas where job applicants and potential employees appear for purposes of gaining employment by the Contractor;
- 2. Conspicuously posted on all employee bulletin boards and in other areas where employees of the Contractor congregate; and,
- 3. Transmitted to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, and to all other sources or employee referrals, including schools and employment agencies.

B. Posters containing the following wording shall be conspicuously posted in all areas where job applicants and potential employees appear for purposes of gaining employment by the Contractor: "(NAME OF CONTRACTOR)" is an Equal Employment Employer."

C. The Contractor's Equal Employment Opportunity policy, as described in these Specifications, Section 7-1.10, and shall be distributed in written form to all employees.

7-1.12.J FAIR EMPLOYMENT PRACTICES STATEMENT

The Contractor shall execute the following Fair Employment Practices Statement:

"Fair Employment Practices Statement": (Name of Contractor) is an Equal Employment Opportunity Employer, as such has adopted the policy and will take affirmative action to employment without regard to their race, color, religion, ancestry or national origin. On (Date), (Name of Contractor) was awarded a public works contract by the Town of Los Gatos, a municipal corporation situated in the County of Santa Clara, State of California, for the work of (Name of Contract). Under said Contract (Name of Contractor) has agreed to comply with those Equal Employment Opportunity Conditions described in Section 7 of the Contract Documents for said project, and has agreed, among other things, that damages will be paid to the Town in event it is found that the requirements of said Conditions have not been satisfied.

Dated: _____

Signed: _____

7-1.12.K RECORDS

The Contractor shall keep such records as are necessary to determine compliance with its Equal Employment Opportunity obligations under this Contract. Such records shall be retained for a period of 2 years following completion of the project. Such records show:

A. The number of minority and non-minority group members employed in each work classification on the project.

B. The efforts and progress being made in cooperation with unions to increase minority group employment opportunities. (Applicable only to Contractors who rely in whole or in part on Unions as a source of their work force).

C. The efforts and progress being made in locating, hiring, training, qualifying, and upgrading employees.

The above-described records, together with the Contractor's records of employment, employment advertisements, application forms, and other pertinent data shall, upon request, be opened to inspection and copying by the Director of Parks and Public Works or the Director of Parks and Public Works authorized representative, or any other agency of the State of California designated by the Director of Parks and Public Works, for purposes of investigating whether the Contractor has complied with the Equal Employment Opportunity conditions of this Contract.

7-1.12.L REPORTS

Between the date of the award of the Contract and the date of the commencement of work on the project, the Contractor shall in conformity and compliance with the directions of the Director of Parks and Public Works, submit to the Director of Parks and Public Works a basic compliance report which shall include the following:

A. The name, business address and telephone number of the Contractor's Equal Employment Opportunity Officer.

B. An executed copy of the Contractor's Fair Employment Practices Statement.

C. A description of the Contractor's sources of potential employees, and the identity of the person or persons who have responsibility for determining who the Contractor will hire and whether or not to hire.

D. Such evidence as is required by the Director of Parks and Public Works, showing that the Contractor has notified all supervisors, foremen, and other personnel officers, in writing, of the content of the Contractor's Equal Employment Opportunity policy.

E. Such evidence as is required by the Director of Parks and Public Works showing that the Contractor has transmitted its *Statement of Fair Employment Practices* to all sources of employee referrals.

F. Such evidence as is required by the Director of Parks and Public Works showing that the Contractor has posted bulletins, posters, and the *Fair Employment Practices Statement* in the manner required by these Equal Employment Opportunity Conditions.

7-1.12.M BREACH OF EQUAL EMPLOYMENT CONDITIONS

In the event the Director of Parks and Public Works, as a result of supervising the Contractor's performance under the Contract or after investigating a complaint by a third party, finds that the Contractor is or has been in violation of its agreement to comply with these Equal Employment Opportunity Conditions, notice of such violations shall be filed with the Director of Parks and Public

Works and given to the Contractor by depositing same in the United States mail, postage prepaid, addressed to the last known business address of the Contractor, with return receipt requested. Not later than 15 calendar days after the filing of said notice with the Director of Parks and Public Works, a hearing shall be held by the Town Council for the purpose of ascertaining whether the charges contained in the notice are true, and, if true, whether the Contractor has failed to make a reasonable and substantial effort to comply with these Equal Employment Opportunity Conditions. Notice of the time and place of said hearing shall be given the Contractor not less than 5 days prior thereto in the same manner as the notice of violations is given. During said hearing, the Town Council shall receive and consider any evidence offered by the Director of Parks and Public Works, the Contractor, and any third party. At the conclusion of said hearing, the Town Council shall determine the matter and its determination shall be final.

If after the hearing above described the Town Council determines that the Contractor has failed to comply with these Equal Employment Opportunity Conditions, and has failed to make a reasonable and substantial effort to comply with said conditions, the Contractor shall be deemed in material breach of the Contract. It is understood that the Owner will have suffered damage by virtue of said breach; and it being impractical and unfeasible to determine the amount of actual damage, it is agreed that the Contractor shall pay to Owner, as fixed and liquidated damages, and not as a penalty, the sum of \$50.00 for each calendar day during which the Contractor is found to have been in noncompliance. Such monies may be recovered from the Contractor and its Surety. The Owner may deduct any such damages from monies due the Contractor.

7-1.12.N DISQUALIFICATION FROM FUTURE CONTRACTS

A finding by the Town Council that the Contractor has failed to comply with these Equal Employment Opportunity Conditions and has failed to make a reasonable and substantial effort to so comply, or a finding of willful violation of the nondiscrimination provisions of the State of California Fair Employment Practices Act, or similar provisions of Federal law or Executive Order, in the performance of work on the project shall be deemed a basis for determining the Contractor to be not a "responsible bidder" as to future contracts for which the Contractor may submit bids. A finding of willful violation of the nondiscrimination provisions of the State of California Fair Employment Practices Act shall be deemed to have occurred upon receipt by the Owner of written notice from the California Fair Employment Practices Commission that it has investigated and determined that the Contractor has violated said Fair Employment Practices Act and has issued an order under Government Code §12970, or obtained judgment and order of enforcement under Government Code §12973.

7-1.12.O OTHER REMEDIES

Nothing contained in these Equal Employment Opportunity Conditions shall be construed in any manner or fashion so as to prevent the Owner from pursuing any other remedies that may be available at law or in equity.

7-1.13 EQUIPMENT AND MATERIAL REPLACEMENT

A. The Contractor shall replace at Contractor's cost and expense any piece of equipment, or part thereof, or any material furnished under these Specifications, which fails because of defective material or workmanship, within 2 years following completion and acceptance of the Work.

B. All decisions regarding acceptable equipment or installation shall be made by the Director of Parks and Public Works, and the Director of Parks and Public Works decision shall be final.

7-1.14 PUBLIC SAFETY - NOISE

It shall be the Contractor's responsibility to keep noise pollution due to construction activities as low as possible. In no case shall noise levels produced by the Contractor exceed either of the following maximums:

A. No individual piece of equipment shall produce a noise level exceeding 85dBA at a distance of 25 feet.

B. The noise level at no point outside of the property line or temporary construction area shall not exceed 85 dBA. No equipment violating these standards will be allowed to operate.

In no case shall the Contractor's operations violate the noise ordinance (Chapter 16) of the Town Code.

Section 8

PROSECUTION AND PROGRESS

8-1.01 PROGRESS SCHEDULE

The bidder's attention is directed to the provisions of Section 8 of the Standard Specifications, and these Specifications, all of which are applicable to this Contract, except that it shall be the bidder's responsibility to contact the utility companies and to determine for itself what, if any utility construction, removal, alteration or relocation work might delay or otherwise affect its operations under this Contract, and the Contractor shall not be entitled to any compensation for such delay or effect, except that time extensions may be granted, at the option of the Director of Parks and Public Works, as provided for in the Standard Specifications.

Prior to beginning work, the Contractor shall submit to the Director of Parks and Public Works for approval a detailed construction schedule for accomplishing the Work within the time allowed.

The detailed construction schedule shall include evidence of a capable work force, availability of construction materials and ability to prosecute the Work diligently to completion.

As a minimum, the construction schedule shall identify all major tasks necessary to complete the Work, shall indicate when each such task will be started and how many working days will be used in completing it, shall indicate the time relationship among the activities, and shall indicate the amount of each Contract item that will be completed after each 10% increment of Contract time has elapsed.

Whenever performance falls behind the approved construction schedule rates, the Contractor shall, by the next day, submit to the Director of Parks and Public Works for approval, a revised construction schedule indicating how the remaining work will be completed within the remaining time.

The Contractor shall also submit to the Director of Parks and Public Works each Friday a detailed plan and schedule for the proposed construction during the following week.

If and when the Director of Parks and Public Works determines that the Contractor will exceed the Contract time allowance, plus approved time extensions, the Director of Parks and Public Works shall suspend further payments due the Contractor until such time as the revised construction schedule is approved and the Contractor demonstrates satisfactory progress in accordance with the approved revised schedule.

Full compensation for providing, updating, and revising the project schedule shall be considered as included in the contract unit prices paid for the various items of work required to be listed in the progress schedule and no further compensation will be made therefor.

8-1.02 START OF WORK AND TIME OF COMPLETION

The Contractor shall mobilize within the time frame set forth in the Notice to Proceed and the Special Provisions. Entire contract shall be completed within the time set forth in the Notice after Contractor's receipt of said Notice.

8-1.03 LIQUIDATED DAMAGES

Liquidated damages will be assessed as noted in the Special Provisions for each calendar day any work

remains incomplete beyond the time fixed above for completion.

8-1.04 ADJUSTMENT AND PRESERVATION OF UTILITIES

This section is supplemental to the Standard Specifications. In case of conflict, these conditions shall govern insofar as applicable.

It shall be the sole responsibility of the Contractor to pothole and verify the exact locations and depths of all utilities prior to making borings or excavations. Power poles and overhead wires shall be protected. Call Underground Service Alert (USA) at 1-800-227-2600 prior to any digging.

The Contractor shall notify Director of Parks and Public Works of Contractor's findings in writing where possible conflicts may exist.

The Contractor shall bear full responsibility for all damages and cost of repairs to existing utilities and surface improvements that are to remain or not in direct conflict. If any utilities or improvements, including sprinklers, are damaged during the course of construction, all expenses, or whatever nature, arising from the restoration of improvements to its original conditions shall be borne by the Contractor, and no additional compensation shall be allowed therefor.

Any damaged, broken or cracked utility boxes must be brought to the attention of the Public Works Inspector prior to construction or the Contractor shall assume liability for the damaged boxes.

Unless otherwise indicated on the drawings or specified herein, the Contractor shall maintain in service all water, gas, and sewer lines and any lighting, power, and telephone surface and sub-surface structures of any nature that may be affected by the work.

If the Contractor fails to maintain and protect such facilities, the Town of Los Gatos reserves the right, if requested by the owners of the utilities, to permit the Owner to move or maintain the utilities at the Contractor's expense.

Should it become necessary in the performance of the Work to disconnect or re-route any underground utility due to a direct conflict with the new work, Contractor shall inform respective utility company involved.

8-1.05 WORKING HOURS

Hours of work shall be limited to 8:00 a.m. to 5:00 p.m. on Monday through Friday unless otherwise stated in the Special Provisions. Other hours must be specifically approved by the Director of Parks and Public Works.

8-1.06 SUPERVISION

The Contractor shall have a qualified superintendent on the job site at all times when work is in progress. Contractor shall submit Superintendents name and resume of experience to the Director Parks and Public Works for approval at pre-construction meeting.

8-1.07 PRE-CONSTRUCTION CONFERENCE

The Contractor shall arrange for a pre-construction conference meeting with the Director of Parks and Public Works. This meeting shall be held at least one (1) week before the Contractor intends to start

construction.

At the pre-construction conference, the Contractor shall provide the Director of Parks and Public Works with the name(s) and telephone number(s) of Contractor's personnel who can be reached and who can respond during non-working hours in the event of an emergency or other contingency requiring the Contractor's immediate attention.

Section 9 MEASUREMENT AND PAYMENT

9-1.01 MEASUREMENT AND PAYMENT

A. *Payment for Increased or Decreased Quantities.* Should there be any variance between the estimated amount of the work to be done and the actual amount of authorized work performed, the provisions of Section 4 of the Standard Specifications, which provide for an adjustment of the unit price by reason of overruns or underruns in excess of 25% of the Director of Parks and Public Works estimate, shall apply.

It is the Contractor's responsibility to continually analyze and apply the estimated quantities provided in the Contract Documents and to use the knowledge gained from site visits, construction, and professional experience, to update the estimated quantities as the work progresses. If and when the Contractor reaches 90% of the estimated quantities of materials required for any portion of the work as specified in the *Plans and Specifications* and has any reasonable belief that the Contractor will be required to exceed those estimated quantities by more than 10%, the Contractor shall provide written notice to the Owner of the possibility and the estimated quantities required to complete the work. If the Contractor fails to provide that written notice before delivering materials in excess of the originally estimated quantities, the Contractor shall not be entitled to any additional compensation or payment for the additional work or materials needed for the additional materials above 110%, but nevertheless shall be required to complete the Work.

B. *Progress Payments.* On or before the 20th day of each month, the Contractor shall prepare and forward to Owner an estimate, in writing, of the total amount of the work completed in place, and the value thereof as of the 15th day of each month.

The Owner shall retain 5% of such estimated value of the Work completed in place, unless otherwise approved by the Engineer, and shall pay to Contractor, while carrying on the work, the balance not retained, as aforesaid, after deducting therefrom all previous payments, and all sums to be kept or retained under the provisions of this Contract. No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials.

Work completed in place, as estimated, shall be an estimate only, and no inaccuracy or error in said estimates shall operate to release the Contractor or any Surety from damages arising from such work or from enforcing each and every provision of this Contract, and the Owner shall have the right subsequently to correct any error made in any estimate for payment. The Contractor shall not be entitled to have any payment estimates processed, or be entitled to have any payment made for work performed, so long as any lawful or proper direction concerning the work or any portion thereof given by Owner or the Director of Parks and Public Works shall remain uncomplied. In addition to the amount which Owner may retain, as provided herein above, the Owner may withhold a sufficient amount or amounts of any payment or payments otherwise due to the Contractor as in its judgment may be necessary to cover:

1. Payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished in or about the performance of the Work on the Project under this Contract;
2. For defective work not remedied;
3. For failure of the Contractor to make proper payments to any of the Contractor's

subcontractors;

4. A reasonable doubt that the Contractor will complete the Work within the agreed time limits;

5. Costs to the Owner resulting from failure of Contractor to complete the Work within the proper time;

6. Damage to other work on property;

7. Potential liquidated damages.

Whenever the Owner shall, in accordance herewith, withhold any monies otherwise due the Contractor, written notice of the amount withheld and the reasons therefor shall be given the Contractor, and when the Contractor shall remove the grounds for such withholding, the Owner will promptly pay the Contractor the amount so withheld.

C. Progress Payment Requests. Pursuant to Public Contracts Code §20104.50, the Owner will promptly process all requests for progress payments pursuant to this Contract. As to any undisputed payments that are made more than 30 days after receipt of an undisputed and properly submitted payment request from the Contractor, the Owner will pay interest equivalent to the legal rate set forth in Code of Civil Procedure §685.10. This section shall not apply to progress payments received between July 1 and August 1 which may take up to an additional 6 weeks to process payments.

D. Acceptance of the Work and Final Payment

1. The final payment for the Work done under this Contract shall be made 60 calendar days after acceptance of the Work by Owner.

2. Owner shall deduct from the final payment for the Work done under this Contract any unpaid fees for business licenses required in conformance with Section 1-1.05 of these Specifications.

3. Upon receipt of written notice from the Contractor that the Work is ready for final inspection and acceptance, the Director of Parks and Public Works shall promptly make such inspection, and when the Director of Parks and Public Works finds the Work acceptable under this Contract and this Contract fully performed, the Director of Parks and Public Works shall promptly issue a final certificate to Governing Body or Owner, stating that the Work provided for in this Contract has been completed and is accepted by the Director of Parks and Public Works under the terms and conditions thereof.

4. Acceptance of the Work will be made by the Governing Body of Owner only upon filing with said Governing Body of a certificate by the Director of Parks and Public Works showing the Work has been given a final inspection and approval by Director of Parks and Public Works and that Contractor has submitted satisfactory evidence to the Director of Parks and Public Works that all payrolls, material bills and other indebtedness connected with said work have been paid. The acceptance will be made only by action of the Governing Body of Owner to regular session.

5. If, after the Work has been substantially completed, full completion thereof is materially delayed through no fault of Contractor, and Director of Parks and Public Works so certifies, Owner shall, upon certificate of the Director of Parks and Public Works, and without terminating this Contract, make payment of the balance due for that portion of the Work completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not

constitute a waiver of claims.

6. The acceptance by Contractor of said final payment shall constitute a waiver of all claims against the Owner arising under this Contract.

Submission of Requests for Payment / Invoices. The Contractor shall submit all original requests for payments or invoices directly to the Owner as follows: Town of Los Gatos Finance Department, Attn: Accounts Payable, Post Office Box 655, Los Gatos, California 95030. A copy of such request or invoices shall also be sent to the Director of Parks and Public Works.

Void Contract Provisions. Payment of undisputed contract amounts by the Owner are contingent upon the Contractor furnishing the Owner with a release of all claims against the Owner arising by virtue of the public works contract related to those amounts. Disputed contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the release.

Damages. Any provision in the Contract which limits the Owner's liability to an extension of time for delay for which the Owner is responsible and which delay is unreasonable under contemplation of the circumstances involved, and not within the parties' control, shall not be construed to preclude the recovery of damages by the Contractor or subcontractor. This section shall not be construed to void any provision in this Contract which requires notice of delays, provides for arbitration or other procedure for settlement, or provides for liquidated damages.



TOWN OF LOS GATOS

SPECIAL PROVISIONS Part III

**Town of Los Gatos
Department of Parks and Public Works**

SPECIAL PROVISIONS

**PROJECT #19-813-0236
Crosswalk Improvements on State Route 9 at Massol Avenue**

SECTION 1. SPECIFICATIONS AND PLANS

General

Wherever in these Specifications the term "Standard Specifications" is used, it shall mean the State of California, Department of Transportation, Standard Specifications, dated 2010, except as specifically noted in the Technical Specifications. In case of conflict between the State of California Standard Specifications and these Specifications, these Specifications shall take precedence over and be used in lieu of such conflicting portions. Any item not covered in these Specifications shall be performed in accordance with the appropriate section of the Standard Specifications.

Special Provisions Section 1 – Section 9

Special Provisions Sections 1 – Section 9 shall apply to all elements of the project. Full compensation for furnishing all labor, materials, tools, equipment and all incidentals for doing all the work involved in compliance with the Plans, Specifications, and Special Provisions Sections 1 – Section 9 shall be deemed included in the price paid for the various other contract bid items and no additional compensation shall be allowed therefore.

SECTION 2. PROPOSAL REQUIREMENTS AND CONDITIONS

Proposal Guaranty

The Bidder's Bond shall conform to the bond form included in the Proposal for the project and shall be properly filled out and submitted with the Proposal.

Pre-Bid Site Inspection

As noted in the Town of Los Gatos Standard Plans and Specifications, prospective bidders shall carefully examine the jobsite. The submission of the bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, as to character, quality, and scope of work to be performed, the quantity of materials to be furnished, and as to the requirements of the proposals, plans, specifications, and the contract. All questions relative to this project must be submitted in writing and received a minimum of five (5) working days prior to the bid opening date and shall be directed to:

Town of Los Gatos, Parks and Public Works Department
41 Miles Avenue, Los Gatos, CA 95030
Attention: Janice Chin, Assistant Engineer
Telephone: (408) 395-3460
Fax: (408) 354-8529
E-mail: jchin@losgatosca.gov

SECTION 3. AWARD AND EXECUTION OF CONTRACT

Determination of Low Bid

All bids will be compared on the basis of the Bid Form of quantities of work to be done. The determination of the low bid will be based on the total base bid. The contract will be awarded to the lowest responsible bidder meeting the contract requirements.

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

Bid Protests are to be delivered to the following:

Town of Los Gatos, Parks and Public Works Department
41 Miles Avenue, Los Gatos, CA 95030
Attention: Lisa Petersen, Assistant Director/Town Engineer
Telephone: (408) 399-5773
Fax: (408) 354-8529

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

The contract shall be executed by the successful bidder and shall be returned together with the contract bonds, to the Town so that it is received within ten (10) days, not including Saturdays, Sundays and legal holidays, after the bidder has received the Notice of Award. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address: Town of Los Gatos, Department of Parks and Public Works, 41 Miles Avenue, Los Gatos, CA 95030.

Pre-Construction Conference

A pre-construction conference will be held shortly after the contract award in accordance with "Meetings" subparagraph found in Section 8-1.07, "Pre-Construction Conference," of the Town Standard Specifications and Section 10-1, "General Construction Requirements," of these Special Provisions. The Contractor shall prepare in advance the proposed progress schedule in accordance with Section 8-1.01, "Progress Schedule" of the Town Standard Specifications and Section 10-1 of these Special Provisions, and a traffic control plan in accordance with Section 10-2, "Traffic Control Requirements" of these Special Provisions.

SECTION 4. BEGINNING OF WORK, TIME OF COMPLETION, AND LIQUIDATED DAMAGES

General

Attention is directed to the provisions in Section 8-1.03 "Beginning of Work", Section 8-1.06 "Time of Completion", and Section 8-1.07, "Liquidated Damages," of the Standard Specifications, and these Special Provisions.

Time of Completion

The Contractor shall begin work as stipulated in the Notice to Proceed.

The Contractor shall diligently prosecute the work to completion before the expiration of **forty (40) working days** after the date of the first working day. The time of completion shall include all allowances for mobilization and total completion of all work including final punch list work and final clean up.

Liquidated Damages

Time is of the essence for completion of this project. The Contractor shall pay to the Town of Los Gatos the sum of one thousand dollars (\$1,000.00) per day for each and every calendar day's delay in the finishing of the work in excess of working days prescribed above. Liquidated damages shall also be assessed for non-compliance with the requirements stated in "Hours of Work" under Section 10-1, "General Construction Requirements," of these Special Provisions, and Section 10-2, "Traffic Control Requirements."

SECTION 5. GENERAL REQUIREMENTS

Licenses

The Contractor shall possess a valid Class "A" General Engineering Contractor's License or Class "C-10" California Specialty Contractor's License at the time the Contract is awarded. Failure to possess the specified license shall render the bid as non-responsive and shall act as a bar to award the Contract to any bidder not possessing said license at the time of bid and forfeiture of the bid will result. All contractors and subcontractors shall have and maintain a current and valid contractor license of the required classification from the State of California throughout the course of this project. In addition, all contractors and subcontractors working in the Town of Los Gatos must have a valid Town of Los Gatos Business License.

Worker's Compensation

Attention is directed to Section 7-1.01A(6) "Workers' Compensation," of the Standard Specifications and the following:

Before commencing work in the Town of Los Gatos the Contractor must provide the Town with a copy of one of the following:

1. Certificate of Worker's Compensation Insurance; or
2. Certificate of consent to self-insure issued by the Director of Industrial Relations; or
3. Certificate of exemption from the Workers' Compensation Laws.

Insurance Requirements

Attention is directed to Section 7-1.09, "Insurance Requirements," of the Town Standard Specifications. The Contractor agrees that they will assume sole and complete responsibility for job site conditions during the course of the work, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours.

In addition to any other indemnity obligation incorporated herein, the Contractor shall indemnify, defend and hold harmless Town, its agents, officers, attorneys. Employees, officials and volunteers, to the fullest extent permitted by law from any and all claims, causes of action, injuries, losses, liabilities, cost (including reasonable defense costs and attorneys' fees) or damages arising out of or related to, or alleged to arise out of or relate to the performance of this contract or any acts or omissions of Contractor, its agents, officers, employees, or anyone rendering services on their behalf, except for any claims, causes of action, injuries, losses, liabilities or damages proximately caused by the active negligence, sole negligence or willful misconduct of Town.

Notwithstanding any other indemnity provisions imposed under this contract, with respect to any design professional services provided by the Contractor, the Contractor agrees to indemnify, defend and hold harmless the Town, its officers, agents and employees from any and all claims, actions, causes of action, losses, damages, costs and liabilities of every nature, including all costs of defending any claim, caused by, pertaining or relating to, or arising out of, or alleged to have been caused by or arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Contractor, except for any claims, actions, causes of action, losses, damages or liabilities proximately caused by the sole negligence or willful misconduct of Town. The Town shall not be liable for acts of the Contractor in performing services described herein.

The foregoing indemnity provisions are intended to fully allocate all risk of liability to third-parties. No other rights of indemnity or contribution shall exist between the parties in law or in equity. The provisions set forth in this section shall survive the termination of this Agreement.

Public Safety

The following paragraphs are hereby added to Section 7-1.09 "Public Safety," of the Standard Specifications.

The Contractor shall maintain a safe workplace throughout the job including, but not limited to, maintenance of barricades, maintenance of safe pedestrian walkways and handicap access throughout or around the project site, and maintenance of pavement within the limits of the roadway and driveways with a suitable traffic-bearing surface. The Contractor shall fulfill the requirements of this Section 24 hours per day, seven days a week, including holidays, from the time of the Notice to Proceed is issued until the project is formally accepted.

Labor Nondiscrimination

Attention is directed to Section 1735 of the Labor Code, which reads as follows:

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

Attention is directed to the following "Nondiscrimination Clause" that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

NONDISCRIMINATION CLAUSE

1. During the performance of this contract, the Contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. The Contractors and subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. The contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code, Section 12990 et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this contract by reference and made a part hereof as if set forth in full. The Contractor and its subcontractors shall give written

- notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
2. This Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

**STANDARD CALIFORNIA NONDISCRIMINATION CONSTRUCTION
CONTRACT SPECIFICATIONS (GOV. CODE, SECTION 12990)**

These specifications are applicable to all state Contractors and subcontractors having a construction contract or subcontract of \$5,000 or more.

1. As used in the specifications:
 - a. Administrator” means Administrator, Office of Compliance Programs, California Department of Fair Employment and Housing or any person to whom the Administrator delegates authority;
 - b. “Minority” includes:
 - (i) Black (all persons having primary origins in any of the black racial groups of Africa, but not of Hispanic origin);
 - (ii) Hispanic (all persons of primary culture or origin in Mexico, Puerto Rico, Cuba, Central or South America or other Spanish derived culture or origin regardless of race);
 - (iii) Asian/Pacific Islander (all persons having primary origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent or the Pacific Islands); and
 - (iv) American Indian/Alaskan Native (all persons having primary origins in any of the original peoples of North America and who maintain culture identification through tribal affiliation or community recognition).
2. Whenever the Contractor or any subcontractor subcontracts a portion of the work, it shall physically include in each subcontract of \$5,000 or more the nondiscrimination clause in this contract directly or through incorporation by reference. Any subcontract for work involving a construction trade shall also include the Standard California Construction Contract Specifications, either directly or through incorporation by reference.
3. The Contractor shall implement the specific nondiscrimination standards provided in paragraph 6(a) through (e) of these specifications.
4. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women, shall excuse the Contractor's obligations under these specifications, Government Code, Section 12990, or the regulations promulgated pursuant thereto.
5. In order for the non-working training hours of apprentices and trainees to be counted, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor or the California Department of Industrial Relations.
6. The Contractor shall take specific actions to implement its nondiscrimination program. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor must be able to demonstrate fully its efforts under Steps (a) through (e) below:

- a) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and at all facilities at which the Contractor's employees are assigned to work. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligations to maintain such a working environment.
 - b) Disseminate the Contractor's equal employment opportunity policy by providing notice of the policy to unions and training, recruitment and outreach programs and requesting their cooperation in assisting the Contractor to meet its obligations; and by posting the company policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - c) Ensure all personnel making management and employment decisions regarding hiring, assignment, layoff, termination, conditions of work, training, rates of pay or other employment decisions, including all supervisory personnel, superintendents, general foremen, on-site foremen, etc., are aware of the Contractor's equal employment opportunity policy and obligations, and discharge their responsibilities accordingly.
 - d) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the equal employment opportunity policy and the Contractor's obligations under these specifications are being carried out.
7. The Contractors are encouraged to participate in voluntary associations, which assist in fulfilling their equal employment opportunity obligations. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar groups of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under these specifications provided that the Contractor actively participates in the group, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's.
 8. The Contractor is required to provide equal employment opportunity for all minority groups, both male and female, and all women, both minority and non-minority.
 9. The Contractor shall not use the nondiscrimination standards to discriminate against any person because of race, color, religion, sex, national origin, ancestry, physical handicap, medical condition, marital status or age over 40.
 10. The Contractor shall not enter into any subcontract with any person or firm decertified from state contracts pursuant to Government Code Section 12990.
 11. The Contractor shall carry out such sanctions and penalties for violation of these specifications and the nondiscrimination clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Government Code Section 12990 and its implementing regulations by the awarding agency. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Government Code Section 12990.

12. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company equal employment opportunity policy is being carried out, to submit reports relating to the provisions hereof as may be required by OCP and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status, (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in any easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

NOTE: Authority cited: Sections 12935(a) and 12990(d), Government Code. References: Section 12990, Government Code.

Prevailing Wage

Attention is directed to Section 7-1.01A(2) of the Standard Specifications entitled “Prevailing Wage,” and as determined/published by the Department of Industrial Relations for the State of California – as indicated in the following website: <http://www.dir.ca.gov/dlsr/pwd/index.htm>.

If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, said published rate of wage shall be in effect for the life of this contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the Department of Industrial Relations, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of the contract, each successive predetermined wage rate shall apply to this contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rate expires during the life of this contract, such wage rate shall apply to the balance of the contract.

Payroll Records

The Contractor shall comply with Section 7-1.02K(3), “Certified Payroll Records” of the 2010 Standard Specifications. It shall be amended to include:

Certified payroll records shall be submitted weekly for the life of the project to a representative of the body awarding the contract.

SECTION 6. CONTROL OF WORK

Record Drawings

The Contractor shall mark all project conditions, locations, configurations, and any other changes or deviations, which may vary from the plans represented on the Original Contract Documents including buried or concealed construction and utility features which are revealed during the course of construction. The Contractor shall keep and maintain the said records and submit a monthly updated set of Record Drawings to the Engineer. Progress payments may be withheld until the Contractor submits the monthly updated Record Drawing to the Engineer. No final payment will be made until the record drawings are delivered.

Materials Testing

Materials testing shall be done in accordance with the project plans and specifications. Attention is also directed to the State of California, Department of Transportation, Standard Specifications dated 2010, portions of which are incorporated into the Town Standard Specifications by reference.

The Contractor shall allow sufficient time for test to be conducted and results reviewed prior to continuing with the work, which may be affected by any test results.

Payment for compliance with Section 6, "Control of Work," shall be deemed included in the various other items of work and no additional compensation shall be allowed therefore.

SECTION 7. CLAIMS

General

The Contractor shall not be entitled to the payment of any additional compensation for any act, or failure to act, by the Engineer, including failure or refusal to issue a change order, or for the happening of any event, thing, occurrence, or other cause, unless the Contractor shall have given the Engineer due written notice of potential claim specified in the Standard Specifications and these Special Provisions.

The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and insofar as possible, the amount of the potential claim. The notice as above required must have been given to the Engineer prior to the time that the Contractor shall have performed the work giving rise to the potential claim for additional compensation, if based on an act or failure to act by the Engineer, or in all other cases within 10 days after the happening of the event, thing, occurrence, or other cause, giving rise to the potential claim. Town may request additional information from Contractor regarding the Contractor's claim which shall be provided to the Town within 10 days of the request. If the Contractor fails to provide notice as stipulated in this section, the Claim will be considered invalid, and no compensation will be allowed therefore.

It is the intention of this Section that differences between parties arising under and by virtue of the contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor hereby agrees that they shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was filed.

In addition to the written notice of potential claim, the Contractor shall submit written statement of all claims arising under or by virtue of the contract so that the Engineer receives the written approval or statement of claims no later than close of business of the thirtieth (30th) day after receiving the proposed final estimate. If the thirtieth (30th) day falls on a Saturday, Sunday, or legal holiday, then receipt of the written approval or statement of claims by the Engineer shall not be later than close of business of the next business day. No claim will be considered that was not included in the written statement or claims, nor will any claim be allowed as to which a notice or protest is required under these provisions in Section 4-1.03, "Changes" and "Time of Completion," Section 4, "Liquidated Damages," Section 5-1.116, "Differing Site Conditions," Section 8-1.10, "Utilities and Non-Highway Facilities," and Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications unless the Contractor has complied with the notice or protest requirements in those sections.

Claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. If additional information or details are required by the Engineer to determine the basis and amount of the claims, the Contractor shall furnish additional information or details so that the

additional information or details are received by the Engineer no later than the fifteenth (15th) day after receipt of the written request from the Engineer. If the fifteenth (15th) calendar day falls on a Saturday, Sunday or legal holiday, then receipt of the information or details by the Engineer shall not be later than close of business of the next business day. Failure to submit the information and details to the Engineer within the time specified will be sufficient cause for denying the claim.

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

Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et. seq., the undersigned,

(Name)

(Title)

(Company)

hereby certifies that the claim for the additional compensation and time, if any, made herein for the work on this contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the contract between parties.

Dated _____

/s/ _____

State of California)
County of _____) ss.

Subscribed and sworn to (or affirmed) before me this _____ day of _____, 20____.

Signature of Notary Public

(Notary Seal)

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

Any claim for overhead type expenses or costs, in addition to being certified as stated above, shall be supported by an audit report of an independent Certified Public Accountant. Any claim for overhead shall also be subject to audit by the Town at its discretion.

Any costs or expenses incurred by the Town in reviewing or auditing any claims that are not supported by the Contractor's cost accounting or other records shall be deemed to be damages incurred by the Town within the meaning of the California False Claims Act.

The Engineer will make the final determination of any claim which remains in dispute after completion of the claim review. The Contractor may be allowed to make a presentation in support of those claims.

Upon final determination of the claims, the Engineer will then make and issue the Engineer's final estimate in writing and within 30 days thereafter the Town will pay the entire sum, if any, found due thereon. That final estimate shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefore, except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors" of the Standard Specifications.

SECTION 8. MATERIALS

Town Furnished Materials

Temporary "No Parking" signs shall be provided by the Town for the Contractor's use on this project.

Submittals

The Contractor shall submit and obtain an Encroachment Permit from the California Department of Transportation (Caltrans) before proceeding with any work.

The Contractor shall submit to the Engineer the following at least three (3) working days before the pre-construction conference:

1. Construction Schedule
2. Traffic Control Plan
3. Materials Submittals Binder
4. Storm Water Pollution Prevention Plan (SWPPP)
5. Notice to Residents, Businesses, and Schools (draft form)

All submittals listed above must be received and processed by the Engineer prior to the issuance of the Notice to Proceed. Any exceptions or rejected submittals will be remedied and resubmitted for the Engineer's review prior to the issuance of the Notice to Proceed. Payment for compliance with Section 8, "Materials," shall be deemed included in the various other items of work and no additional compensation shall be allowed therefore.

Materials Submittal List

The materials proposed by the Contractor to be used on this contract shall be submitted for approval to the Engineer three (3) working days before the pre-construction conference.

The Contractor shall submit **one (1)** set of original submittals to the Engineer for approval in a three-ring binder, at least two inches in thickness, and include numbered index tabs separating each submittal. Submittal index tabs shall follow the numbering system identified in the list below. Subsequent re-submittals, including the original and all copies shall be submitted in loose-leaf form or via PDF.

Submittals and support information shall be separated and clearly labeled when submitted to the Engineer for approval. The submittal list supplied is intended to be comprehensive, but no claim for its completeness is implied and submittal of the complete list will not relieve the Contractor of supplying all the information needed or of complying with any of the other requirements of the plans or specifications. Revised lists may be issued and items may be added to the list supplied.

Manufacturer's specifications shall be supplied along with submittal list for all applicable products on the list.

Certificates of Compliance shall be submitted in accordance with Section 6-1.07, "Certificates of Compliance," of the Standard Specifications including the individual material specification of these Special Provisions.

Submittals shall contain:

1. The date of submission and the dates of any previous submissions, including identification of revision or re-submittals.
2. The Project title and number.
3. Contractor identification, names of subcontractors, suppliers and manufacturers.
4. Specification Section number(s) and Bid Item(s) which pertain.
5. Applicable standards, such as ASTM, Federal, or State Specification numbers. Certified test results indicating performance of materials/products with regard to Specification requirements.
6. A 5"x 3" blank space for Engineer's stamp.
7. The Contractor is required to initial or sign the submittal, certifying the review of submittals and verification of products, field construction criteria, and coordination of the information within the submittal and the project plans and specifications.

The General Contractor shall be required to review and approve all submittals and provide them signed as evidence thereof, prior to submitting to the Engineer for review. Submittals that are not signed by the General Contractor will be rejected. Submittals shall be numbered consecutively.

The preparation of plans, drawings, and necessary documents, as required by the following submittal lists, shall be considered as part of the requirements of other items of work and no additional compensation shall be allowed therefore.

The Engineer reserves the right to reject any item that does not fulfill the requirements of these plans, the Standard Specifications, and the Special Provisions.

The Engineer reserves the right to require additional submittals from the Contractor that are not specifically identified in the Materials Submittal List Table below. If so requested, the Contractor shall provide the Engineer with four (4) copies of any additional submittal.

Payment for compliance with Section 8, "Materials," shall be deemed included in the various other items of work and no additional compensation shall be allowed therefore.

TOWN OF LOS GATOS
Submittal List

DESCRIPTION
1. Contractor's Caltrans Encroachment Permit Application
2. Construction Schedule
3. Traffic Control Plan
4. Notices to Residents, Businesses, and Schools
5. Storm Water Pollution Prevention Plan (SWPPP)

Materials Submittal List:

DESCRIPTION	REQUIRED SUBMITTAL		
	DESCRIPTION MIX DESIGN/PRODUCT CUT-SHEETS	MANUFACTURER/ PRODUCER INSTALLATION INFORMATION	CERTIFICATE OF COMPLIANCE
6. Portland Cement Concrete (PCC) Class A (six-sack mix) (3,000 psi, 28-day)	X		X
7. Class 2 Aggregate Base, 3/4" Max.	X		X
8. Hot Mix Asphalt (HMA) 1/2", Type A	X		X
9. Paving Asphalt Binder PG 64-10			X
10. SS1h Emulsified Asphalt			X
11. Thermoplastic Material		X	X
12. Pavement Markers		X	X
13. Glass		X	X
14. Polymer Resin Binder			X
15. Sign and Sign Post	X	X	
16. Flashing Beacon System	X		
17. Radar Speed Feedback Sign System	X		
18. Rectangular Rapid Flashing Beacon (RRFB) System	X		

SECTION 9.

DESCRIPTION OF WORK

Description of Work

This project in general includes the following: crosswalk improvements on State Route 9 at Massol Avenue in the Town of Los Gatos. Work includes, but is not limited to, replacing existing flashing beacons with rectangular rapid flashing beacons, installation of a landscaped median island (including irrigation), a new streetlight foundation and pole, installation of green thermoplastic bike lanes and other pavement markings, as shown on the plans.

Locations of Work

The work that is to be performed is at the following locations within the California Department of Transportation (Caltrans) right-of-way:

On State Route 9 from San Benito Avenue to approximately 360 feet west of Massol Avenue, including the intersection of State Route 9 and Massol Avenue.



TOWN OF LOS GATOS

TECHNICAL SPECIFICATIONS Part IV

SECTION 10 TECHNICAL PROVISIONS

SECTION 10-1 GENERAL CONSTRUCTION REQUIREMENTS

Project Plans

The “Project Plans” found in **Appendix A** shall be considered as the project plans.

Mobilization

Mobilization shall not be separately paid for but shall be considered as included in the payments for other items of work. This shall include full compensation for furnishing all labor and materials, including tools, equipment and incidentals, and for performing all of the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of equipment and materials as specified in the Town Standard Specifications, the Standard Specifications, and these Special Provisions, and as directed by the Engineer.

Order of Work

Order of Work shall conform to the provisions in Section 10-1.02, “Work Sequencing,” of the 2018 Standard Specifications and these Special Provisions.

The work to be completed is located within the California Department of Transportation (Caltrans) right-of-way. The Town has received an encroachment permit for the work. The Contractor shall also submit and obtain an Encroachment Permit from Caltrans before proceeding with any work.

At least five (5) working days before any work is started, the Contractor shall furnish to the Engineer a written schedule for the work, listing the dates on which individual areas are to be subject to project related work and the extent of impact caused by the work. Additionally, the Contractor shall submit any request for approval for special traffic consideration including but not limited to lane closures, etc. The Contractor shall thenceforth adhere diligently to said written schedule in the prosecution of the work.

The street may not be available for work if scheduling is not requested by the Contractor and approved by the Engineer (5) working days prior to the desired workday.

Attention is directed to Section 10-2, “Traffic Control Requirements,” of these Special Provisions.

Cooperation

Attention is directed to Section 5-1.36D, “Non-Highway Facilities,” of the 2018 Standard Specifications.

It is the Contractor’s responsibility to work with utility companies to coordinate the removal, relocation, raising to grade, installation of the new facilities, or any other utility work as shown on the plans or indicated in the specifications with the appropriate utility company. The Contractor shall provide advance notification and shall allow sufficient time and work space for the utility company to complete the work necessary.

If in the opinion of the Engineer, the Contractor’s operations are delayed by reason of utility facilities not being removed or relocated, the Contractor will be entitled to an extension of time only. The Contractor shall be entitled to no other compensation for such delay.

Progress Schedule

The Contractor shall submit a project progress schedule for approval by the Engineer within eight (8) days, not including Saturdays, Sundays, and legal holidays from the date of the Notice of the Award of Contract or 3 days before the pre-construction conference, whichever comes first. Failure to submit an

acceptable progress schedule shall result in rejection of the Contractor's proposal. The progress schedule shall be in the form specified below unless otherwise specified in the Special Provision or approved by the Engineer. Updated progress schedules shall be provided by the Contractor monthly with the estimates of work required in Section 9-1.16, "Progress Payments," of the 2018 Standard Specifications. No partial payments will be made for any work until an updated schedule has been submitted and approved by the Engineer. Updated schedules shall incorporate all current schedule information, including actual progress, approved time adjustments, and proposed changes in sequence and logic.

The Contractor must furnish a computerized schedule prepared by the critical path method (CPM) which shows the order in which the Contractor proposes to carry out the work; the sequence and interdependence of construction activities; all salient features of the work (including procurement of materials and equipment); the dates on which the Contractor will start the salient features of the work; and the scheduled dates for completing the said salient features. The construction schedule shall include:

- a. Time for submittals and reviews;
- b. Time for fabrication and delivery of manufactured products for the work; and
- c. The interdependence of procurement and construction activities.

The construction schedule shall:

- a. Be a timescaled network diagram referenced to specific calendar dates;
- b. Include time for the Engineer to review submittals or inspect the work; and
- c. Identify the activities which constitute the controlling operations or critical path.

The construction schedule shall not contain multiple critical paths.

Scheduling of change order work is the responsibility of the Contractor. The Contractor shall revise the schedule to incorporate all activities involved in completing the change order work and submit a new schedule to the Engineer for review.

Delays or changes to non-critical activities will not be considered for a contract time extension. Non-critical activities are those activities which when delayed, do not affect the contract completion time.

The project schedules submitted shall be consistent in all respects with the time and order of work requirements of the contract. The Engineer, at his or her sole discretion, retains the right to reject any and all construction schedules submitted by the Contractor, including when the Engineer determines that the Contractor has too many items on the Critical Path, or the logic of the schedule is in error, or if the Engineer determines salient items of work are missing from the schedule.

Subject to the above provisions, nothing herein shall preclude the Contractor from early completion of the contract.

The Contractor shall submit updated progress schedules to the Engineer as a condition of approval for the monthly progress payments and final acceptance.

Record Drawings

The Contractor shall keep and maintain on the job site, one record set of drawings. On these, the Contractor shall mark all project conditions, locations, configurations, and any other changes or deviations which may vary from the details represented on the original contract documents, including buried or concealed construction and utility features which are revealed during the course of construction.

Final payment will not be approved until the Contractor prepared record drawings have been delivered to the Engineer.

General Measurement and Payment Requirements

The Contractor shall submit in all field quantities completed to date for payment with each monthly pay estimate. The Contractor shall provide, in writing, who from their team will be responsible for field measuring quantities with the Town's representative. Upon completion of a contract bid item, the Contractor's representative shall field measure the final quantities with the Town's representative. This agreed upon amount will be considered final and no re-measuring of these field quantities will be allowed without the approval of the Engineer. All supporting documentation required for payment of an item, shall be submitted by the Contractor within two pay periods following the work. Documentation submitted more than two pay periods after the work was completed will not be paid and the cost of this work shall be borne by the Contractor.

Hours of Work

Unless otherwise approved in writing by the Engineer or specified in these Special Provisions, the hours of work for this project are Monday through Friday, 9:00 AM to 3:00 PM.

The work hours will be strictly enforced. The Engineer has full authority to implement the working hours and completely shut down the construction operations outside the hours of work specified. Should the provisions of this section not be met, liquidated damages of Five Hundred Dollars (\$500.00) for every 60-minute time period (or portion thereof) beyond the hours of work allowable shall be withheld from moneys due to the Contractor.

24-Hour Contact Number

The Contractor shall assign a project superintendent who has the complete authority to make decisions on behalf of the Contractor. The project superintendent shall be on the job at all times during construction and shall be available and on call 24 hours a day for the duration of the project. The Contractor shall provide to the Engineer and to the Los Gatos-Monte Sereno Police Department a 24-hour contact number for the project superintendent. This number shall not direct calls to a recorder or other message taking service. The project contact and 24-hour contact number shall be on all of the notices and signs for the project.

Advance Public Notification

Two weeks prior to beginning any work in an area, the Contractor shall deliver written notice to all adjoining residents and businesses, tenants, and other applicable parties and all other properties where their only ingress/egress is through the project's work area. Individual or separate notices shall be given for general construction activity in an area as well as specific activities, which will, in any way, inconvenience the resident/property owner/tenant or affect their operations or access to their properties. Such notices shall include the expected date for start of construction, a general description of the construction activity to take place, expected duration of the activity, and the name, address, and contact number of the Contractor's superintendent. The Contractor shall provide accurate information regarding the construction schedule and activities to be incorporated into the two-week notification. The Contractor shall make every effort to coordinate work with individual residents and businesses whose access will be disrupted in order to minimize the disruption and impacts on the resident or business.

The Contractor shall also prepare and hand-deliver a "follow-up" notice. The notice shall be distributed two working days prior to the work beginning. The "follow-up" notice shall be delivered to all adjoining residents and business, tenants, and other applicable parties and any other properties who sole ingress/egress is through the project's work area.

Copies of all notices shall be provided to the Engineer for approval five (5) working days prior to the desired distribution date.

Should the Contractor's schedule change and/or differ in any capacity from the schedule initially mentioned in the notification to the resident/property owner/tenant or from the updates to the Town website, the Contractor shall re-notify all applicable parties (residents/property owner/tenant and/or businesses mentioned below) five (5) working days prior to the beginning of any work on that street.

The Contractor shall contact and coordinate the work with the following parties throughout the project. The two week and two-day notification shall also be given to the following parties prior to beginning any work:

West Valley Collection and Recycling, LLC – (408) 283-8500
U.S. Postal Service – Post Master – (408) 395-7526
Los Gatos/Monte Sereno Police Department – (408) 354-8600
Santa Clara County Fire Department – (408) 378-4010

The Contractor shall also give written notice to residents, businesses, medical offices, etc. for any driveway closures or anticipated service disruptions. The notice shall be distributed two working days prior to the anticipated disruption. The Contractor shall coordinate all disruptions with the appropriate utility, property owner, resident, business and the Town. Notice shall be given in advance and specify the duration of the disruption of any utility, and the temporary closure of access to any driveway. Such notice shall comply with the requirements for closure of driveway access as specified under Special Provision Section 10-2, "Traffic Control Requirements."

Lack of proper advance notification and coordination shall result in the work being shut down. All costs associated with the stoppage of work shall be borne by the Contractor.

Line and Grade

The Contractor shall layout the project by providing all stakes and marks needed to establish the lines and grades required for completion of the work specified on the Plans and in these Special Provisions to the satisfaction of the Engineer.

Meetings

Prior to commencement of any work on the project, a pre-construction conference will be scheduled by the Town and held at the Town's Engineering office for the purpose of review and discussion of the project schedule and construction procedures. The Contractor's project manager and/or project superintendent and representatives from all listed subcontractors shall be required to attend the pre-construction conference. The Contractor shall prepare and submit at the pre-construction meeting the proposed project schedule, water pollution control plan, traffic control plan, public notification letter, and other submittals as specified under Section 8, "Materials," of the Special Provisions.

The Contractor shall also schedule and conduct weekly field meetings at locations to be determined by the Town. The meetings shall be held at the same time and place each week and shall include all subcontractors working on the project and discussions of scheduled work on the project during the week of the meeting. The Contractor shall notify the Engineer of the time, date, and location of these meetings 72 hours in advance of the first meeting. Detailed schedules for the following two weeks shall be submitted to the Engineer at each weekly meeting.

Waste Haulers and Recycling Operations

The Contractor shall not impair or impede waste hauler and recycling operations scheduled to be conducted within the project area. It is the Contractor's responsibility to determine which waste hauler and recycling operators are scheduled to operate within the project area, and to develop a project schedule that will not impair or impede the waste hauler or recycling operations.

Project Appearance and Street Sweeping

The Contractor shall maintain a neat appearance to the work site. Debris developed during construction shall be disposed concurrently with its generation. Stockpiling of debris or construction materials shall not be allowed unless otherwise approved by the Engineer.

The Town prohibits the use of any public property or public right-of-way locations as construction staging points, unless specifically approved by the Engineer.

Right-of-Way

The Contractor shall operate within public right-of-way only.

Tree Trimming

If existing trees or shrubs, including median island planting, and private trees, encroach into the public right-of-way and threaten to obstruct the Contractor's operation, the Contractor shall request permission to trim existing the trees or shrubs, at least five (5) working days prior to the date of scheduled tree trimming. All tree and shrub trimming must have prior approval of the Engineer and shall be performed by a Contractor possessing a C-27 or a D-49 license. All costs for tree or shrub trimming and proper disposal shall be paid by the Contractor.

Landscaping Obstruction

In the event that there are landscaping obstructions such as ivy, lawn, juniper branches, grass, or other encroaching vegetation, the Contractor shall trim or prune such obstruction only to the extent necessary to conduct the installation of improvements in the public right-of-way. Landscaping or other improvements outside the limits of work shall be protected by the Contractor and shall be replaced in kind if the Contractor's operations damage the existing improvements. If the Contractor fails to comply in providing the necessary replacement as defined, the Engineer may elect to have the Town or contract forces perform all these duties deducting all the expenses incurred from any moneys that are due, or to become due, to the Contractor. By exercising this option, the Contractor is in no way relieved of the responsibilities to perform these duties.

Staging/Disposal Areas

The Contractor shall survey the area for construction staging. Staging areas shall not be located in a residential area.

The following requirements shall apply to the contractor's staging area:

- No stockpiles or staging area will be allowed in the right-of-way or on undeveloped lots unless specifically approved by the Engineer
- The staging area shall be included in the Contractor's SWPPP
- The staging area shall not be located in an environmentally or culturally sensitive area and/or impact water resources (rivers, streams, bays, inlets, lakes, drainage sloughs).
- The staging area shall not be located in a regulatory floodway or within the base floodplain (100-year).
- The staging area shall not affect access to properties or roadways.

The Contractor shall obtain the approval of the Engineer before staging equipment or storing materials in the public right-of-way or on Town property. In addition, the Contractor shall provide proof of an agreement when using private property for staging, if requested by the Engineer.

All debris shall be hauled off and disposed of the same working day in which the material was generated.

Personal vehicles of the Contractor's employees shall not be parked in the neighborhood or on the traveled way. When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic and shall travel in the normal direction of travel.

Dust Control

The following requirements shall be applicable to this contract in lieu of the requirements of Section 14-9.03, "Dust Control," of the 2018 Standard Specifications.

A. The Contractor shall provide an acceptable plan for preventing the generation of dust due to the Contractor's operations in the construction zones, along the haul routes, or equipment parking areas. This plan may consist of water sprinkling sweepers or an equivalent service. No separate payment will be made for dust control and all costs in connection therewith shall be included in the payment items to which the work is incidental.

B. In the event the control of dust is not satisfactory to the Owner, the Owner shall take such measures as may be necessary to insure satisfactory dust control and deduct the cost of such measures from any payments due to the Contractor.

Water for Construction

The costs of water as required for the construction and post-construction on this project, including dust control, shall be considered as included in the costs of items bid for applicable item of work and no separate payment will be made therefor. The Contractor shall conform to the requirements of the water company from which water is purchased. In no case shall the Contractor violate the Town's water conservation ordinance.

Sanitation

The Contractor shall provide for sanitary facilities for the use of the workers on the job. Such facilities shall be placed and maintained by the Contractor so as not to be aesthetically displeasing, annoying to the neighbors, nor offensive to the senses nor the community standards of decency. The Engineer shall be the sole judge of the adequacy of the facility, the placement, and the maintenance thereof. Upon notification by the Engineer of deficiencies in any of these areas, the Contractor shall make immediate corrections. Failure to take corrective action within 24 hours shall give the Engineer due cause to stop the work in the contract and to order the corrective work to be done on the sanitary facility and to charge all costs of such work against the monies due or to become due to the Contractor.

Water Pollution Control

Water pollution control work shall conform to the provisions in Section 13, "Water Pollution Control," of the 2018 Standard Specifications and these Special Provisions, with the exception of payment. Payment shall be covered by "Measurement and Payment" of Section 10-1 of these Special Provisions.

The Contractor shall be responsible for ensuring that all work conforms to the "Best Management Practices for the Construction Industry" found in the Storm Water Pollution Prevention Plan (SWPPP), the "Blueprint for a Clean Bay" handout, and the Town Code.

The Contractor shall comply with the requirements of the State Water Resource Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction and Land Disturbance Activities.

The Contractor shall not violate any discharge prohibition contained in the California Regional Water Quality Control Board San Francisco Bay Basin Water Quality Control Plan ("Basin Plan").

A storm water information handout, "Blueprint for a Clean Bay," has been prepared for this contract and is available in **Appendix C**.

Electric Blowers

The use of gasoline leaf blowers is prohibited. The Contractor shall use electric leaf blowers that shall not exceed 65 decibels in all residential, commercial, and industrial zones or public space, measured 50 feet from the source. The Contractor shall comply with the requirements as set forth in the Town of Los Gatos Ordinance 2231.

COVID-19

All work shall be done in compliance with the current County Health order on COVID-19. The Contractor shall be responsible for continuous compliance until the work has been accepted and shall be responsible for meeting the requirements of any new orders issued.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in compliance with the Plans, Specifications, and Special Provisions of Section 10-1, "General Construction Requirements," shall be deemed included in the price paid for other contract items and no additional compensation shall be allowed therefore.

SECTION 10-2 TRAFFIC CONTROL REQUIREMENTS

General

Traffic control shall conform to the provisions of Section 12, "Temporary Traffic Control," of the 2018 Standard Specifications, the California Manual on Uniform Traffic Control Devices (CA MUTCD), and these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.04, "Public Safety," of the 2018 Standard Specifications and these Special Provisions.

The traffic control plan shall be prepared in compliance with the Standard Plans and/or CA MUTCD and shall be prepared by a certified traffic engineer or a qualified traffic control professional. The Contractor shall submit a scaled drawing with detailed information, such as lanes to be closed or narrowed, time and days of operation, transitions, cones and barricades, signs, arrow boards, pedestrian and bicycle provisions, etc. The traffic control plan should show length of transitions, cone spacing, sign spacing, etc. based on the posted speed limits or the posted construction zone speed limits. The traffic control plan shall also include a provision for the Contractor to contact and coordinate with the Valley Transportation Authority (VTA) if a bus stop is affected.

The Contractor shall maintain a safe workplace throughout the job including, but not limited to, providing all flaggers, safety equipment, flashing arrow boards, changeable message signs (minimum of two), traffic control devices; maintenance of barricades, safe pedestrian passages along sidewalks, maintenance of handicap access throughout the project site where applicable and maintenance of pavement within the limits of the roadway and driveways with a suitable traffic bearing surface.

The Contractor shall provide and maintain all necessary traffic control devices to ensure safe pedestrian and vehicular access through and around the job site. Warning signs shall be installed at locations in accordance with the “MUTCD for Streets and Highways – Part 6: Temporary Traffic Control 2014.” The Contractor shall fulfill the requirements of this section, 24 hours per day, seven days a week, including holidays, from the time the Notice to Proceed is issued until the project is formally accepted.

Should the Contractor fail to perform these duties, the Engineer, at the Engineer's sole discretion, may elect to have the Town, or contract forces, perform the duties, deducting the expenses incurred from any moneys that are due, or to become due, to the Contractor. By exercising this option, the Contractor is in no way relieved of the responsibility to perform these duties.

The Contractor shall provide a minimum of two competent and qualified flaggers dedicated solely to directing traffic if traffic lanes have been reduced to only one lane for two way traffic, in and out of driveways and cross-streets and/or across the construction area as deemed to ensure safe traffic control during construction operations. Flaggers shall be equipped with all necessary tools to properly control the traffic.

Traffic Control/Management Plan

A traffic control plan shall be submitted by the Contractor to the Engineer a minimum of five (5) working days prior to any work commencing on the project. The traffic control plan shall be reviewed and accepted by the Engineer prior to any work commencing on the project. All traffic plans shall be prepared in accordance with the State of California Department of Transportation “California Manual on Uniform Traffic Control Devices for Streets and Highways – Part 6: Temporary Traffic Control 2014,” Section 12, “Temporary Traffic Control,” of the 2018 Standard Specifications, and these Special Provisions.

No Parking Signs

Prior to the start of work which requires parking restriction, the Contractor shall request approval to post and shall maintain and update temporary “No Parking” signs on each street where the operations will take place. It shall be the Contractor's responsibility to post "No Parking" signs in the areas where the Contractor's work will require restricted parking. The Town will provide signs for the Contractor's use. To be enforceable, the signs must be posted not less than 72 hours prior to the start of the work at a maximum spacing of 60 feet. The signs must clearly show the date(s) and hours of the parking prohibition, as well as the date and time the signs were posted, and the project name and contractor's phone number. If the work is not performed during the timeframe indicated on the “No Parking” signs, the work will be rescheduled with at least five (5) working days advance notice. The Contractor shall perform all re-posting of “No Parking” signs and re-notification of businesses, tenants, and residents as a result of his failure to meet the posted schedule. Any delays caused by failure of the Contractor to adhere to the approved schedule will be at the Contractor's sole expense. No additional compensation will be allowed for costs resulting from said delays.

The Contractor shall remove the “No Parking” signs immediately when they are no longer needed for use in the respective area of the project. The Contractor shall notify the Los Gatos/Monte Sereno Police Department directly after posting, and immediately upon removal of the said signs at (408) 354-8600.

During the morning of each scheduled workday, the Contractor shall be responsible for calling the Los Gatos/Monte Sereno Police Department Police Dispatch to tow cars, if necessary. The Contractor shall have available for the police responding to the call photo documentation of the “No Parking” signs being posted if the signs were removed or vandalized the previous night.

Detours, Temporary Striping, and Barriers

Any approved detours or barriers, signing and striping necessary to complete the construction of the project shall be provided, installed, maintained, and removed by the Contractor at his expense. Temporary striping shall be self-sticking traffic marking tape, vinyl or otherwise, developed for such use, and shall be used for temporary striping as required, unless shown otherwise on the plans or specified in the special provisions. No painted temporary striping or markings will be allowed unless the temporary markings will be entirely covered by the permanent markings.

Notify the Los Gatos/Monte Sereno Police Department daily at (408) 354-8600 of street or lane closures or detours within the roadway prior to setting up and upon removal of traffic control devices.

Additional Construction Area Signs and Controls

In addition to the requirements of the CA MUTCD, the following traffic controls will be required as specified by the Engineer. These additional requirements in no way relieve the Contractor from his obligation to comply with the standards set forth in that manual.

- "Road Work Ahead" (Type C-23(CA))" signs shall be posted in advance of the first major cross street before the start of the work zone to allow traffic to avoid the work zone prior to entering the zone. The signs shall also be posted at the approaches to the project site.
- "End Road Work" (Type G20-2) signs shall be placed at all public road exits from the project site.
- The Contractor shall provide, install and maintain a minimum of four (4) lighted barricades for each individual construction site for concrete improvements (i.e. for curb and gutter removal & replacement and for accessibility ramp installation).
- Changeable message signs will be used starting one (1) week prior to construction beginning and will be maintained in place until construction impacts to the public no longer exist as determined by the Engineer.

The Contractor shall be responsible for locating existing poles on which to mount these signs or shall provide temporary stands or poles on which to place the required signs. The Engineer shall approve the method of attachment to existing poles prior to sign installation. No sign shall be mounted on decorative street light poles unless the Contractor can clearly show that the mounting method will not damage the finish on the poles.

Upon completion of the work, the signs and posts shall be removed and disposed of outside the public right of way.

Maintenance of Pedestrian Access and Circulation

Safe pedestrian access and circulation that is fully wheelchair accessible shall be maintained by the Contractor through or around the project area. All walkways, pedestrian crossings, ramps and other pedestrian facilities removed or blocked by the Contractor's operations shall be replaced with temporary facilities unless otherwise approved by the Engineer.

Pedestrian access at the project site may be diverted for a maximum of five (5) calendar days with approved traffic control plan. Drop off from existing improvements to excavated areas shall be temporarily ramped. Ramps shall be maintained at 12:1 or flatter with compacted sub-grade or base rock material until final improvements are installed.

Lane Closures

Requests for lane closures shall be made a minimum of five working days prior to the proposed closure. Once the lane closure has been approved by the Town, the Contractor shall post a minimum of five (5) working days in advance of the proposed lane closure a changeable message board sign at the limits of each closure or as specified by the Engineer. These changeable message board signs shall also be used on the day of the actual closure. The changeable message board signs shall indicate the days and hours of the proposed lane closure and the type of work being done during that lane closure.

Flashing arrow signs shall be used for all lane closures. The Contractor shall check with the Engineer to confirm any lane closure restrictions that may be in effect before closing any lanes.

The Contractor shall leave the streets open to traffic until just prior to starting the work, and will provide all barricades, signs and traffic control measures necessary to protect the work.

Work shall be completed on Monday through Friday per the Caltrans 5-day construction workday calendar. No work that interferes with public traffic shall be performed prior to 9:00 am or after 3:00 pm, except as otherwise approved by the Engineer. All traffic lanes shall be open to traffic between the hours of 3:00 pm and 9:00 am unless otherwise authorized by the Engineer. All streets shall be open to traffic at the end of the working hours specified in this section.

No work that interferes with public traffic shall be performed outside of the working hours, except as otherwise approved by the Engineer. All traffic lanes shall be open to traffic outside of the working hours.

A minimum of one paved, or surfaced traffic lane, not less than twelve (12) feet wide, shall be open for use by public traffic in each direction of travel. Traffic may not be routed over unpaved roadways unless authorized by the Engineer.

In addition, the full width of the traveled way on each street shall be open for public use on Saturdays and Sundays (except for those streets approved by the Engineer for weekend work), on designated legal holidays, and when construction operations are not actively in progress. Designated legal holidays are: January 1, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, Thanksgiving, the day after Thanksgiving, and December 25th. When a designated holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When a designated holiday falls on a Saturday, the preceding Friday shall be a designated legal holiday.

Deviations from the requirements of this section concerning hours of work, which do not change the cost of the work, may be permitted upon the written request of the Contractor, if in the opinion of the Engineer, the general public will be better served and the work expedited. Such deviations shall not be implemented until the Engineer has provided the Contractor with written approval to do so. All other modifications will be made by contract change order.

The Contractor shall pay the Town liquidated damages in the amount of \$500 per hour (or part of an hour) for traffic control that is set-up before the designated and approved hours of work. Liquidated damages for failure to open streets by the required time shall be \$500.00 per hour.

Traffic Control System for Lane Closure

A traffic control system shall consist of closing traffic lanes in accordance with the details shown on Caltrans Standard Plans T-10, T-10A, T-11, T-12, and T-13 as shown in **Appendix B**, the provisions of Section 12, "Temporary Traffic Control," of the 2018 Standard Specifications, and under these Special Provisions.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take measures as may be necessary to comply with the provisions of Section 7-1.04, "Public Safety," of the 2018 Standard Specifications.

Each vehicle used to place, maintain and remove components of a traffic control system on multilane roads shall be equipped with a Type II flashing arrow sign which shall be in operation when the vehicle is being used for placing, maintaining, or removing the components. Vehicles equipped with a Type II flashing arrow sign not involved in placing, maintaining, or removing the components when operated within a stationary type lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion.

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

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 excavations adjacent to the traveled way, shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations, approved by the Engineer.

Temporary Pavement Delineation

Temporary pavement delineation shall comply with Section 10-8 of these Special Provisions and with the provisions in Section 12-3, "Traffic-Handling Equipment and Devices," of the 2018 Standard Specifications, and the California MUTCD.

Property Access Requirements

The Contractor shall maintain property access to all residents and businesses at all times unless otherwise approved by the Engineer. Upon approval by the Engineer, access to certain properties may be temporarily closed if all of the following conditions can be met:

- a. No options exist to maintain property access and complete the project.
- b. The Contractor has discussed the closure with the resident or business owner in person.
- c. Residents or business owners has been notified, in writing, at least five (5) calendar days in advance of the time and length of closure
- d. Resident or business owners have been reminded of the closure, in writing, at least two (2) working days prior to the actual closure.
- e. The Contractor has provided the resident or business with a contractor name and number to call with questions regarding the closure.
- f. Closure will last no longer than three (3) working days

Signalized Intersections

No signal shutdown will be permitted between 7:00-9:00 AM and 4:00-6:00 PM during weekdays. The duration of signal shutdown shall not exceed 10 hours unless otherwise approved by the Engineer. The Contractor may install temporary signals at the Contractor's sole expense, if approved by Engineer in advance.

Construction Operations in the Vicinity of Signalized Intersections

Unless otherwise approved by the Engineer, construction operations in or at the vicinity of any signalized intersection that affect traffic movement may require the presence of two (2) off-duty Los Gatos-Monte Sereno police officers per intersection to monitor and direct traffic while work is in progress. Unless otherwise agreed upon by the Los Gatos-Monte Sereno Police Department, the Contractor shall plan their

work such that they are able to provide at least two (2) weeks advance notice to the Los Gatos-Monte Sereno Police Department when scheduling officers. The Contractor shall schedule officers with the Town Police Department at (408) 354-8600. The minimum chargeable rate for a reserve officer is \$46.00 per hour (minimum) and a three (3) hour minimum shift is required. In lieu of using a Los Gatos-Monte Sereno police officer, the Contractor may use a licensed traffic control company as approved by the Engineer.

The Contractor shall be invoiced directly from the Los Gatos-Monte Sereno Police Department and shall pay for all costs associated with their service.

All existing movements available must be maintained through the intersection.

Measurement and Payment

Full compensation for preparing traffic control plans, temporary pavement delineation plans, providing construction and detour signs, temporary signals, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in compliance with the Plans, Specifications, and Section 10-2, "Traffic Control Requirements," of the Special Provisions, with the exception of the additional changeable message signs, shall be included and paid for in the appropriate bid item for:

TRAFFIC CONTROL (L.S.)	BID ITEM #1
CHANGEABLE MESSAGE SIGNS (EA.)	BID ITEM #2

The basis for payment for Bid Item: Traffic Control will be based on the percentage of job completed in each progress payment.

SECTION 10-3 EXISTING FACILITIES

General

Existing Facilities shall conform to Section 15, "Existing Facilities," of the 2018 Standard Specifications, the Plans, and these Special Provisions.

Protect Existing Facilities to Remain

The Contractor shall work around and protect all existing improvements to remain, including but not limited to existing utilities, monumentation, bench marks, storm drainage facilities, utility vaults, traffic detector loops, home runs and handholes, concrete and hot mix asphalt pavement, pavement markings, landscaping, irrigation facilities, and appurtenances that are within or adjacent to the construction areas.

The Contractor shall notify Underground Service Alert (USA) prior to beginning any work. Notification shall be in full compliance with USA. At the conclusion of the project, the Contractor must remove all USA markings from all paved and concrete surfaces throughout the job site without damaging said surfaces. The method of removing the USA markings is at the Contractor's discretion.

Approximate locations of existing utility lines are shown on plans based on as-built maps provided by utility companies. The Contractor is responsible for locating and field verifying the locations of all existing utilities prior to all construction activities and protecting all facilities during construction. The Contractor shall protect existing electroliers when placing construction signs.

The Contractor shall immediately repair or remove and replace any item damaged or injured by his operations at his sole expense and to the satisfaction of the Engineer. The Contractor shall immediately notify the appropriate owner of the improvement or facility and the Engineer of any damage as a result of

his operations to existing improvements or facilities. If the improvement belongs to a private residence and the property owner or occupant is not at home, such notification shall be attached to the front door of the property. All underground facilities that are damaged by the Contractor during construction shall be restored by the Contractor within two (2) hours after the damage is done.

All existing improvements, including but not limited to, irrigation systems, brick work, stonework, fences, mailboxes, turf and landscaping, on public right-of-way which are obstacles to forming operations may be removed as necessary for this type of work. The Contractor shall notify the adjacent property owner and the Engineer prior to removal of any existing improvements. After removing the forms, all the existing improvements shall be restored to their original condition at no additional cost to the Town. If the Contractor fails to comply in providing the necessary restoration work as defined, the Engineer may elect to have the Town or other contract forces perform all these duties, deducting all the expenses incurred from any moneys that are due, or to become due, to the Contractor. By exercising this option, the Contractor is in no way relieved of the responsibilities to perform these duties.

Adjust Facilities to Grade

All existing storm manholes, manholes, traffic signal boxes, handholes, utility valve covers, utility valve boxes, water meter boxes, cable boxes, vault covers, and monuments shown on the Plans to be adjusted shall be adjusted to grade in accordance with Section 15-2.10, "Adjust," of the 2018 Standard Specifications, the Plans, and these Special Provisions. Where existing facilities to be adjusted are located in traffic areas, said facilities shall be modified to handle traffic loads and retrofitted with traffic covers.

The Contractor shall verify all utility covers in the field to be raised with the Engineer. Locations shall be documented prior to the any resurfacing work.

The Town shall be notified seven (7) working days prior to adjusting any facilities to grade. All work shall be done without any interruption to services provided by the facility.

Frames and covers shall be removed, transported, and stored without damage. Any items damaged shall be replaced at the Contractor's expense. Pre-existing damage must be brought to the Engineer's attention prior to commencement of any work. The covers shall be raised by excavating the frame and cover in a neat concentric circle with a diameter not greater than necessary to loosen and adjust the frame with the cover and the concrete collar.

At the direction of the Engineer, the Contractor shall use quick set concrete for all collars. Class A concrete mix (590 pounds cement per cubic yard concrete) shall be used to fill the void to an elevation 1" to 1.5" below finish grade. After three (3) days of concrete set, a tack coat of undiluted SS1h asphalt emulsion shall be applied to all concrete and vertical surfaces. The hot mix asphalt surface (HMA) course to be applied shall be 1/2", Type A, compacted to a minimum of 95 percent. Asphalt binder shall be PG 64-10. Any facilities that are adjusted to grade, but are not to the satisfaction of the Engineer, shall be removed and re-adjusted within four (4) working days of being notified to do so by the Engineer. All required hot mix asphalt, tack coat and concrete required for raising facilities to grade shall be paid for under this contract item.

Measurement and Payment

Full compensation for adjusting sewer manholes to grade, tree removal, replacing decorative median island cobblestones, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in compliance with the Plans, Specifications, and Section 10-3, "Existing Facilities," of the Special Provisions, shall be included and paid for in the per unit price paid for:

ADJUST SANITARY SEWER MANHOLE TO GRADE (EA.) BID ITEM #3

SECTION 10-4 CONCRETE IMPROVEMENTS

General

The work described herein this section shall comply with Section 73, “Concrete Curbs and Sidewalks,” and Section 90 “Portland Cement Concrete,” of the 2018 Standard Specifications, the Plans, and these Special Provisions. New improvements shall be constructed in accordance with the Project Plans.

The work includes, but is not limited to the following: the removal and disposal of existing pavement and base material, sawcutting existing pavement, construction of curb; the installation of Class 2 aggregate base; grading; compacting; installation of dowels; installation of rebar; installation and finishing of concrete curb improvements; and the installation of the adjacent asphalt pavement restoration (next to the adjacent curb locations).

Painted curbs removed and replaced by the Contractor shall be repainted at the Contractor’s expense. Curbs shall be constructed to the Town’s standards including specified Class 2 aggregate base compacted to 95%.

The limits of removal/replacement and new curb are found in the Project Plans. All facilities shall meet current ADA requirements.

Curb removal and replacement shall be marked in the field by the Engineer and shall be confirmed by the Contractor prior to its removal and replacement.

The Contractor shall give the Engineer a minimum of one week’s notice prior to actual removal and replacement of any concrete improvements. The limits of all removal and replacement shall be from score mark to score mark unless otherwise approved by the Engineer.

The subgrade for sidewalks, driveways, aprons, curb ramps, and similar structures below the aggregate shall be compacted to a relative compaction of 95 percent for a depth of 0.5 foot. The subgrade for curb and gutter below the aggregate shall be compacted to a relative compaction of 95 percent for a depth of 0.75 foot. Subgrade prep for concrete improvements shall be paid for under the appropriate bid items for concrete improvements.

Aggregate base for sidewalk, curb and gutter, and curb ramps shall be Class 2, 3/4” maximum and shall conform to Section 26, “Aggregate Bases,” of the 2018 Standard Specifications, the Plans, and these Special Provisions. Existing aggregate base shall be removed from the construction area and shall not be used as backfill material. The cost for aggregate base shall be included in the pay items for sidewalk, curb and gutter, and curb ramp and no additional compensation will be allowed, therefore.

New improvements shall not be placed until forms and compaction requirements are inspected and approved by the Engineer.

Portland Cement Concrete shall contain 1 lb. (min.) lamp black per cubic yard. The Contractor shall supply the Town a certificate of compliance that the concrete used on the project meets the required standard specifications. Driveways and adjacent improvements shall meet ADA requirements.

At locations where the sidewalk, curb and gutter, and curb ramps connect with existing improvements, steel dowels shall be installed. Dowels shall be 12” long, #4, grade 60, steel reinforcing bars or as indicated on the Plans. Dowels shall be firmly epoxied into existing improvement with a six-inch (6”) embedment. Dowels shall be installed prior to placing new sidewalk, curb and gutter, and curb ramp.

Epoxy shall be Type II and conform to Section 95-2.03, "Epoxy Adhesive for Bonding Freshly Mixed Concrete to Hardened Concrete," of the 2018 Standard Specifications. A certificate of compliance is required for the epoxy.

Curb and gutter which are a part of the driveway approach and/or curb ramp shall be constructed monolithically with a straight grade between existing improvements to remain.

Where rolled curb exists, curb ramp installation shall contain curb transitions not less than 10 feet long at both ends of the ramp.

Curb and gutter to be replaced shall be constructed with a straight grade between existing improvements to remain. Flowlines for the curb and gutter and for curb and gutter attached to a curb ramp shall be verified and flow tested by the Contractor in the presence of the Engineer and shall be free from ponding prior to acceptance of the improvements. The Contractor shall replace new concrete improvements if the said improvements do not conform to the designed flowline.

New concrete shall be free of stamps, logos, names, graffiti, etc. Any concrete identified that is displaying a stamp or equal shall be removed and replaced at the Contractor's sole expense and no additional compensation shall be allowed, therefore.

Hot Mix Asphalt Pavement Restoration

The hot mix asphalt pavement restoration adjacent to the curb ramp and curb and gutter installations will be a minimum of 12-inches wide on all sides where the adjacent concrete is replaced. The Contractor shall remove a minimum depth of 8" or to the top of the native soil, whichever is greater. The replaced hot mix asphalt will be 4 inches thick, on top of a minimum of 4 inches of class II, aggregate base, compacted to a relative compaction of 95% per the Town Standard Drawings. Compaction shall be achieved using a vibratory plate compactor. The paving asphalt shall be PG 64-10. A tack coat of undiluted SS1h emulsified asphalt shall be placed on all exposed HMA and concrete surfaces prior to the placement of the new asphalt section.

The Contractor may elect to perform a 12-inch wide asphalt restoration that will be filled with 12 inches of a 2-sack sand/cement slurry and 2-inches of 1/2", Type A hot mix asphalt. The Contractor may not place the new hot mix asphalt until the slurry cures and is approved by the Engineer to proceed with the final 2" asphalt lift.

The final, top layer of hot mix asphalt adjacent to the curb and gutter shall be 1/2" HMA, Type A, compacted to a relative compaction of 95%, and placed in two, 2-inch lifts. The Contractor is required to use a twin drum, 2.5-ton vibratory roller for compaction of the final lift of hot mix asphalt.

The hot mix asphalt pavement restoration for curb ramps and curb and gutter shall be paid for under the associated bid items and shall comply with these Special Provisions. The area of any pavement restoration work will not be measured as part of the pay items.

The Contractor shall ensure that connections to existing or previously laid surfacing shall conform to the requirements of surface smoothness under the Standard Specifications or the Contractor shall correct all these deficiencies to the satisfaction of the Engineer. The Engineer's decision whether the Contractor has met the requirements of surface smoothness shall be final.

Measurement and Payment

Full compensation for furnishing all labor, materials, equipment and incidentals, and for doing all of the work involved in compliance with the Plans, Specifications, and Section 10-4, "Concrete Improvements," of the Special Provisions, including but not limited to excavation, rebar, and base rock, and exposed aggregate concrete and asphalt conforms, shall be included and paid for in the appropriate bid item listed below:

INSTALL CURB (TYPE A1-8) (L.F.)

BID ITEM #4

SECTION 10-5 PAVEMENT MARKER, THERMOPLASTIC MARKING, AND STRIPING REMOVAL

General

Pavement marker, markings and striping removal shall conform to the plans and these Special Provisions.

Existing pavement markers, thermoplastic pavement markings, and striping, and paint markings and striping shall be removed by grinding prior to placement of the new surface. The grinder shall be specifically designed for the purpose of removing existing traffic stripes and markings and shall conform to the provisions of Section 15-2.02C and 15-2.02D of the 2018 Standard Specifications. Immediately upon removal of the markings and striping, temporary marking and striping shall be placed. Grinding operations shall be conducted to keep all removed pavement material from entering the storm drain system. The operation shall be controlled and contained so as not to impair the safe passage of traffic adjacent to the work site. Existing pavement markers shall be removed prior to placing the new surfacing (cape, slurry seal, microsurface, and overlay).

The location of all striping, markings, and markers shall be marked out and documented by the Contractor prior to removal of any striping, markers, and/or thermoplastic material and before placing the new surfacing (cape, slurry seal, microsurface, and overlay). This information shall be given to the Engineer for review prior to any striping removal.

All traffic striping and pavement markings (legends) covered by or removed prior to the surfacing or otherwise damaged by the Contractor's operations shall be replaced in kind in the same location and count.

Existing pavement striping, markings, and markers which are outside the work area are not to be removed and shall be protected by the Contractor. Any striping, markings, or markers which are to remain, which are damaged or rendered useless by the Contractor's operations, shall be restored by the Contractor to the Engineer's satisfaction and at the Contractor's sole expense.

The Contractor shall review all existing striping and pavement markings in the field prior to submitting a bid.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, flaggers, equipment, and all incidentals, and for doing all of the work in compliance with the Plans, Specifications, and Section 10-5, "Pavement Marker, Thermoplastic Marking and Striping Removal," of the Special Provisions shall be considered as included in the payment for the items of work that require their removal and no additional compensation will be allowed therefor.

SECTION 10-6 TEMPORARY PAVEMENT DELINEATION

General

Temporary pavement delineation shall be furnished, placed, maintained and removed in accordance with Section 12 of the 2018 Standard Specifications, the CA MUTCD, and these Special Provisions. Nothing in these Special Provisions shall be construed as to reduce the minimum standards specified in the CA MUTCD or as relieving the Contractor from his responsibility as provided in Section 7-1.04, "Public Safety," of the 2018 Standard Specifications, and these Special Provisions.

Lane line or centerline pavement delineation shall be provided at all times for travel lanes open to public traffic. Whenever the work covers or causes obliteration of pavement delineation, temporary pavement delineation or permanent traffic stripes shall be in place prior to opening the traveled way to public traffic.

Surfaces on which temporary pavement delineation is to be applied shall be cleaned of all dirt and loose material and shall be dry when the pavement delineation is applied.

The Contractor shall perform all work necessary to establish satisfactory alignment for temporary pavement delineation.

Temporary pavement delineation that is damaged from any cause during the progress of the work shall be immediately repaired or replaced at the Contractor's sole expense.

Temporary Striping

Whenever existing traffic striping or markings have been removed, paved over, or otherwise obliterated, temporary striping or markings shall be provided as follows: Slurry tabs of the appropriate color as approved by the Engineer shall be installed and placed on twenty-four (24) foot intervals to delineate all four (4) inch traffic stripes. All channelization lines (solid eight (8) inch or twelve (12) inch line markings) shall be temporarily restored with a double row of slurry tabs as approved by the Engineer. All crosswalks shall be restored with a double row of slurry tabs as approved by the Engineer. All pavement markers separating multiple turning lanes shall be replaced with slurry tabs on a ten (10) foot spacing. Temporary traffic striping and marking shall be removed and replaced with permanent striping and markings as soon as the final pavement surface has cured sufficiently to receive the permanent traffic paint or thermoplastic. Permanent pavement markers shall be installed on the same day that the permanent traffic striping and markings are installed, however, the installation of pavement markers shall be done only after all traffic striping and markings are installed. The Contractor shall maintain the temporary striping until their permanent traffic striping and markings are placed.

When no longer required for the direction of public traffic, as determined by the Engineer, the temporary traffic stripe and pavement marking tape and temporary pavement markers, applied to existing pavement, the top layer of new pavements, or any other paved surface where the previously placed pavement delineation conflicts with the new traffic pattern, shall be removed and disposed of in accordance with Section 5-1.36C, "Nonhighway Facilities," of the 2018 Standard Specifications and all lines and marks used to establish the alignment for the temporary traffic stripes, pavement markings, and temporary pavement markers shall be removed from the pavement.

Measurement and Payment

Full compensation for furnishing, placing, maintaining, replacing (regardless of the number of times it is required) and removing temporary traffic stripes and markings and temporary pavement markers shall be considered as included in the lump sum price paid for under Section 10-2, "Traffic Control Requirements," and no additional compensation will be allowed therefor.

SECTION 10-7 TRAFFIC STRIPES, PAVEMENT MARKINGS, AND MARKERS

General

Traffic stripes (traffic lines) and pavement markings (legends) shall conform to the following: Provisions of Section 84-1 and 84-2 of the 2018 Standard Specifications, the California MUTCD, the striping tie out plans as generated by the Contractor and approved by the Engineer under Section 10-6, "Pavement Marker, Thermoplastic Marking and Striping Removal," of these Special Provisions, the Standard Plans, Project Plans, and these Special Provisions. Traffic Stripes and marking shall be installed as shown on the approved striping tie-out plans or as directed by the Engineer.

All traffic stripes and pavement markings shall be laid out in the field by the Contractor and reviewed and approved by the Engineer five (5) working days prior to any final installation. Any striping and/or marking installed by the Contractor that the Engineer has not pre-approved, and that the Engineer determines are installed improperly or in the wrong locations, shall be removed and replaced to the satisfaction of the Engineer at the Contractor's sole expense.

Paint for Traffic Stripes

Paint for the traffic stripes, curb painting, and pavement markings shall be Rapid Dry Water Borne paint in accordance with Sections 84 and 85 of the 2018 Standard Specifications and shall be applied in two coats.

Curbs shall be painted at locations shown on the Plans and as directed by the Engineer. Application shall consist of two coats of traffic paint of the appropriate color applied to the face and top of the curb.

Pavement markings shall be installed with stencils belonging to the Contractor that are determined to be identical to the Town's stencils.

The Contractor shall install the first coat of the paint within seven (7) calendar days of the final resurfacing. After fourteen (14) calendar days, the second coat of paint shall be applied after the final resurfacing.

Raised Pavement Markers

Pavement markers shall conform to Section 85, "Pavement Markers," of the 2018 Standard Specifications, the California MUTCD, and these Special Provisions. All non-reflective pavement markers shall be ceramic. Plastic pavement markers shall not be allowed.

Adhesive shall be hot-melt bituminous adhesive conforming to Section 85, "Pavement Markers," of the 2018 Standard Specifications and these Special Provisions.

Markers shall not be placed on new hot mix asphalt surfacing until the surfacing has been opened to public traffic for a period of not less than seven days when hot melt bituminous adhesive is used, and not less than 14 days when epoxy adhesive is used. Placement of pavement markers shall be completed within three weeks of application of the new resurfacing of the respective roadway.

All pavement markers in place (outside the limits of the work) shall be protected from damage and shall be clean and undamaged after completion of the project. Any damage to the newly placed or existing markers due to the failure of the Contractor to protect the work, and correction of errors, shall be repaired by the Contractor at no additional cost.

Blue reflective (Caltrans Type BB) fire hydrant pavement markers shall be installed conforming to the provisions of the California MUTCD Section 3B.11, "Raised Pavement Markers," and Figure 3B-102

(CA).

A Certificate of Compliance shall be furnished as specified in Section 6-3.05E, "Certificates of Compliance," of the 2018 Standard Specifications for reflective pavement markers. Said certificate shall also certify that the reflective pavement markers conform to the prequalified testing and approval of Caltrans, division of Traffic Operations, and where manufactured in accordance with the approved quality control program.

Thermoplastic Traffic Stripes and Pavement Markings

Thermoplastic traffic stripes (traffic lines) and pavement markings shall conform to Section 84, "Traffic Stripes and Pavement Markings," of the 2018 Standard Specifications and these Special Provisions.

Thermoplastic material shall be free of lead and chromium and shall conform to PTH-02ALKYD or PTH-02SPRAY of the 2018 Standard Specifications.

Retroreflectivity of the thermoplastic traffic stripes and pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of $250 \text{ mcd m}^{-2} \text{ lx}^{-1}$. Yellow thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of $150 \text{ mcd m}^{-2} \text{ lx}^{-1}$.

The color for green back symbols shall meet FHWA specifications for "green."

Where striping joins existing striping, as shown on the Plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Payment for crosswalks shall be measured from the edge of curb or edge of gutter, whichever is less, in linear feet, and shall include the ladder striping and no additional compensation shall be allowed therefore.

Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris. Thermoplastic shall be extruded and placed in one coat and shall be placed five days after the final surfacing. Sprayable thermoplastic is not allowed after the installation of surface treatments (slurry seal, chip seal, or microsurfacing). Longitudinal limit line shall be white and 12" in width.

Application

Use preheaters with mixers having 360 degree rotation to preheat the thermoplastic material. Apply the thermoplastic in a single uniform layer by extrusion method. Completely coat and fill voids in the pavement surface with the thermoplastic.

Extruded Thermoplastic

Apply extruded thermoplastic at a temperature from 400 to 425 degrees F, unless a different temperature is instructed by the manufacturer. Apply extruded thermoplastic for a traffic stripe at a rate of at least 0.20 lb./ft. of 4-inch wide solid stripe. The applied thermoplastic traffic stripe must be at least 0.060 inch thick. An applied thermoplastic pavement marking must be from 0.100 to 0.150 inch thick. Apply glass beads to the surface of the molten thermoplastic at a rate of at least 8 lb./100 sq. ft.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work in compliance with the Plans, Specifications, and Section 10-7, "Traffic Stripes, Pavement

as follows:

1		2		3		4	
X	y	X	y	x	y	x	y
0.230	0.754	0.336	0.540	0.450	0.500	0.479	0.520

- c. The pigment system shall not contain heavy metals or any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.
7. The top surface of the material shall have regularly spaced indents. The closing of these indents during application shall act as a visual cue that the material has reached a molten state, allowing for satisfactory adhesion and proper embedment of the anti-skid/anti-slip elements, and a post-application visual cue that proper application procedures have been followed.
8. Skid Resistance: The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 8 (Mohs scale). Upon application, the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.
9. Slip Resistance: The surface of the preformed thermoplastic material shall contain anti-skid elements with a minimum hardness of 8 (Mohs scale). Upon application, the material shall provide a minimum static coefficient of friction of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.
10. Thickness: The material shall be supplied at a minimum thickness of 90 mil (2.29 mm).
11. Environmental Resistance: The material shall be resistant to deterioration due to exposure to sunlight, water, salt, or adverse weather conditions and impervious to oil and gasoline.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, flaggers, equipment, and all incidentals, and for doing all of the work in compliance with the Plans, Specifications, and Section 10-8, “Green Bike Lanes,” of the Special Provisions shall be included and paid for in the appropriate bid item price for:

“GREEN BACK BIKE LANE SYMBOL WITH ARROW” **BID ITEM #7**
LEGEND-TLG STD. TR-A – THERMOPLASTIC (EA.)

5.0' WIDE DASHED GREEN BIKE LANE – **BID ITEM #8**
THERMOPLASTIC (L.F.)

SECTION 10-9 **SIGNAGE**

General

Work shall conform to Section 82, “Signs,” of the 2018 Standard Specifications, the Plans, these Special Provisions, and the California MUTCD except as noted herein. The Contractor shall mark the sign locations for approval by the Engineer prior to installation. The Contractor shall modify or extend the existing sign posts as needed or as directed by the Engineer.

The Contractor shall inventory existing sign locations prior to removal. Signs to be salvaged shall be removed, cleaned and stored by the Contractor unless another location is specified. For locations where the Contractor is to remove and/or relocate existing sign posts as shown on the Plans, the Contractor shall also remove the existing foundation and/or footing. Voids created by the removal shall be backfilled with cement slurry (2-sack mix) where concrete pavement is to be installed. Voids created by the removal of the sign posts not in the concrete pavement area shall be backfilled with soil and compacted to at least 90% relative compaction or as specified by the Engineer.

The street signs that are obstructing the construction work shall be removed and signs shall be installed by the Contractor. New signs shall be placed on a new sign post. Prior to installation, the Engineer shall approve the location of the signs. The Contractor shall call Underground Service Alert (USA) at 1-800-227-2600 prior to digging for the sign pole installation. The Contractor shall neatly core the existing sidewalk, concrete pavement, etc. and shall install the sign posts per the Town Standard Plans. The Contractor shall provide all fasteners required to install all signs as indicated on the Plans and as directed by the Engineer.

The Contractor, at the Contractor's sole expense, shall repair materials to be salvaged that are damaged as a result of the Contractor's operations or install a new sign per the Town of Los Gatos Standard Plans to the satisfaction of the Engineer.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for performing all of the work involved in compliance with the Plans, Specifications, and Section 10-9, "Signage," of the Special Provisions, shall be paid for in the price per each (EA.) paid for:

INSTALL NEW R1-5 (CA) SIGN ON NEW POST (EA.)

BID ITEM #9

SECTION 10-10 ELECTRICAL SYSTEMS

General

Street lighting, radar speed feedback sign, rectangular rapid flashing beacon (RRFB), and electrical services shall conform to the provisions of Section 86, "Electrical Systems," of the 2018 Standard Specifications, the Town of Los Gatos Electrical Specifications and Details, the 2018 Standard Plans, and these Special Provisions. Pursuant to Section 86-1.03, the Contractor shall provide a schedule of values for all items included in the Lump Sum Bid.

Electrical work shall include the following at the intersection of Massol Avenue and Los Gatos-Saratoga Road and as shown on the Plans: Removal of existing signal poles, and associated electrical equipment at new locations, demolition of existing and installation of new foundations, removal and salvaging of 1-B poles, luminaire mast arm, removal/adjustment of existing and installation of new pull boxes, modification to existing and installation of new conduits, coordinate with PG&E and provide point of service, traffic control, and all incidentals to complete this work.

Preservation of Existing Street Lighting Systems

Attention is directed to Section 86-1.06 of the 2018 Standard Specifications regarding the maintenance of existing electrical systems.

All existing traffic safety lighting shall be maintained throughout the project area until the new safety lighting is fully operable and approved by the Engineer.

Where existing conduits are to be intercepted and new pull boxes installed, a minimum conductor slack of three feet shall be maintained at all structures and pull boxes, new and existing. The Contractor shall furnish and install new conductors if necessary.

Where new conductors/cables are to be installed in existing conduits, contractor shall remove and protect existing conductors, clean the conduits, and re-pull existing with new conductors together into existing conduits.

Flashing Beacon System

The Flashing Beacon System shall consist of furnishing and installing the flashing beacon system complete, functional, and in place as shown on the Plans, Section 86-4.05, “Flashing Beacons,” of the 2018 Standard Specifications, and the Special Provisions. Also included is any and all related demolition, excavation, spoil removal, backfill, dewatering, testing, and surface (PCC, HMA, landscape) restoration in kind or as designated on the Plans.

The location of proposed flashing beacon standards and other equipment shown on the Plans are approximate only and the exact location of such shall be established in the field by the Engineer. The Contactor shall mark the locations for approval by Engineer.

Radar Speed Feedback Sign System

Radar speed feedback sign systems shall conform to the requirements in Section 86-6.10, “Electrical Information Signs,” of the 2018 Standard Specifications, the Plans, and these Special Provisions.

Radar Speed Feedback Sign shall be Speedcheck-18 Radar Speed Sign or approved equal.

Key Features

- Meets FHWA and MUTCD requirements.
- Modular, compact and lightweight design for quick, easy installation and service.
- Modular components secured in place with vandal resistant lock bar, and 11-gauge welded aluminum, stainless steel, and brass hardware. Can absorb 2-inches of impact deflection without damaging internal components.
- Standard tools for repairs.
- High-contrast display for easy visibility in all weather and lighting conditions.
- Large 36” x 48” sign with 18” high digits for clarity at higher speeds.
- Flashing digits and optional “SLOW DOWN” message activates to provide speed sensitive violator warning without being distracting. By switching display content at a user-specified speed threshold (set in software), violating drivers are increasingly cautioned (or rewarded) as they change speed above (or below) the threshold with high-speed cutoff.
- Display strobe modes provide intuitive feedback activated by vehicle speed. User-specified speed threshold can be set in software to activate violator strobes at (and above) detected speed.
- Bluetooth, cell modem, Ethernet, radio/RF modem, and third-party device communication options available.
- Lowest power consumption on the market.
- Powered by solar, battery, or AC systems.
- Unlimited technical support.
- 3-year limited warranty.

Optional Features

- Display: Flashes “SLOW DOWN” message when drivers exceed user-specified speed thresholds.
- Scheduler: Manages unlimited schedules and modes on a calendar with a 2-year exception list.
- Traffic Analysis: On-board data logger collects date, time, and speed for over 200,000 vehicles; raw data is not binned but provided in .csv; generates pre-defined speed compliance reports.
- Outputs: Triggers external devices, such as flashing beacons, strobes, or cameras by speed threshold or schedule, or from a centralized remote location; yellow or red beacons with 12” or 8” diameter LED modules.
- Inputs: External devices can manage display operation with external contact closure and the included wiring harness.

Power

- 110/220 VAC in standard configuration.
- 12 VDC for battery or solar system operation.
- Solar sized for specific geographic location and sign application.
- 3.5 W draw for typical daytime displayed number, traffic, and local illumination.
- 50, 80, or 170 W high-efficiency photovoltaic solar panel.

Enclosure

- Ventilated, weatherproof NEMA 3R enclosure.
- Cabinet Dimensions: 15.7”x 21.0”x8.2” (WxHxD)

Display

- Display Enclosure Dimensions: 31”x23”x4” (WxHxD)
- Speed display 18” high numbers.
- Amber LEDs
- 7-segment LED digit design with high contrast for all lighting conditions. LEDs automatically dim during nighttime operation.
- Safety masking design to limit display view from the side.
- Static Sign Dimensions: 36”x48” (WxH)
- Static Sign Construction: 3M High Intensity Prismatic or Diamond Grade retroreflective sheeting and components; available in 3931 yellow, 3983 fluorescent yellow/green, 3930 white, and 3934 orange; others available.
- Display Enclosure Mounts: Standard banding, u-bolt for flat/square poles, tilt bracket for vertical adjustments, flat bracket, or quick change portable bracket.

Communication

- Comes with on-board user interface for configurations and optional status monitoring.
- Shared platform design for device managers and controllers of Speedcheck products.
- Two-way wireless communication.
- Bluetooth, cell modem, Ethernet, radio/RF modem, GSM, and third-party device communication options.

Environmental

- -40 to 167° F system operating temperature.
- 5-30 Hz 3-axis vibration.
- FCC 15.107 and 15.109 Class A radiated and conducted emissions compliance.
- FCC part 15 low-power radar device.

Rectangular Rapid Flashing Beacon (RRFB) System

Components for hard-wired Rectangular Rapid Flashing Beacon System shall include:

Rectangular Rapid Flashing Beacon LED Light Bars, Static Signage, XAV Push Button with sign, Pedestrian Sensors, Control Cabinet with Flash Controller, Radio/Controller, APS control unit, Power control units, and Aluminum 15-FBS Poles & Foundations.

RRFB system shall be hard-wired to a proposed service location to be determined.

Primary Function

The primary function of the RRFB System is to provide a highly visible, enhanced warning to road users of an active pedestrian crossing.

Each light bar shall house LED light arrays: two rapid and alternately flashing rectangular amber (vehicle) indications and one amber side-mounted (pedestrian) indication. Optional warning systems placed in advance of the crosswalk require no pedestrian indication.

A crosswalk with no median will have a RRFB crosswalk assembly on each side of the road for pedestrian activation from either approach. A crosswalk assembly shall have two light bars, mounted back-to-back, enhancing the required pedestrian crossing signage, for the purpose of warning road users from both traffic directions of the active pedestrian crossing. Included in the system will be a pedestrian activation push button and a hardwired powered RRFB control cabinet. A crosswalk with median will have a single-sided RRFB crosswalk assembly on each side of the road for pedestrian activation from either approach, and one double-sided assembly in the median. This also maximizes the visibility of the RRFB warning system to road users. The RRFB pedestrian warning system shall be synchronized with wireless 900mHz radios. Active vehicle indications shall be visible in a direct line of sight at distances over 1000 feet during the day, and over 1 mile at night.

General Requirements

The Rectangular Rapid-Flashing Beacon Manufacturer shall have a minimum of ten years of relevant intelligent traffic product manufacturing experience, as well as a minimum of three years of RRFB manufacturing experience.

Specific Functional, Mechanical and Electrical Hardware Requirements System

Each Crossing System shall consist of 3 Pole RRFB System consisting of:

- One or two quantity Light Bars and Static Signage, mounted for maximum visibility to road users on each pole (shown on plans)
- On each of the outer poles, XAV Pushbutton for activation as well as pedestrian presence detectors.
- One of the outside poles shall have a APS control unit in the controller cabinet (see plans for pole)

Upon activation by an ADA-compliant XAV pushbutton, the RRFB controller shall activate all integral RRFB indications.

When activated, all indications associated with a given crosswalk shall simultaneously commence operation within 120 msec and shall cease operation at a predetermined time (programmable timeout) after any pedestrian actuation.

Shall operate on hard-wired power through the power control units.

Individual components shall be independently replaceable, equipped with approved terminal strips or wire-end molded connectors.

Rectangular Rapid Flashing Beacon Light Bar

The RRFB Light Bar shall be in conformance with all applicable FHWA MUTCD standards and guidelines and shall meet or exceed the requirements specified in FHWA Memorandum IA-21, Interim Approval for Rectangular Rapid Flashing Beacons at Crosswalks.

When activated, each of the two vehicle indications of a Light Bar shall have 70 to 80 periods of flashing per minute and shall have alternating, but approximately equal, periods of rapid flashing light emissions and dark operation. During each of its 70 to 80 flashing periods per minute, one of the amber indications shall emit two medium rapid pulses of light; then the other amber indication shall emit four short rapid pulses of light followed by a long pulse.

The light intensity of the vehicle indications shall meet the minimum specifications of Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated November 2008. Manufacturer Certification of Compliance shall be provided upon request.

The Light Bar housing shall be constructed of durable, corrosion-resistant powder-coated aluminum with stainless steel fasteners.

Enclosed components shall be modular in design whereby any component can be easily replaced using common hand tools in the field, without having to uninstall the housing.

All mounting hardware required for mounting the Light Bar housing either singly or back to back shall be provided and be universal.

Each of the two vehicle LED indications shall be approximately 7.00" wide x 2.8" high, each with eight amber LEDs.

A pedestrian LED indication, approximately 0.5" wide x 1.75" high, shall be side-mounted in the Light Bar housing: assembly to be mounted so it is directed toward, and visible to, pedestrians in the crosswalk. RRFB-XL2 light bars placed in advance of a crosswalk do not require the pedestrian LED indicator.

Dimensions of the Light Bar are 23.56" wide x 3.76" high x 1.37" deep.

Static Warning Signage

Each static sign face shall be constructed on a 0.080" thick 5052-H32 aluminum substrate with the MUTCD compliant sign legend, as dictated by the requirements, screened onto fluorescent yellow-green 3MTM Diamond Grade™ DG3 Reflective sheeting.

Each static sign shall be sized to meet the requirements.

Each static sign shall have two holes for mounting to a post or pole.

Shall include pole mounting hardware.

Control Cabinet

Shall be NEMA 3R Type.

Shall be 15" tall x 12.5" wide x 9.8" deep and constructed of minimum 0.080" thick aluminum.

To promote airflow for internal components, the cabinet shall be vented with screening included on all vents and drains to prevent insects and other foreign matter from entering.

For security, the cabinet must include at least two tamper-resistant stainless steel hinges and a replaceable #2 traffic lock with keys.

To facilitate maintenance or repairs, the cabinet shall include a removable control panel to which all control circuit components either mount or connect.

For easy installation on a wide range of pole sizes and types, the cabinet shall utilize four 5/16"-18 stainless steel mounting studs that mate to a range of bracket options. To ensure a secure mount to the supporting post, two banding style brackets that fit poles with a 2-3/8" or larger diameter shall be included as standard equipment.

To prevent corrosion, all materials used in the construction or mounting of the control cabinet shall be either aluminum or stainless steel. Anti-vandal mounting hardware shall be available as an option.

A UV resistant label shall be applied to the exterior of the cabinet and include system specific information including model number, serial number, date of manufacture, as well as any applicable regulatory compliance information.

RRFB Control Cabinet and Flash Controller

The RRFB Programmable Flash Controller is housed within an IP67-rated enclosure for protection from the environment. This Flash Controller assembly is housed within the NEMA 3R Control Cabinet along with the 900MHz Wireless Transceiver, Solar Charge Controller, Battery and XAV Control Unit and shall:

- Include integrated constant-current LED drivers with a minimum of two-channel output for driving one or two RRFB units
- Have multiple programmable function options:
 - Run from Dusk to Dawn
 - Run Daytime only
 - Run 24 hours per day, 7 days per week
 - Run for a programmable time period when activated via switch, button contact closure or when triggered from an external sensor such as a wireless transmitter, radar, presence detector or loop detector with a compatible sensor output.
- Include an integrated Real Time Clock (RTC) with on-board battery backup
- Have the capability of RS232 communication for programming with Windows-based software
- Include a minimum of two General Purpose Inputs and Outputs (GPIO)
- Be internally housed in its own IP67 type enclosure
- Be independently replaceable of other control panel components
- Be able to monitor internal temperature
- Operate between the temperatures of -40° to +176°F (-40° to +80°C)

Push Button Station

- Shall be ADA compliant
- Must be Polara XAV2E-LED model
- Shall work in conjunction with associated XAVCU2 control unit placed in cabinet to function as a normally open (n/o) circuit with the following features:
 - Three LEDs that flash in sequence with the crosswalk lighting
 - Voice narration message with adjustable volume control and built in speaker
 - Voice narration to be English and English/Spanish selectable
 - Programmable number of audible message repeats
 - Optional Locator Tone with programmable interval
- Shall have a directional push button that can be rotated into a fixed position for the application
- Shall be provided with all necessary mounting hardware, wiring and associated ADA signage.

- Shall have an operating voltage range of 10-24 VDC
- Shall have a low idle current of approximately 1.2mA.
- Shall operate from -30° to +165°F (-34° to +74°C)

System Power Supply

The RRFB System shall be powered by a power source to be determined.

Warranty

The Manufacturer shall offer a three-year unconditional warranty against all defects in material and workmanship.

Signal Conductors and Wiring

Conductors for RRFBs shall not run to a terminal block on a standard unless they are to be connected to a RRFB that is mounted thereon, and any additional RRFBs on other standards that are to be connected to these conductors shall be connected only in the pull box, not on the terminal block.

Conductor insulation shall cover the entire length of the wire except near the ends of the termination points. All wires shall be clearly marked inside the controller cabinet designating the appropriate signal phase.

At least six feet of slack shall be provided in the pull box nearest each signal standard, for those conductors terminating in that standard; and 3 feet of slack shall be provided for each conductor in all other pull boxes.

Conductors No. 10 and smaller shall be solid copper traffic signal conductors Type USE, THW or TW with a minimum insulation thickness of 40 mil.

Bonding and Grounding

Grounding jumper shall be attached by a 3/16 inch or larger brass bolt in the signal standard, lighting standard, service pedestal, or controller cabinet and shall be run to the conduit, ground rod, or bonding wire in adjacent pull box.

All PVC conduit shall contain 1 bare stranded No. 8 AWG copper wire for bonding.

Disposal of Electrical Equipment

All ballasts and transformers and all fluorescent and mercury lamps shall be disposed of in accordance with California Department of Health Services Regulations set forth in Title 22, Division 4.5 of the California Code of Regulations (CCR).

Ballasts and transformers which contain polychlorinated biphenyl (PCB) are designated extremely hazardous wastes, and fluorescent tubing and mercury lamps are designated hazardous wastes under Title 22, Division 4.5, Chapter 13, Article 4 (CCR).

Conduit

Conduits shall be installed using directional boring or open trench as determined by the Contractor and approved by the Engineer. The top of the installed conduit shall be a minimum of 18 inches below finished grade.

All new conduits shall be 2" or larger in diameter except where spliced to existing conduits. All conduits shall be Schedule 80 polyvinyl chloride conduit unless otherwise specified. End bells shall be installed on all PVC conduits ends. Ground bushings shall be installed for all metallic conduits.

The Contractor shall not use 90-degree elbows. Only large radius 45-degree elbows shall be allowed.

All conduits shall have a pull tape and a bare #10 AWG (minimum) copper wire for grounding and tracing of conduits.

All conduits placed in utility joint trenches shall be inspected and approved by the respective utility (PG&E, SBC, Verizon, Comcast, etc.) prior to backfill. The Contractor shall coordinate all such inspections with each utility company.

All conduits shall be sealed with Duct-Seal after wires are installed to prevent moisture and rodents from entering the conduits.

Conduits shall be installed either parallel to or perpendicular to the curb, unless otherwise approved by the Engineer, prior to placement. Conduit at an oblique angle to the curb will not be permitted.

Conduits shall be a rigid schedule 80 PVC unless otherwise noted in accordance with Section 86-2.05, "Conduit," of the 2018 Standard Specifications. Conduit installation shall be installed as shown on the Plans and shall conform to Section 86 of the Standard Specifications and these Special Provisions.

The Contractor shall pothole all utilities to determine the exact location and depth of all existing utilities prior to the installation of the conduit and pull boxes.

Directionally-bored conduits shall be installed at a minimum depth of eighteen inches (18") from the existing pavement surface. Directionally-bored conduits within the public right-of-way shall be installed within one foot (1') of the lip of gutter or underneath the sidewalk.

Conduit terminations into pull boxes shall be swept at bends no greater than 30 degrees, or to a maximum of 45 degrees, if the maximum of 30 degrees is not possible.

At no time shall a conduit run exceed a cumulative 180 degrees of bends.

Foundations

Foundations shall conform to applicable Standard Plans for existing signal poles to be relocated.

Standards

New Standards shall conform to the 2018 Standard Specifications and Plans ES-6 series, ES-7 series, and the Plans. Signal and lighting standards shall be galvanized. Galvanized signal and lighting standards shall not be painted.

Service Enclosure

Service enclosures shall be per Section 86-1.02P (2) of the 2018 Standard Specifications.

Service shall be a Type III-AF service as shown on sheet RSP ES-2D of the 2018 Standard Plans.

The Contractor shall coordinate with PG&E for point of service.

Removing, Reinstalling, or Salvaging Electrical Equipment

Removing and/or salvaging of equipment shall conform to the provisions of Section 86-7.01, "Removing, Reinstalling, or Salvaging Electrical Equipment," of the 2018 Standard Specifications and the following.

All salvaged equipment shall be delivered to the Town of Los Gatos Service Center at 41 Miles Avenue. The Contractor shall coordinate with the Engineer forty-eight (48) hours in advance to arrange for acceptance of salvaged equipment.

The Contractor shall protect equipment from damage during removal, relocation, and re-installation.

Switch Over Requirement

All required switch over work will be completed between the hours of 7 pm and 5 am or as approved by the Engineer. Prior to the switch over work, the Contractor shall notify all residents within 300 feet of the work limits of the upcoming night work one week before the start of work.

Pull Boxes

Pull boxes shall conform to Section 86-2.06, "Pull Boxes," and Section 86-2.06B, "Cover Marking," of the 2018 Standard Specifications and Plan ES-8.

The identification "LOS GATOS" shall be engraved, welded, or cast on the top face of all covers and followed by one of the following applicable markings:

1. "STREET LIGHTING" (for pull boxes containing lighting)
2. "TRAFFIC SIGNAL" (for pull boxes containing traffic signal circuits with or without street lighting circuits)
3. "TRAFFIC SIGNAL INTERCONNECT" (for copper traffic signal communication)
4. "TRAFFIC FIBER OPTIC" (for fiber optic traffic signal communication)
5. "SERVICE" (for pull boxes in service runs and where utilities company conduits terminate)
6. "TREE LIGHTING" (for tree lighting systems only)
7. "SPRINKLER CONTROL" (for sprinkler control systems only)
8. "ELECTRICAL" (for electrical systems not mentioned above)

Pull boxes shall be No. 5 or larger unless otherwise indicated on the Plans.

Excess conduit for all conduit ends shall be cut back to provide stub ends of 1-inch minimum to 2-inch maximum.

Bottom of pull boxes shall be grouted over clean crushed rock sump (12 inches minimum). All pull boxes shall have a 2-inch drain hole in center bottom and grouted with smooth surface sloped toward drain hole.

Any pull box, including the cover that is shown on the plans to be relocated or raised to grade shall be new.

Where pull boxes are being replaced or removed, the Contractor shall remove and replace the entire flag of sidewalk to the nearest score mark, unless otherwise noted on the Plans. New sidewalk shall be doweled into the existing sidewalk. All flags shall be replaced within 24-hours of removal.

Conductors

Identification stripe colors shall be permanently impregnated the conductor insulating jacket. No. 10 or smaller traffic signal conductors shall be solid copper with either:

- Type USE insulation with a minimum thickness of 1 mm (40 mils), or
- Type THW insulation with a minimum thickness of 1 mm (40 mils).

Splicing and Splicing Insulation

All connectors and terminals installed to the conductors, including those for detector circuits, shall be pressure connector crimp type and shall be soldered after being applied with the applicable tool recommended by the manufacturer of the connector.

Heat shrinkable insulating tubing shall be applied after completion of the splicing procedure. Insulation over the connector shall consist of a heat shrinkable, mastic lined, 1 mm minimum polyolefin cable sleeve, or cover, to which heat shall be applied at a temperature greater than 120 degrees C with an electric hot air gun until the sleeve or cover shrinks and covers the connector and the mastic material has flowed completely around and between the conductors to form a waterproof insulation. The conductor insulation shall not be damaged due to application of the heat shrinkable insulation sleeve.

Identification Labeling

Identification shall be by T&B Ty-Rap Cable Ties No. TY553M, fastened to the conductors/cables in such a manner that they will not move along the conductors/cables. The flags on the Ty-Rap shall be marked with a Ty-Rap marking pen No. WT 163 M-1 (Black) or approved equal. All phase conductors shall be labeled by phase designation in the pull boxes nearest their termination and in the controller cabinet. Detector cables shall be labeled by channel designation in the pull boxes nearest their termination and in the controller cabinet. Detector cables shall be also labeled by phase designation in the controller cabinet nearest their termination at the detector amplifiers.

Bonding and Grounding

Bonding and grounding shall conform to Section 86-2.10, "Bonding and Grounding," of the 2018 Standard Specifications and the following.

All metallic electrical equipment including, but not limited to, poles, metal conduit, service pedestals, controller cabinets, anchor bolts, foundation reinforcement, and metallic cable sheaths, shall be tied to ground electrical potential and shall be interconnected by means of copper conductors and clamps to form a single, grounded and electrically bonded system. Grounding of the electrical system shall be accomplished by means of approved 5/8-inch x 10-foot copper-clad steel or 3/4-inch x 10-foot galvanized steel ground rods installed in all cabinet foundations and in all pull boxes that contain conduits with equipment ground conductors as shown on the project plans. Ground rods shall extend above the finished cabinet foundation or grouted pull box bottom sufficiently to attach a ground clamp and #8 AWG bare copper equipment ground conductor.

Directional Boring

Installation by directional boring shall conform to the Plans and these Special Provisions. Prior to the start of directional boring, the Contractor shall submit a plan which addresses the following items:

- a. Identifies location and size of proposed bore pits and receiving pits
- b. Describes process for identifying and locating existing utility services and other underground utilities or obstructions
- c. Identifies a proposed boring corridor to avoid conflicts with existing utilities, services and other facilities.

This plan shall be submitted to the Engineer a minimum of ten (10) working days prior to the start of work. The Contractor will not be allowed to directional bore until an approved plan is on file with the Engineer.

Directional boring shall be performed by the technique of creating and directing a bore hole along a predetermined path to a specified targeted location where indicated on the plans to install conduits. The

technique shall involve the use of mechanical and hydraulic equipment to change the boring course and shall use instrumentation to monitor the location and orientation of the boring head assembly along the predetermined course.

Boring shall be accomplished with fluid-assisted mechanical cutting. Unless otherwise approved, boring fluids shall be a mixture of bentonite and water or polymers and additives. Bentonite sealants and water will be used to lubricate the boring head. It is mandatory that minimum pressures and flow rates be used during boring operations so as not to fracture the subgrade material around and/or above the bore. Uncontrolled jetting (where the primary purpose is to use fluid force to erode soil for creation of the final bore hole diameter) is prohibited.

The boring system shall utilize small-diameter fluid jets to fracture, and mechanical cutters to cut and excavate the soil as the head advances forward. After installation of conduit in the bored hole, the hole shall be sealed with concrete slurry.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in compliance with the Plans, Specifications, and Section 10-10, "Electrical Systems," including but not limited to removal and re-installation of existing flashing beacon poles, and associated equipment at new locations, demolition of existing and installation of new foundations, removal and salvage of 1B poles, removal/adjustment of existing and installation of new pull boxes, modification to existing and installation of new signal conduits, installation of new rectangular rapid flashing beacons, installation of a new streetlight foundation and pole, traffic control, utility coordination, including PG&E point of service, and all incidentals to complete this work shall be included and paid for in the lump sum (L.S.) price paid for:

ELECTRICAL SYSTEMS (L.S.)

BID ITEM #10

SECTION 10-11 IRRIGATION SYSTEMS

General

The work of this section shall include: furnishing, installing and testing a complete irrigation system including bubbler heads, drip emitters, sleeving, drip line, emitters, controller, master valve, backflow preventer and wiring as shown on plans; monitoring and maintaining the system for 60 calendar day period; preparing As-Built drawings and an Operations Manual; system tests; and warranting the system for a period of one year.

The Contractor shall submit for review the complete list of materials proposed for installation, including listing all of the materials by manufacturer's name and model number. Only materials and items of equipment so approved shall be used. Any proposed substitutions, together with descriptive material, shall be included with the list.

Prior to the final acceptance of the irrigation system, the Contractor shall furnish three (3) individually bound Service Manuals to the Engineer. The manuals shall contain the following:

Index sheet indicating the Contractor's name, address and phone number; copies of equipment warranties and certificates; list of equipment with names, addresses and telephone numbers of all local manufacturer's representatives; complete operating and maintenance instructions in sufficient detail to permit operating personnel to understand, operate, and maintain all equipment.

Record drawings may be on a clean print of the Irrigation Drawing if changes and dimensions are clearly indicated. This drawing must be submitted to the Engineer before complete backfilling of trenches will be authorized. Show mains, valves, and laterals with necessary dimensions from fixed points so that they may be easily located in the future.

Quality Assurance

All work and materials to be in full accordance with latest rules and regulations of the Division of Industrial Safety; the Uniform Plumbing Code; National Electric Code, and other applicable laws or regulations, including all local codes.

Nothing in these drawings or specifications is to be construed to permit work not conforming to these codes. Furnish, without extra charge, any additional material and labor as required to comply with these rules and regulations, though the work is not mentioned in these particular Construction Documents.

Protection of Existing Conditions

Become acquainted with all site conditions. Locate existing utilities and equipment to remain. Should utilities or other work not shown on the plans be found during excavations, promptly notify the Landscape Architect. Failure to do so will make the Contractor liable for any and all damage arising from his operations subsequent to discovery of such utilities not shown on plans.

Before starting work of this section report to the Engineer, in writing, conditions which will prevent the proper provision of this work. Beginning the work of this Section without reporting unsuitable conditions to the Engineer constitutes acceptance of conditions. Any required removal, repair, or replacement of this work caused by unsuitable conditions to be done at no additional cost to the Town.

Take necessary precautions to protect existing site conditions. Repair any damaged item to its original condition or furnish and install equivalent replacement at no additional cost to the Town.

Adjust trench locations in field to minimize damage to plant roots.

Coordination

Schedule and coordinate work with other trades to avoid conflicts in construction sequence and equipment installation.

Product Handling

Protect work and materials under this Section from damage during construction and storage. Protect polyvinyl chloride (PVC) pipe and fittings from direct sunlight. Beds on which pipe is stored must be full length of pipe.

As-Built Drawings

Keep construction drawings on the job site at all times. Make daily record of work installed each day.

After all work is complete have a set of As-Built drawings prepared, by a competent draftsman, on a reproducible copy of the irrigation plan. As-Built drawings shall show all deviations from the Contract Documents. Show locations of underground equipment by dimensioning off known points of reference. Indicate material substitutions in legend. Include manufacturer name, catalog number and size.

Deliver completed As-built drawings to the Engineer prior to final acceptance.

Clean Up

Keep all areas of work clean, neat and orderly at all times. Clean up and remove all debris from the work area prior to Final Acceptance.

Final Acceptance

Work under this Section will be accepted by the Engineer upon satisfactory completion of all work.

Maintenance Period

The Maintenance Period begins after all irrigation work is complete as determined by the Landscape Architect and runs concurrently with the Plant Establishment Period. Maintenance shall be by qualified and experienced personnel and includes, but is not limited to, operating, flushing and adjusting the irrigation system to assure adequate watering of native plant materials.

Maintenance period may be extended by the Landscape Architect if the system is improperly maintained.

Warranty

In addition to manufacturer's warranties, all work shall be warranted for one year from the date of Final Acceptance against defects in material, equipment and workmanship. Warranty shall also cover repair of damage to any part of the premises resulting from leaks or other defects in materials, equipment and workmanship to the satisfaction of the Landscape Architect.

Products

Provide new products in perfect condition.

Backflow prevention device, controller, remote control valves, quick coupler valves, drip emitters, and bubbler heads shall be as shown on the drawings and details.

Pipe

Mainline Pipe: Polyvinyl chloride (PVC) 1120-1220, Type 1 Schedule 40 solvent weld and shall conform to ASTM D1785.

Lateral Pipe: Polyvinyl chloride (PVC) 1120-1220, Class 200 solvent weld and shall conform to ASTM D2241.

Fittings & Nipples

PVC Fittings and Nipples: Schedule 40 or 80 (as shown on Drawings), standard weight, as manufactured by Pacific Western, Simpson, Lasco, or approved equivalent, to meet ASTM D2466, D2464 and D2467.

Flexible Nipples: Flexible PVC with Schedule 40 PVC male adapters at each end, factory made, to meet ASTM D2287.

Above Grade Risers: As shown on Drawings.

Galvanized fittings: Threaded, standard weight malleable iron fittings and couplings. Hot-dipped risers, nipple stock, ells, tees and unions.

Anchorage: Clamps, straps, and washers: steel, ASTM A506; bolts: steel, ASTM A307.

Fitting Compounds, Solvents, & Wraps

Primer and glue: As recommended by manufacturer of pipe being installed.

Thread sealant: Non-hardening sealant compatible with pipe being installed. Permatex 51 or equivalent. Do not use thread lubricant on PVC pipe.

Teflon tape: For PVC male threads.

Solvent for PVC pipe: ASTM D2564, gray.

RectorSeal No. 5 for galvanized steel, iron, brass or copper pipe.

Wire

Common and Control Wire: U.L. approved for direct burial, copper, AWG-UF 600 volt, No.14 minimum size. All Common wire shall be the same color. Common and control wire shall be different colors.

Splicing Materials: Packaged kit approved for underground use such as Gel-Tite King Silicone-filled Safety, Kin One-Step Connector, Spears Dry Splice DS 100 with “Kote” brand DS 300 sealant or equivalent.

Sleeves & Conduit

General: Size sleeves 1 inch larger than outside diameter of irrigation pipe fittings

PVC Sleeves: PS 21, Type II, Grade I, Schedule 40 PVC.

PVC Conduit: UL Listed, Schedule 40 PVC electrical conduit.

Galvanized Steel Sleeve: Where placed by jacking or boring use galvanized steel pipe conforming to ASTM A53.

Valve Boxes

Heavy duty plastic with lockable lids. Brooks, Carson or equivalent over-the-top lids. Size for control valves: 14 inches x 19 inches; for gate valves: 10-inches round, unless noted otherwise on Drawings. Provide one box for each control valve. Mark valve boxes with station numbers.

Keys

Provide two sets for controller cabinet; for quick coupling valves provide minimum one key and matching hose swivel for every five quick couplers installed.

Check Valves

Check valves shall be built into head by manufacturer or adjustable PVC check valves as per Valcon, King Brothers, Flo-Control or approved equivalent installed in riser.

Pressure Regulator

As shown on the Control Zone Kit detail. If the Control Zone Kit is not installed at the highest point of the irrigation zone it serves, a check valve shall be installed downstream of the PR Back Flush Filter to prevent water from draining back into the valve box.

Control Zone Kit

Control zone kit assemblies for drip irrigation zones must include a valve, filtration and pressure regulation to meet the flow requirements of the zone. Where necessary a check valve shall also be installed.

Control zone kits shall be Rain Bird control zone kits as indicated on construction drawings. Components shall be sized according to the hydraulic demands of the system. Medium Flow Kit for 3.0 to 20.0 GPM. Includes a 1" PESB Valve, Basket Filter with 200 mesh (75 micron) screen, 40 psi Pressure Regulator and ball valve.

Drip System Components

Sub-surface dripline shall be pressure-compensating Sub-Surface Dripline, with Copper Shield Technology, for potable water systems with emitters and spacing as shown on construction drawings.

Bubblers

Bubblers shall be adjustable Rainbird 1300AF series as shown on the Drawings or approved equal.

Controller

Irrigation controller shall be Rainbird ESP 4 ME 4 station controller with LNK WIFI Module and WR2 Rain Sensor.

Controller Cabinet

Controller cabinet shall be per Section 20-2.06B (3), "Irrigation Controller Enclosure Cabinets," of the 2018 Standard Specifications.

Controller cabinet shall be a type 336L cabinet as shown on sheet ES-3B of the 2018 Standard Plans.

Controller Cabinet Foundation

Controller cabinet foundation shall be per Section 87-1.03E(3), "Concrete Pads, Foundations, and Pedestals," of the 2018 Standard Specifications.

Controller cabinet foundation shall be installed per sheet ES-3B of the 2018 Standards Plans.

Substitutions

Substitutions must have written approval of the Engineer and should equal the standard of products specified in the Construction Documents.

Installation of any approved substitution is Contractor's responsibility. Any changes required for installation of any approved substitution must be made to the satisfaction of the Engineer and at no additional cost to the Town.

Approval by the Engineer of substituted equipment does not waive these requirements.

Layout

Lay out work as accurately as possible to drawings using stakes and different colored flags to indicate different types of heads and valves. Drawings are diagrammatic to the extent that swing joints, offsets and all fittings are not shown.

Adjust layout as required to conform to existing site conditions and avoid conflict with trees, light standards and other site elements.

Take care to coordinate layout of irrigation bubbler heads with planting layout.

Full and complete coverage is required. Make any necessary minor adjustments to achieve full coverage at no additional cost to Town.

Do not willfully install the irrigation system as shown on drawings when it is obvious in the field that obstructions or other discrepancies exist which may not have been considered in the design. Notify the Engineer of discrepancies before proceeding.

Excavating and Trenching

Perform all excavations as required for installation of work included under this Section, including shoring of earth banks, if necessary. Restore to their original condition all surfaces and existing underground utilities damaged or cut as a result of the excavation.

Dig trenches wide enough to allow a minimum of 3 inches between parallel irrigation pipe lines, 12 inches from pipe of other trades. Do not install pipe directly over other lines in same trench.

Dig trenches of sufficient depth to provide minimum cover from finish grade as follows:

- Mains: 18 inches
- Laterals: 15 inches
- Wire: 18 inches
- Under traffic loads: 30 inches
- Drip Line: 2" below grade, not counting the mulch layer

Install all pipe under paving in sleeves.

All live main lines buried under hard surface areas (roads, paths, etc.) shall have a copper tracer wire incorporated in the trench. Remote control valve wiring can act as a tracer in instances where it is included in the main line runs. Pressure lines to quick coupler valves are considered live mains.

Should existing paving require cutting, saw cut paving a minimum 12 inches wide, compact backfill to equal surrounding undisturbed soil, dispose of waste off site. Patch to match existing pavement.

Sleeves & Conduit Installation

Install sleeves where control wires and pipe pass through or under walls, under paving and as required to facilitate a smooth construction sequence.

Provide separate sleeve for each pipe. Wire may be grouped and installed in single conduit.

Extend sleeves a minimum of 12 inches beyond edges of walls, walks and other paving.

Coordinate sleeve installation with other trades.

Pipe Line Assembly

Install pipe in accordance with manufacturer's instructions.

Place no closer than 4 inches to walk or curb edges.

Where pipe of dissimilar metals are connected, use dielectric fittings.

Solvent weld PVC pipe and fittings using solvents and methods recommended by manufacturer. Clean pipe and fittings of dirt and moisture before assembly. PVC pipe may be assembled on ground surface beside trench. Snake pipe from side to side in bottom of trench to allow for expansion and contraction.

Do not cut PVC pipe with a hacksaw. Use pipe cutters or other method which does not result in burrs.

Make all connections between PVC pipe and metal valves or pipe with threaded fittings using PVC male adapters.

Use thread sealant (not thread lubricant) on threaded PVC connections and assemble the joint to hand tight. Do not over-tighten.

Quick Coupling Valves

Locate quick couplers within 12 inches of remote control valve boxes wherever practical. If not near a valve, locate at edge or other element to facilitate locating in the field.

Remote Control Valves

Install control valves in valve boxes where shown and group together where practical. Place no closer than 4 inches to walk edges, buildings and walls. Maximum 12 inches from path edge wherever possible.

Limit one control valve per box. Set valve boxes flush with finish grade and parallel to edge of paving. Place one brick under each (4) corner of box for support. Fill bottom of box 4 inches deep with 3/4-inch diameter drain rock.

Label each valve with polyurethane I.D. Tag attached to valve wire, Christy Standard Tag, or equivalent. Label each tag with the controller station number, 1" letters or numbers.

Controller

Install per manufacturer's instructions and local code.

Controller Mounting: Install controller as detailed on the Drawings.

Connect remote control valves to controller in sequence as noted on Drawings.

Label valve wires at controller with non-fading label.

Prepare controller chart describing what area is covered by each valve.

Backflow Device

Install per code and manufacturer's specifications and as detailed on the Drawings.

Provide pipe supports and accessories as necessary to properly secure the assembly. After installation, apply acceptable corrosion-retarding material to surfaces of ferrous anchorages.

Control Wiring

Install control wires in common trench with main. Lay to the side of pipe and snake wires in trench to allow for contraction of wires. Tie wires in bundles at 10 foot intervals. Provide 24 inches of coiled slack at valves.

Wire splices to be crimped and sealed with Splice-Koat connector. Line splices will be allowed only on runs of more than 500 feet and must occur in splice box.

Check Valves

Install per manufacturer's instructions on all low heads as necessary to control line drainage.

Closing Pipes and Flushing Lines

Cap or plug all openings as soon as lines have been installed to prevent entrance of materials that would obstruct the pipe. Leave in place until removal is necessary for completion of installation.

Thoroughly flush all water lines before installing nozzles or valves.

Backfilling and Compacting

After system is operating and required tests and observations have been made, backfill trenches with sand or finely divided soil, free of rubbish and rocks.

Compact backfill for trenches to equal surrounding undisturbed soil.

Dress off all areas to finish grades. Adjust grades if settlement occurs.

Observations & Tests

Submit written requests for observation meetings to the Landscape Architect at least 3 days prior to meeting.

Observation meetings to be called as the following work is completed: layout; when the point of connection, backflow preventer, mainline, 1 valve, 1 quick coupler and 1 lateral circuit have been installed; at the coverage test (pre-maintenance); when Maintenance Period is complete, for Final Acceptance.

Pressure Tests

After laying but before backfilling, test irrigation pipe for leakage. Allow glued connections to dry minimum 24 hours, remove air from lines, and center load pipe before beginning test.

For Mains: Cap off valve risers and test under full static pressure for a minimum of 4 hours. Perform test prior to installing remote control valves. Repair all leaks. At the Contractor's option, a 1-hour pressure test at 125 psi may be substituted for the above test. Provide the necessary pump and equipment required for this test. Maximum 3 psi loss permitted.

For Laterals: Pressure test laterals with risers capped at static pressure for 1 hour. Minor leaks in swing joints and sprinkler riser assemblies will be acceptable.

Coverage Test: After all risers and heads are installed, check for complete and even coverage of all planting areas and minimum overthrow onto paved surfaces, buildings and fences. Make adjustments and change nozzle sizes as required. Check head pressure. Pressure should fall within spec for that head.

Operation Test: Prior to the start of the Maintenance Period set the controller on automatic operation and irrigate automatically throughout the Maintenance Period.

Adjusting

Prior to Final Acceptance, adjust and regulate entire system. Set watering schedule on controller appropriate to type of plant and season of year. Adjust remote control valve to operate heads at optimum performance based on pressure.

Demonstration

System layout: Provide reduced prints of As-built irrigation plan, laminated in 4 mil. plastic, of size to fit controller door. Affix plans to inside of controller door.

Upon completion of work, instruct Engineer in operation and maintenance procedures for entire system.

Prepare and deliver to Engineer an operations manual, in three-ring binder, which includes the following: Manufacturer's data sheets, maintenance and parts information for each type of equipment installed; equipment warranties; and names and addresses of the Contractor, the subcontractors, and the equipment suppliers.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in compliance with the Plans, Specifications, and Section 10-11, "Irrigation Systems," of the Special Provision, shall be included and paid for in the lump sum (L.S.) price for:

IRRIGATION SYSTEMS (L.S.)

BID ITEM #11

SECTION 10-12 LANDSCAPE PLANTING

General

The General Provisions and all other Contract Documents for this project are complementary and applicable to this Section of the Specifications.

Scope

The work of this Section includes all labor, materials and equipment required to complete work indicated on the drawings. The work shall be performed in accordance with the best standards of practice relating to the various trades and under the continuous supervision of a competent foreman, capable of interpreting the drawings and the Specifications.

The schedule of work procedures included in this Section are listed as follows:

- Soil Preparation
- Clearing and Grubbing
- Soil Conditioning
- Finish Grading
- Method of Planting
- Planting of Trees
- Planting of Shrubs
- Watering Basins
- Watering
- Cultivation and Weed Removal

Verification Prior To Construction:

All irrigation work shall be inspected and approved before start of any work of this Section.

Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities and shall immediately inform the Engineer of any discrepancy between the drawings and/or the specifications and actual conditions. No work shall be done in any area where there is such a discrepancy, until approval for same has been given by the Engineer.

Plant materials shall be furnished in the quantities and/or spacing as shown or noted for each location, and shall be of the species, kinds, sizes, etc., as symbolled, and described in the "Landscape Plant List and Legend". The Engineer has prepared this list only as a convenience to the Contractor and assumes no responsibility for its accuracy. The drawings take precedence over the plant list.

Prior to excavation for planting or placing of stakes, locate all electrical cables, conduits, sprinkler valve control wires, and all utility lines so that proper precautions may be taken not to damage such improvements. In the event of a conflict between such lines and plant locations, promptly notify the Engineer who shall arrange for relocation for one or the other. Failure to follow this procedure places upon the Contractor the responsibility for, at no additional expense, making any and all repairs for damages resulting from work hereunder.

Inspection

All inspections herein specified, shall be made by the Engineer or his representative. The Contractor shall request inspection, at least two days in advance of the time inspection is required.

Inspection will be required for the following parts of the work:

- Inspection upon completion of preliminary finished grading.
- Inspection upon completion of soil preparation prior to final grading.
- Inspection of plants prior to layout.
- Layout inspection of spotted plants.
- Inspection of holes prior to planting.
- Final inspection upon completion of all planting, tree staking, and espaliering prior to commencement of the maintenance period.
- Inspection at end of maintenance period.

Certification

Prior to job acceptance, written certifications shall be submitted to the Engineer for the following:

- Quantity of all soil amendments called for by plans or specifications.
- Quantity of commercial fertilizer and organic fertilizer as called for by Plans or Specifications.
- Quantity of plant materials called for by Plans.

Plant Material

The plant material indicated on the drawings and herein specified, shall conform to the following:

Nomenclature: Plant names indicated or listed in the "list of plant materials" on the drawings, conform to "Standard Plant Names" second edition, except for names not covered therein, the established customs of the nursery is followed.

Condition: Plants shall be symmetrical, typical for variety and species, sound, healthy, vigorous, free from plant disease, insect pests, or other eggs, and shall have healthy, normal root systems, well filling their containers, but not to the point of being root bound. Plants shall not be pruned prior to delivery, except as authorized by the Engineer, or his representative. In no case shall trees be topped before delivery.

Dimensions: The height and spread of all plant material shall be measured with branches in their normal position. The caliper of all trees shall be measured 4'-0" above the surface of the ground. Where caliper or other dimensions of any plant materials are omitted from the "list of plant materials," it shall be understood that these plant materials shall be normal stock for type listed.

Inspection: All plant materials must have been previously inspected at the nursery by appropriate governmental agency as required by State or local code and shall be subject to the inspection and

approval of the Engineer, or his representative, before planting.

Plant List: As included on the "Planting Plans."

Sizes of Plants: Shall be stated on the Plant List and Legend. Container stock (1 gal., 5 gal., 15 gal., 24" box, and 36" box) shall have been grown in that container for at least one (1) year, but not over two (2) years.

Substitutions: For the indicated plant materials will be permitted provided the substitute materials are approved in advance by the Engineer, and the substitutions are made at no additional cost to the Owner. Except for the variations thus authorized, all substitute plant materials shall conform to the requirements of these Specifications. If accepted substitute materials are of less value than those indicated or specified, the contract price will be adjusted in accordance with the provisions of the contract.

Plants Not Approved: To be removed from site immediately and replaced with suitable plants. The Engineer may reject entire lots of plants represented by defective samples.

Fertilizers, Soil Conditioners, and Topsoil Import

Applicable samples of fertilizers and soil conditioners shall be submitted for inspection and stored on the site until furnishing of materials is completed. Delivery may begin upon approval of samples or as directed by the Engineer. All materials listed below may or may not be required in this work. Check appropriate specification Section below for job requirements.

Commercial Fertilizer: Shall be approved standard brand and shall conform to the applicable State fertilizer laws. It shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original unopened containers each bearing the manufacturer's guaranteed analysis. Any fertilizer which becomes caked or otherwise damaged, making it unsuitable, shall not be used. It must contain the following percentages by weight:

- 5% Nitrogen
- 20% Phosphoric Acid
- 20% Water Soluble Potash

Nitrolized Fir or Redwood: Shall be bulk, treated with a reactive form of nitrogen (NH₃) and shall be as manufactured by Waste Management or other approved manufacturer.

Iron Sulfate (Ferric): Standard commercial brand, delivered to the job site in unopened containers.

Bone Meal: Standard commercial brand delivered to the site in unopened containers (refer to "Shrub Planting Detail" for quantity used per shrub).

Hoof and Horn: Standard commercial brand delivered to the site in unopened containers (refer to "Shrub Planting Detail" for quantity used per shrub).

Soil Sulfur (non burning): Standard commercial brand delivered to the job site in unopened containers.

Gypsum: Commercially processed and packaged Ca SO₄ 2H₂O with a minimum 80 percent grade containing 14 percent combined sulfur.

Bark Mulch

Bark mulch shall not exceed 1/2" in diameter. Rejected material will be removed from the job site at the no additional expense to the Town.

Imported Topsoil

Topsoil shall be classified per USDA methodology as a loamy sand or sandy loam. A minimum 10% shall be in excess of 2.0 mm. The sum of the silt plus clay shall fall between 20% and 50%. Ph of the saturated paste shall be between 5.5. and 7.5. Determined on the saturation extract solution, salinity shall be less than 3.5 mmhos, boron less than 1.0 ppm, and the SAR value less than 6.0. Fertility shall be modifiable by conventional means to provide healthy plant growth. Refer to specs for soils amendments required.

Before any topsoil is delivered to the site, the contractor shall submit a 2 lb. sample of the topsoil used from each source for inspection and approval. Delivery of the topsoil may begin upon approval of the sample. The approved sample shall be stored on the site until the supply from its source is exhausted or until no more topsoil is needed.

Soil Preparation

Moisture Content: The soil shall not be worked when the moisture content is so great that excessive compaction will occur; nor when it is so dry that a dust will form in the air or that clods will not break readily. Water shall be applied, if necessary, to provide ideal moisture content for tilling and for planting herein specified.

Preliminary grading shall be done in such a manner as to anticipate the finished grade. Excess soil shall be removed or redistributed before application of fertilizer and mulch. Where soil is to be replaced by plants and mulch, allowance shall be made so that when finish grading has begun, there shall be no deficiency in the specified depth of mulched planted beds.

Site clearance prior to the installation of all planting areas: The Contractor shall be responsible for the removal of all existing brush, dead trees, and weeds to the satisfaction of the Engineer. The Contractor shall protect all existing plant material to be preserved from damage and destruction during the above work procedure.

Weeding: Before and during preliminary finish grading, all weeds and grasses shall be dugout by the roots and disposed of off the site, except those weeds and grasses that are not the perennial type, are less than 2-1/2" high, and are not bearing seeds, in which case may be turned under.

Trenches: If any portion of the sprinkler system is installed after grading and fertilizing is completed, the upper portion of the backfill shall be retilled and fertilized to a depth specified for the area as required, to conform to the Specifications.

Finish Grades: Landscape Contractor is responsible for bringing all planted areas to finish grade, which shall be 1-1/2" below paving, curbs, and headers, or as noted by spot elevations. The Landscape Contractor shall receive the site graded by others to within 1/10 of one foot.

Scarify subgrade in planted and lawn areas to a depth of 12 inches by ripper teeth equipment in two passes, the second pass perpendicular to the first pass.

The finish grading shall conform to the proposed contours and set grades as shown on the Plans and as modified herein.

Finish grade shall be to a tolerance of plus or minus 1/10 of one foot (0.1') for all landscape areas.

Soil Conditioning

All topsoil shall be cultivated to a light, friable consistency, using a rototiller or similar machine.

The Contractor shall obtain an A-05 Agricultural Suitability soil analysis for precise soil amendment requirements. For bidding purposes, the following amendments shall be tilled into the top 6" of soil and then thoroughly watered down:

- 6 Cu. Yds./1,000 Square Feet Nitrified Redwood Sawdust
- 20 Lbs./1,000 Square Feet 6-20-20 Commercial Fertilizer

The Contractor shall obtain an A-05 Agricultural Suitability soils analysis for precise backfill requirements. For bidding purposes, the following amendments shall be used for backfill in pits for trees and shrubs:

- 6 Cu. Yds./1,000 Square Feet Nitrified Redwood Sawdust
- 20 Lbs./1,000 Square Feet 6-20-20 Commercial Fertilizer

In addition to above amendments, each shrub and tree shall receive planting tablets in the planting holes as follows:

- 2 tablets per 1 gallon size.
- 4 tablets per 5 gallon size.
- 8 tablets per 24" box size

Planting tablets shall be placed on bottom of planting hole, at outer edge and covered with 1" of backfill mix before placing plant. Dust bottom of hole with soil sulfur.

The prepared soil shall be mixed in an area adjacent to the planting work and shall be accurately proportioned using a suitable measuring container. Unused excavated soil shall be cleaned up and disposed of off the site. Protect the mix from water until it has been placed in backfill around plants.

Finish Grading

Upon completion of rough grading, weeding and soil conditioning, any irregularities left due to construction shall be finish graded to the elevations shown on the drawings after the soil has dried sufficiently to be readily worked. Grades not otherwise indicated shall be uniform levels or slopes between points where elevations are given. Minor adjustments of finish grades shall be made at the direction of the Engineer, if required. Finish grade shall be smooth, even, and uniform in plane with non-abrupt change of surface. Low spots and pockets shall be adjusted when soil is at optimum moisture content for working.

Method of Planting

No planting shall be done until all operations in conjunction with the installation of the sprinkler system have been completed, final grades have been established, the planting areas have been properly graded and prepared as herein specified, and the work approved by the Engineer.

Relative position of all trees and plants is subject to approval by the Engineer and they shall (if necessary) be relocated as directed as part of the contract.

All plants shall be set so that, when settled, they bear the same relation to the required grade as they bore to the natural grade before being transplanted. Each plant shall be planted in the center of the pit and backfilled unless otherwise specified, with the prepared soil. No soil in muddy condition shall be used for

backfilling. No filling will be permitted above crown. All broken or frayed roots shall be properly cut off. Tamp and water thoroughly to eliminate air pockets.

In the event that underground construction work or obstructions are encountered in the planting operation, alternate locations will be selected by the Engineer after notifications of such obstacles by the Contractor. Operation will be done at no extra cost to the Town.

Planting of Trees

Trees shall be planted according to Town of Los Gatos Standard Details ST-234 and ST-235.

Planting of Shrubs

Shrubs shall be planted in pits of at least twice the diameter of their ball of earth. Compacted soil at the bottom of pit shall be loosened and pit filled with "amended topsoil" to the bottom of the ball. When the plant has been properly set, the pit shall be filled to the required grade with "amended topsoil", and thoroughly settled by tamping and watering. All vines shall be removed from stakes, untied, and securely fastened in an approved manner to wall, fence, or other surface next to which they are planted and/or as otherwise detailed.

Plants shall not be allowed to dry out before or while being planted. Keep exposed roots moist by means of wet sawdust, peat moss, or burlap at all times during planting operations, do not expose to the air except while being placed in the ground. Wilted plants, whether in place or not, will not be accepted and shall be replaced at the no additional expense to the Town.

Watering Basins

Construct a mound of topsoil around each tree and plant to form a watering basis placed at the edge and following the shape of the planting pit area, firmly compacted. Mounds for trees and for from five gallon or larger containers, shall be at least 4" high. Mounds for all other shrubs not otherwise specified shall be at least 2" high. Excavated earth if capable of retaining water, may be used. After watering, any settlement within the basins shall be refilled to the required grade with "prepared soil" and additional mulch worked into the surface as required to restore the mulched conditions.

Watering

Immediately after planting, water shall be applied to each tree, shrub and vine by means of a hose. The water shall be applied in moderate stream in the planting holes and until the material about the roots is completely saturated from the bottom of the hole to the top of the ground to allow soil to fully settle and eliminate air pockets.

Following the planting of ground cover plants, furnished in flats, each plant shall be immediately and thoroughly watered by means of a hose using a slow, running stream of water.

Plants which cannot be watered efficiently with the existing water system, shall be watered by means of a hose.

Apply water in sufficient quantities, and as often as seasonal conditions required, to keep the ground wet at all times, well below the plant's root system.

Weed Removal

Pre-emergence weed control: Immediately upon completion of all shrub and tree planting and initial watering, all shrub and ground cover areas shall be treated with "Surflan" at label rates.

If weed growth has occurred, cultivate to 6" minimum depth and bring to smooth even grade.

Certificates

In addition to any other certificates specified, the Contractor shall furnish a certificate with each delivery of bulk material, stating the source, quantity, and type of material and that material conforms to the specification requirements. For bulk delivered organic fertilizer, the certificates shall also state the volume, net weight, percent of nitrogen, percent of phosphoric acid and will not burn or otherwise damage plants, or plant roots. For other fertilizers and soil conditioners, in containers, a similar certificate or invoices shall be furnished stating total quantities by weight and volume for each material. These certificates shall be submitted to the Engineer prior to the start of the maintenance period.

Protection

The Contractor shall carefully and continuously protect all areas included in the Contract, including plant materials, fences, supports, etc., until final acceptance of the work by the Engineer.

Maintenance

Plant maintenance work shall consist of applying water (except initial water of plants), weeding, caring for plants, edging and mowing of lawns and performing the following final plant established work.

The entire project is to be maintained for a period of 60 calendar days, commencing from the time all items of work have been completed to the satisfaction of the Engineer.

In order to expedite the plant establishment work, the Contractor shall maintain a sufficient number of men and adequate equipment to perform the work herein specified, and from the time any planting is done, until the end of the final 60 calendar day period.

During the final 60 calendar day period, all plants and planted areas shall be kept well watered and weed-free at all times. Weeds, Dallas and Johnson grass, and Bermuda grass shall be removed. The entire project shall be so cared for, that a neat and clean condition will be presented at all times, to the satisfaction of the Engineer.

Damaged planting areas shall be replanted immediately. Depressions caused by vehicles, bicycles, or foot traffic, shall be filled with topsoil and leveled. Replant damaged areas. Trap and eliminate gophers and moles and repair damage, as above.

Prior to end of maintenance, apply commercial fertilizer, analysis 16-4-4 at the rate of 4 lbs./1,000 sq. ft. uniformly over all planting area.

The Contractor may be relieved from maintenance work when the final 60 calendar day plant establishment work has been satisfactorily completed to the satisfaction of the Engineer.

Clean Up

Upon completion of work in this Section, remove rubbish, trash and debris resulting from operation. Remove disused equipment and implements of service and leave entire area involved in a neat and acceptable condition such as to meet the approval of the Engineer.

Final Inspection

Inspection of finished lawn and planting work will be made at the Contractor's request upon completion of work. Written notice requesting inspection shall be submitted to the Engineer at least 5 days prior to the anticipated inspection date.

Acceptance

Portions of the work under this Contract may be accepted as complete at the option of the Engineer.

The work under this Contract will be accepted by the Engineer upon the satisfactory completion of all work, including maintenance, but exclusive of the guarantee and replacement of plant materials.

Guarantee and Replacement

All shrubs shall be guaranteed by the Contractor as to growth and health for a period of one year after completion of the specified maintenance period, and/or final acceptance by the Engineer. All trees shall be guaranteed by the Contractor to live and grow in acceptable upright position for a period of one year after completion of the specified maintenance period, and/or final acceptance by the Engineer.

All plants that show sign of failure to grow at any time during the life of the Contract, including the maintenance period, or those plants so injured or damaged as to render them unsuitable for the purpose intended, shall be immediately replaced in kind at no additional expense to the Town.

The Contractor, within 15 days of notification by the Engineer, shall remove and replace all guaranteed plant materials which for any reason fail to meet the requirements of the guarantee. Replacement shall be made with plant materials as indicated or specified for the original planting and all such replacement materials shall be guaranteed as specified for the original guaranteed material.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in compliance with the Plans, Specifications, and Section 10-12, "Landscape Planting," of the Special Provisions shall be included and paid for in the lump sum (L.S.) price for:

LANDSCAPE PLANTING (L.S.)

BID ITEM #12

SECTION 10-13 REMOVE TREE

General

The Contractor shall remove and dispose of all trees, including stumps to a depth of at least 18 inches, as identified on the Plans and as directed by the Town. Removal of the trees includes roots and tree wells. All tree removals must have prior approval of the Engineer and shall be performed by a Contractor possessing a C-27 or a D-49 license. All costs for the tree removal and proper disposal shall be paid by the Contractor.

The Contractor shall post tree removal notices at least ten (10) days prior to their removal. Notices shall be requested by the Contractor and provided by the Town. Any delays caused by the failure of the Contractor to post the notices will be at the Contractor's sole expense. No additional compensation will be allowed for costs resulting from said delays.

Where trees are removed, the removed trees, stumps, and roots shall become the property of the Contractor and shall be removed from project site. All debris resulting from tree removal work, including broken branches, fallen leaves, wood chips, and sawdust produced from stump and root removal work, shall be promptly removed from the work site. Holes resulting from tree stump and tree root removal activities shall be backfilled with soil flush with adjacent grade.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing and disposing of trees, including roots and stumps, and removing tree

wells; and backfilling with soil, as shown on the Plans, Specifications, and Section 10-13, “Remove Tree,” of the Special Provisions shall be included in the price per each (Ea.) for:

REMOVE TREE (EA.)

BID ITEM #13

APPENDIX A
Project Plans

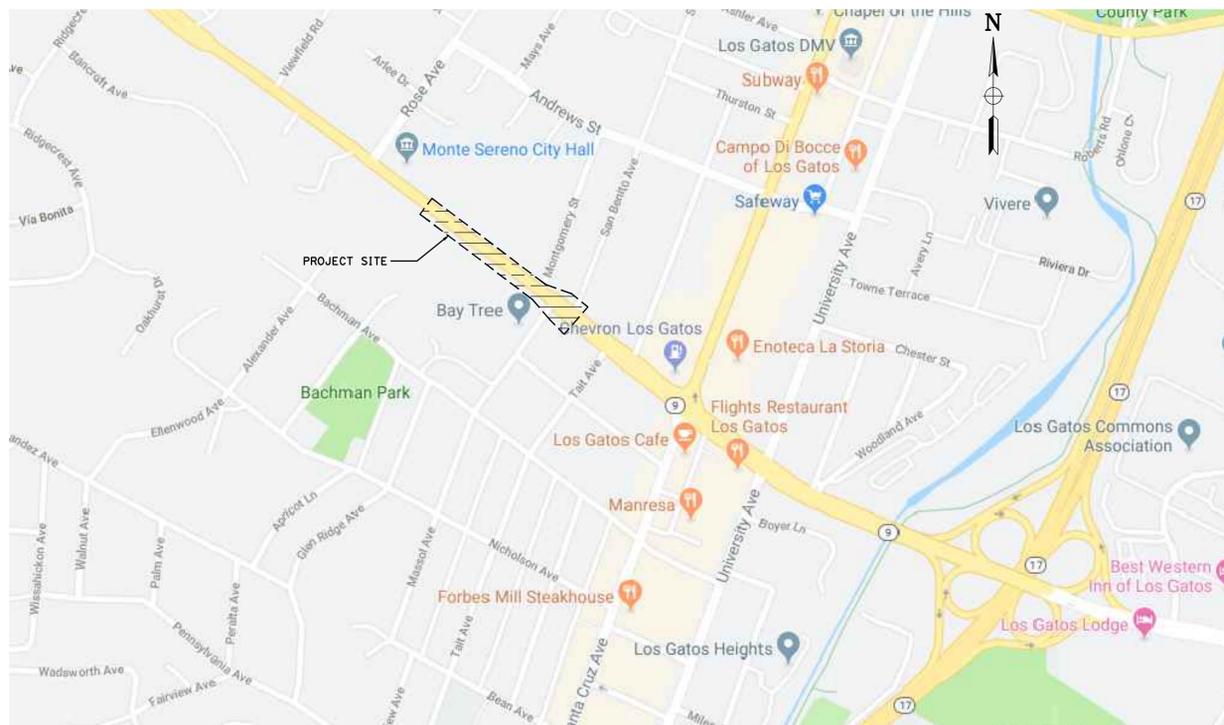
TOWN OF LOS GATOS

CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE

PROJECT NO. 19-813-0236

TOWN OF LOS GATOS STANDARD NOTES

1. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THESE PLANS, THE PROJECT SPECIFICATION, AND THE TOWN OF LOS GATOS ENGINEERING DESIGN STANDARD AND SPECIFICATIONS (UNLESS SPECIFICALLY STATED OTHERWISE ON THE PLANS).
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, LOCATE AND PROTECT ALL UNDERGROUND FACILITIES. THE CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-227-2600 A MINIMUM OF FORTY-EIGHTY (48) HOURS BUT NOT MORE THAN FOURTEEN (14) DAYS PRIOR TO COMMENCING ALL WORK.
3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, CODES, RULES AND REGULATIONS GOVERNING THE WORK IDENTIFIED ON THESE PLANS. THESE SHALL INCLUDE, WITHOUT LIMITATION, SAFETY AND HEALTH RULES AND REGULATION ESTABLISHED BY OR PURSUANT TO THE OCCUPATIONAL SAFETY AND HEALTH ACT OR ANY OTHER APPLICABLE PUBLIC AUTHORITY.
4. THE GENERAL CONTRACTOR SHALL PROVIDE QUALIFIED SUPERVISION ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL EXERCISE ALL NECESSARY CAUTION TO AVOID DAMAGE TO ANY EXISTING TREES, SURFACE IMPROVEMENTS, DRAINAGE, WATER, SEWER, ELECTRICAL, OR TELECOMMUNICATION FACILITY WHETHER ABOVE GROUND OR UNDERGROUND. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR ANY DAMAGE THERETO.
6. THE CONTRACTOR SHALL COORDINATE ALL UTILITY INFORMATION SHOWN ON THE PLANS WITH UTILITY OWNERS FOR LAYOUT AND DETAILS OF INSTALLATION, RELOCATION, ADJUSTMENT AND ABANDONMENT.
7. LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ARE BASED ON FIELD SURVEY AND/OR AVAILABLE UTILITY AS-BUILTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF WORK.
8. THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES AND SERVICE LATERALS FROM DAMAGE DUE TO THE CONTRACTOR'S OPERATIONS. ANY AND ALL UTILITY SERVICES THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF UTILITY OWNER. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES TO RELOCATE THEIR UTILITIES IF NECESSARY TO COMPLETE THE PROJECT AT NO ADDITIONAL COST TO THE TOWN.
9. HORIZONTAL AND VERTICAL CONTROLS SHALL BE SET AND CERTIFIED BY A LICENSED SURVEYOR OR REGISTERED CIVIL ENGINEER QUALIFIED TO PRACTICE LAND SURVEYING.
10. THE CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY CONSTRUCTION FENCING, BARRICADES, LIGHTS, FLAGGERS, AND SIGNS THAT ARE NECESSARY TO GIVE ADEQUATE WARNING AND PROTECTION TO THE PUBLIC AT ALL TIMES.
11. SURVEY MONUMENTS PRESERVATION AND RESTORATION: ALL MONUMENTS, LOT CORNER PIPES, AND OTHER PERMANENT MONUMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION SHALL BE REPLACED AND A RECORD OF SURVEY OR CORNER RECORD PER SECTION 8771 OF THE PROFESSIONAL LAND SURVEYOR'S ACT FILED BEFORE ACCEPTANCE OF THE IMPROVEMENTS BY THE TOWN. COPIES OF ANY RECORDS OF SURVEY OR CORNER RECORDS SHALL BE SUBMITTED TO THE TOWN.
12. THE CONTRACTOR SHALL KEEP UP-TO-DATE A COMPLETE RECORD OF PRINTS OF THE CONTRACT DRAWINGS SHOWING EVERY CHANGE FROM THE ORIGINAL DRAWINGS MADE DURING THE COURSE OF CONSTRUCTION, INCLUDING EXACT LOCATIONS, SIZE, MATERIAL, AND EQUIPMENT. A COMPLETE SET OF CORRECTED AND COMPLETED RECORD DRAWINGS (AS-BUILTS) SHALL BE SUBMITTED TO THE TOWN PUBLIC WORKS INSPECTOR PRIOR TO FINAL ACCEPTANCE.
13. THE CONTRACTOR TO CUT AND CAP ABANDONED OR RETIRED UTILITIES AS SHOWN ON THE PLANS PER TOWN STANDARDS, OR AS DIRECTED BY THE ENGINEER.
14. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AND SAFETY AT ALL TIMES.
15. GOOD HOUSEKEEPING PRACTICES SHALL BE OBSERVED AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. SUPERINTENDENCE OF CONSTRUCTION SHALL BE DILIGENTLY PERFORMED BY A PERSON OR PERSONS AUTHORIZED TO DO SO AT ALL TIMES DURING WORKING HOURS. THE STORING OF GOODS AND/OR MATERIALS IN THE TOWN RIGHT-OF-WAY WILL NOT BE ALLOWED UNLESS APPROVED BY THE TOWN.
16. ALL WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MANAGEMENT DISTRICT FOR AIRBORNE PARTICULATES.



VICINITY MAP

NOT TO SCALE

LEGEND

EXISTING	PROPOSED	
		Landscaped Median
		Manhole
		HMA Full Section Replacement
		Decorative Cobblestones
		Remove Tree
		Existing Driveway
		New Roadside Sign On Post
— W —		Existing Water Line
— S —		Existing Sewer Line
tc—(oh)—		Existing Overhead Communication Line
— sd —		Existing Storm Drain Line
— g —		Existing Gas Line
e—(oh)—		Existing Overhead Electric Line
— e —		Existing Underground Electric Line

ABBREVIATIONS

PCC - Portland Cement Concrete
HMA - Hot Mix Asphalt

SHEET INDEX

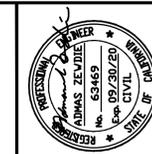
No.	DRAWING	DESCRIPTION
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2	L-1	Layout
3	S-1	Signing and Striping Plan
4	E-1	Electrical Improvement Plan
5	E-2	Electrical Details
6	E-3	Electrical Details
7	I-1	Irrigation Plan
8	I-2	Irrigation and Planting Details
9	P-1	Planting Plan
10	TC-1	Traffic Control Plan

Admas Zewdie

Admas Zewdie

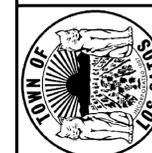
04/30/2020

DATE



Date: 04/29/2020
Scale: No Scale
Design: Admas Z.
Drawn: Abel A.
Check: Admas Z.
Engr.: Admas Z.
Proj. No.: 2019-008

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Los Gatos, CA 95032
www.activewayz-engineering.com
info@activewayz-engineering.com
510.989.2420



CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE

TITLE

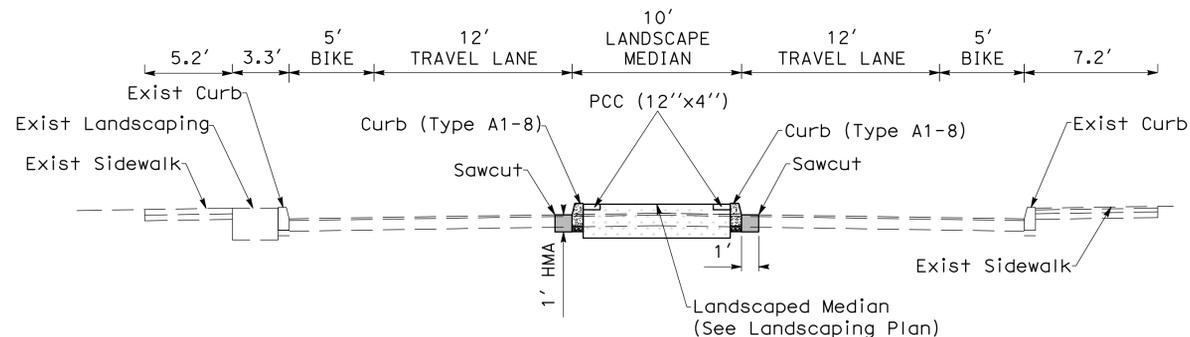
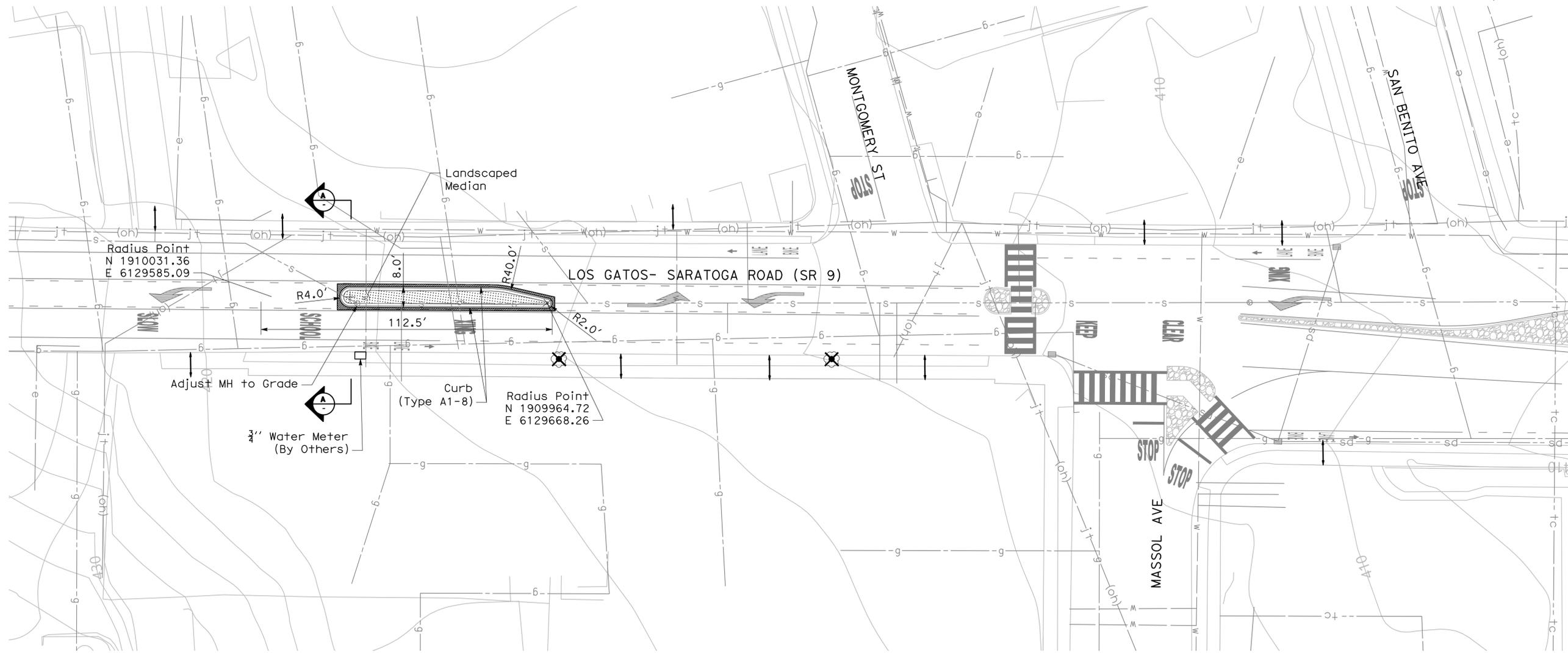
REVISION NO.	BY	DATE

Drawing Number:

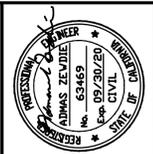
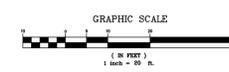
T-1

1 OF 10

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THE REQUIREMENT SHALL BEYOND CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR NEGLIGENCE OF THE OWNER OR THE ENGINEER.



Section A-A
No Scale



Date: 04/29/2020
 Scale: 1" = 20'
 Design: Adamas Z.
 Drawn: Abel A.
 Check: Adamas Z.
 Eng'r: Adamas Z.
 Proj. No.: 2019-008

ActiveWyz Engineering, Inc.
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 www.activewyz.com
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 510.989.2420



CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE LAYOUT

REVISION NO.	BY	DATE

Drawing Number:
L-1
 2 OF 10
 Project Specifications

PROJECT NOTES (THIS SHEET ONLY):

- 1 LUMINAIRE ON EXISTING UTILITY POLE IS TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR.
- 2 POLE TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR. FOUNDATION TO BE COMPLETELY REMOVED. REMOVE AND SALVAGE EXISTING SOLAR PANEL, ENCLOSURE, AND DRIVER FEEDBACK SIGN(DFS).
- 3 EXISTING POLE TO REMAIN. EQUIPMENT ON POLE TO BE REMOVED AND SALVAGED.
- 4 POLE TO BE REMOVED AND BECOME PROPERTY OF THE CONTRACTOR. FOUNDATION TO BE COMPLETELY REMOVED. EQUIPMENT ON POLE TO BE REMOVED AND SALVAGED.
- 5 FURNISH AND INSTALL TYPE III-AF SERVICE PEDESTAL AND FOUNDATION. SEE SERVICE EQUIPMENT WIRING DIAGRAM DETAIL 7 ON DRAWING NUMBER E-3.
- 6 FURNISH AND INSTALL TYPE 15TS POLE AND RRFB SYSTEM PER DETAIL 1 ON DRAWING NUMBER E-2.
- 7 FURNISH AND INSTALL RRFB SYSTEM PER DETAIL 2 ON DRAWING NUMBER E-2 ON EXISTING TYPE 1-B MOD. (14') POLE.
- 8 FURNISH AND INSTALL TYPE 15-FBS (MOD.) POLE AND RRFB SYSTEM PER DETAIL 3 ON DRAWING NUMBER E-2.
- 9 FURNISH AND INSTALL TYPE 15-FBS (MOD.) POLE WITH FLASHING BEACON AND DRIVER FEEDBACK SIGN(DFS) SYSTEM PER DETAIL 5 ON DRAWING NUMBER E-3.
- 10 FURNISH AND INSTALL FLUORESCENT YELLOW-GREEN SW24-3(CA) SIGN (48"x36") AND POST. INSTALLED TO BE VISIBLE BY ONCOMING TRAFFIC PER CA MUTCD STANDARDS.
- 11 FURNISH AND INSTALL 2" CONDUIT WITH 2#8(LIGHTING), 2#12(DFS), 2#12(FLASHING BEACON), 2#12(IRRIGATION), 2#14(RRFB), 2#14(APS), AND 1#8(GROUND) CABLES.
- 12 FURNISH AND INSTALL 3" CONDUIT WITH 3#2(SERVICE) CABLES.
- 13 FURNISH AND INSTALL 2" CONDUIT WITH 2#8(LIGHTING), 2#14(RRFB), 2#14(APS), AND 1#8(GROUND) CABLES.
- 14 FURNISH AND INSTALL 2" CONDUIT WITH 2#12(DFS), 2#12(FLASHING BEACON), 2#12(IRRIGATION), AND 1#8(GROUND) CABLES.
- 15 FURNISH AND INSTALL 336L CABINET AND FOUNDATION PER CALTRANS DETAIL ES-3B. FURNISH AND INSTALL IRRIGATION CONTROLLER INSIDE NEW CABINET.
- 16 FURNISH AND INSTALL 2" CONDUIT WITH 2#12(IRRIGATION) AND 1#8(GROUND) CABLES.
- 17 FURNISH AND INSTALL NO. 6 PULL BOX.

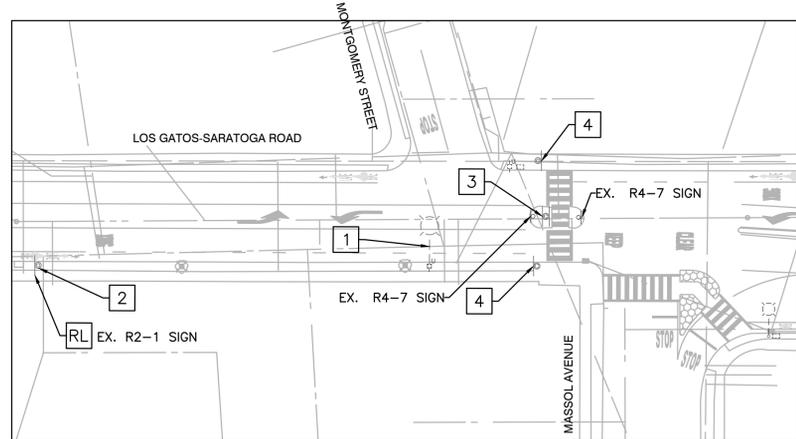
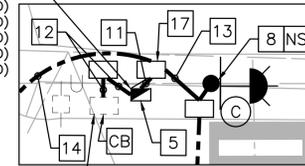
LEGEND:

- EXISTING SIGN
- EXISTING UTILITY POLE
- EXISTING STREET LIGHT
- EXISTING PULL BOX
- PROPOSED SIGN
- PROPOSED FLASHING BEACON
- PROPOSED PULL BOX (NO. 5)
- PROPOSED 15TS POLE
- INSTALL CONDUIT INTO EXISTING PULL BOX
- NO SLIP BASE ON STANDARD

POLE	STANDARD		LED LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	LUM. M.A.		
(A)	15TS	15'	165W	FURNISH AND INSTALL RRFB SYSTEM EQUIPMENT PER DETAIL 1 ON DRAWING NUMBER E-2
(B)	1-B (MOD.) (14') (E)	-	-	FURNISH AND INSTALL RRFB SYSTEM EQUIPMENT PER DETAIL 2 ON DRAWING NUMBER E-2
(C)	15-FBS (MOD.)*	-	-	FURNISH AND INSTALL RRFB SYSTEM EQUIPMENT PER DETAIL 3 ON DRAWING NUMBER E-2
(D)	15-FBS (MOD.)*	-	-	FURNISH AND INSTALL FLASHING BEACON AND DRIVER FEEDBACK SIGN EQUIPMENT PER DETAIL 5 ON DRAWING NUMBER E-3. RELOCATE EXISTING R2-1 SIGN FROM EXISTING POLE TO NEW POLE.

NOTES:
 ALL EQUIPMENT IS NEW UNLESS NOTED OTHERWISE.
 (E) = EXISTING EQUIPMENT
 * = NO SLIP BASE ON STANDARD

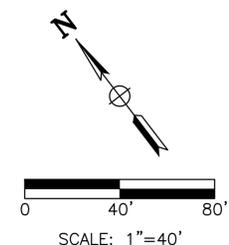
PROPOSED CTID NO. 04370090010884
 PROPOSED TYPE III-AF SERVICE (120/240V SWITCHING BY STATE)
 PROPOSED ELECTRICAL LOAD:
 1-165W LED LUMINAIRE(METERED)
 20W RRFB(METERED)
 5W DRIVER FEEDBACK SIGN(METERED)
 25W IRRIGATION CONTROLLER(METERED)
 5W FLASHING BEACON(METERED)



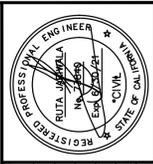
EQUIPMENT REMOVAL	
REMOVAL	QUANTITY
REMOVE EXISTING LUMINAIRE MAST ARM	1
REMOVE EXISTING 1-B (MOD.) POLE	3
REMOVE AND SALVAGE FLASHING BEACON	4
REMOVE AND SALVAGE POLE MOUNTED ENCLOSURE	4
REMOVE AND SALVAGE EXISTING SOLAR PANEL	4
REMOVE AND SALVAGE EXISTING SIGN	8
REMOVE AND SALVAGE EXISTING DRIVER FEEDBACK SIGN	1

GENERAL NOTES (ELECTRICAL SHEETS ONLY):

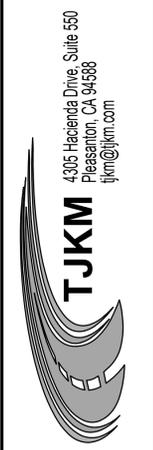
1. WORK SHALL BE DONE IN ACCORDANCE WITH THE 2018 EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLAN AND SPECIFICATIONS; THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD); AND THE TOWN OF LOS GATOS STANDARD PLANS AND SPECIFICATIONS; THE FLASHING BEACON AND RECTANGULAR RAPID FLASHING BEACON (RRFB) MANUFACTURER'S SPECIFICATIONS, AND THESE PLANS.
2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF UNDERGROUND UTILITIES, THEIR FACILITIES, AND ASSOCIATED EQUIPMENT. PROTECTION SHALL BE PROVIDED PRIOR TO AND DURING DEMOLITION, TRENCHING, EXCAVATION, JACKING, AND BORING. CONTACT UNDERGROUND SERVICE ALERT (USA), TOLL FREE AT 811, AT LEAST 2 FULL WORKING DAYS BEFORE BEGINNING WORK.
3. AFTER ALL UNDERGROUND UTILITIES ARE MARKED, THE CONTRACTOR SHALL ESTABLISH THE LOCATIONS OF ALL POLES AND RELATED FACILITIES. THE CONTRACTOR SHALL THEN ARRANGE WITH THE PUBLIC WORKS DEPARTMENT TO APPROVE THOSE LOCATIONS PRIOR TO THE START OF ANY WORK.
4. POSITIONING OF THE FLASHING BEACONS, STANDARDS AND PULL BOXES SHALL BE VERIFIED BY THE TOWN OF LOS GATOS PRIOR TO INSTALLATION.
5. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE FLASHING BEACON, RRFB, AND DRIVER FEEDBACK SIGN TO BE FULLY OPERATIONAL.
6. ALL SALVAGED MATERIAL SHALL BE DELIVERED TO:
 TOWN OF LOS GATOS
 MAINTENANCE SERVICES DIVISION
 41 MILES AVENUE
 LOS GATOS, CA 95030
7. CONTRACTORS SHALL NOTIFY THE TOWN OF LOS GATOS PUBLIC WORKS DEPARTMENT (ENGINEERING DIVISION) TWO WORKING DAYS BEFORE THE START OF WORK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO THE ENGINEER IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL REMEDIAL ACTION CAN BE TAKEN. ANY COSTS RESULTING FROM THE CONTRACTOR'S FAILURE TO REPORT OR FAILURE TO STOP WORK AS DIRECTED WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.



CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR OBSERVING 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 THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



Date: 04/29/2020
 Scale: No Scale
 Design: Ruta J.
 Drawn: Andrew D.
 Check: Ruta J.
 Engr. Ruta J.
 Proj. No.: 2019-008

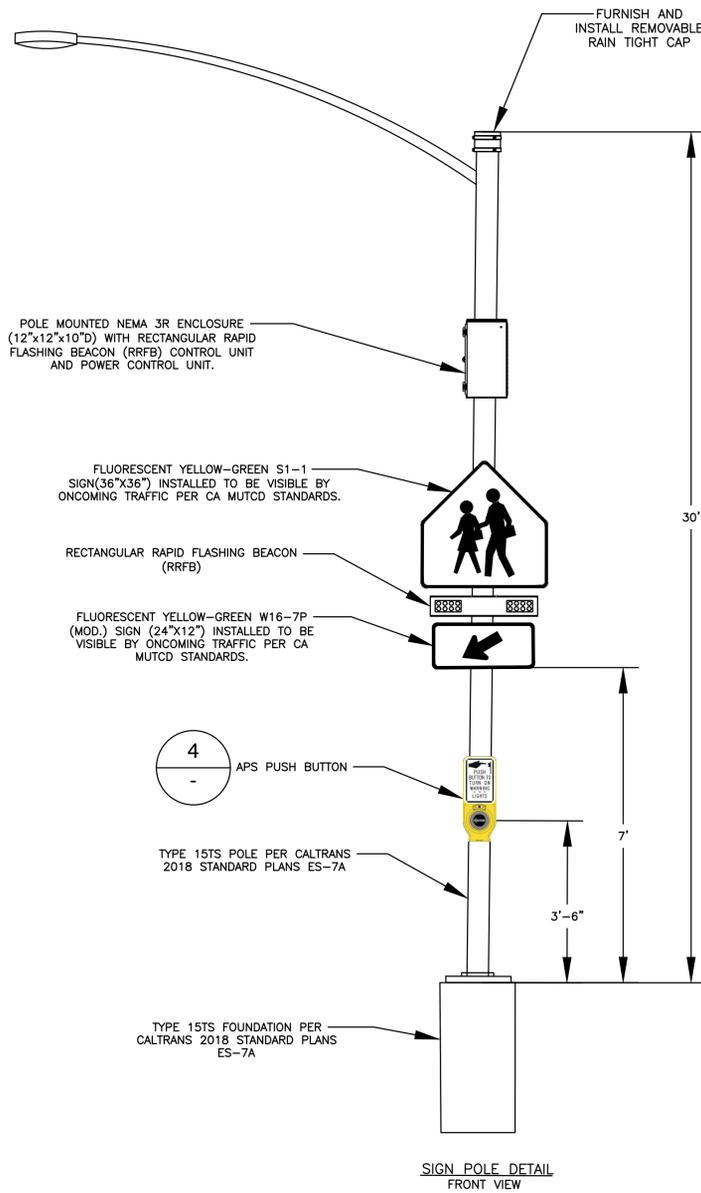


CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE ELECTRICAL IMPROVEMENT PLAN

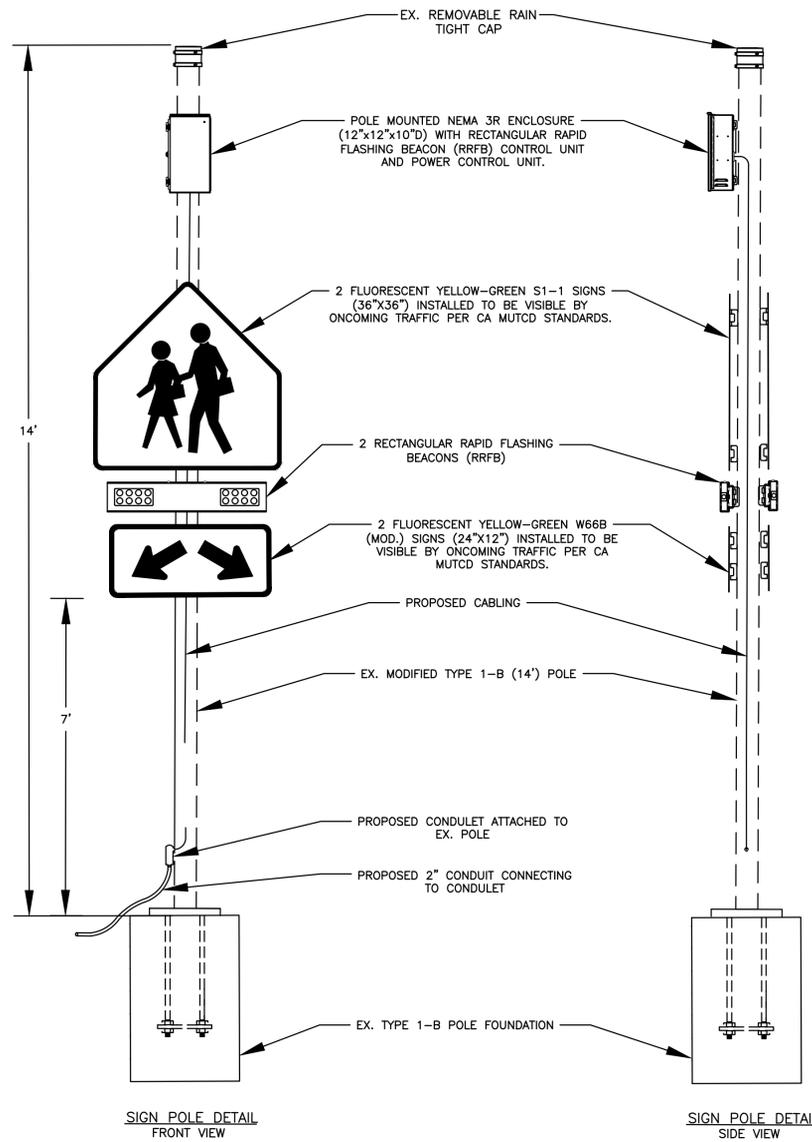
REVISION NO.	DATE	BY

Drawing Number:
E-1

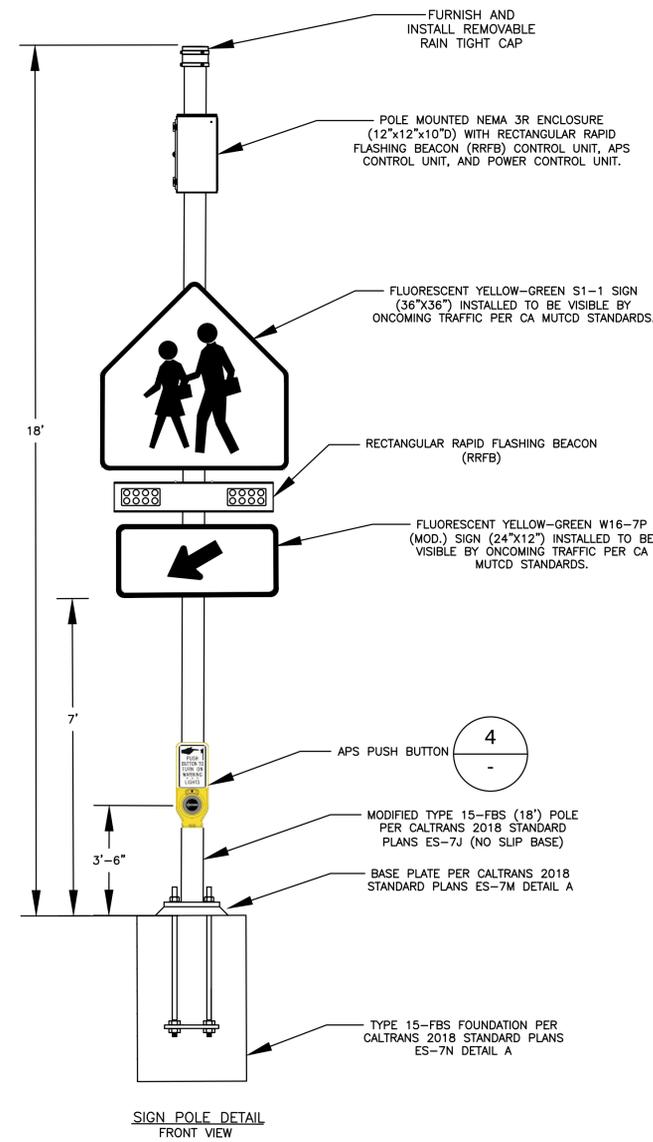
CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



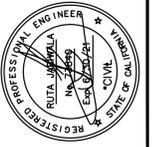
1 RRFB SYSTEM 15TS POLE INSTALLATION DETAILS
NOT TO SCALE



2 DUAL HORIZONTAL BACK-TO-BACK RRFB SYSTEM TYPE 1-B (14') POLE INSTALLATION DETAILS
NOT TO SCALE

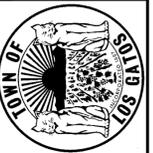


3 RRFB SYSTEM TYPE 15-FBS (18') POLE INSTALLATION DETAILS
NOT TO SCALE



Date: 04/29/2020
Scale: No Scale
Design: Ruta J. Altun
Drawn: Andrew D. Altun
Check: Ruta J. Altun
Proj. No.: 2019-008

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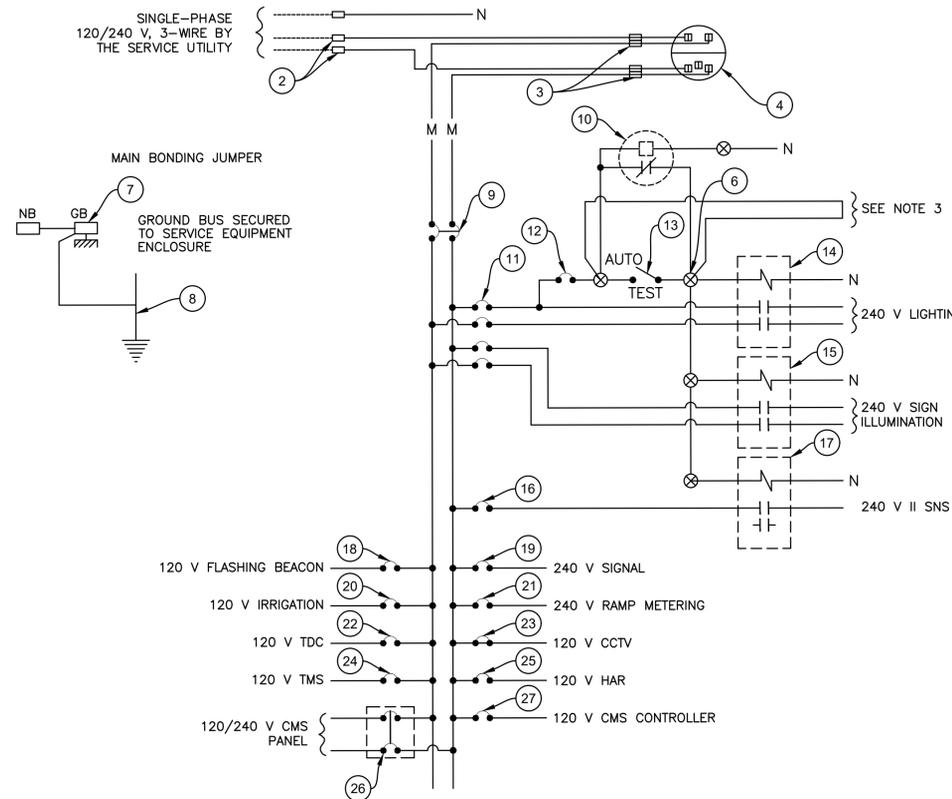
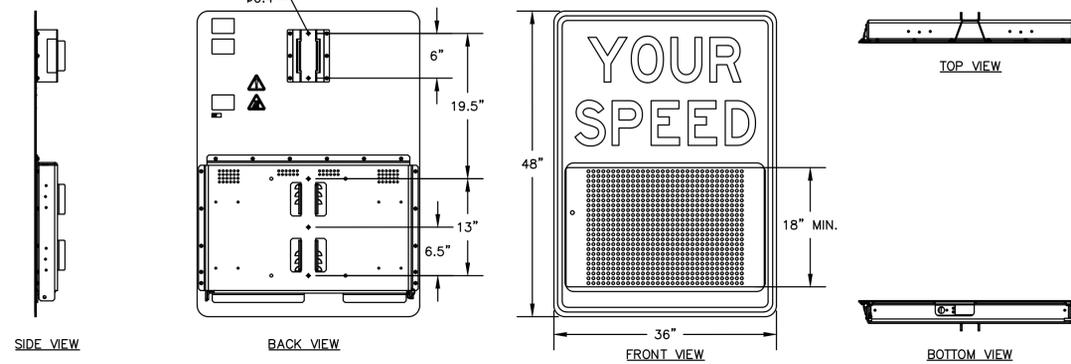
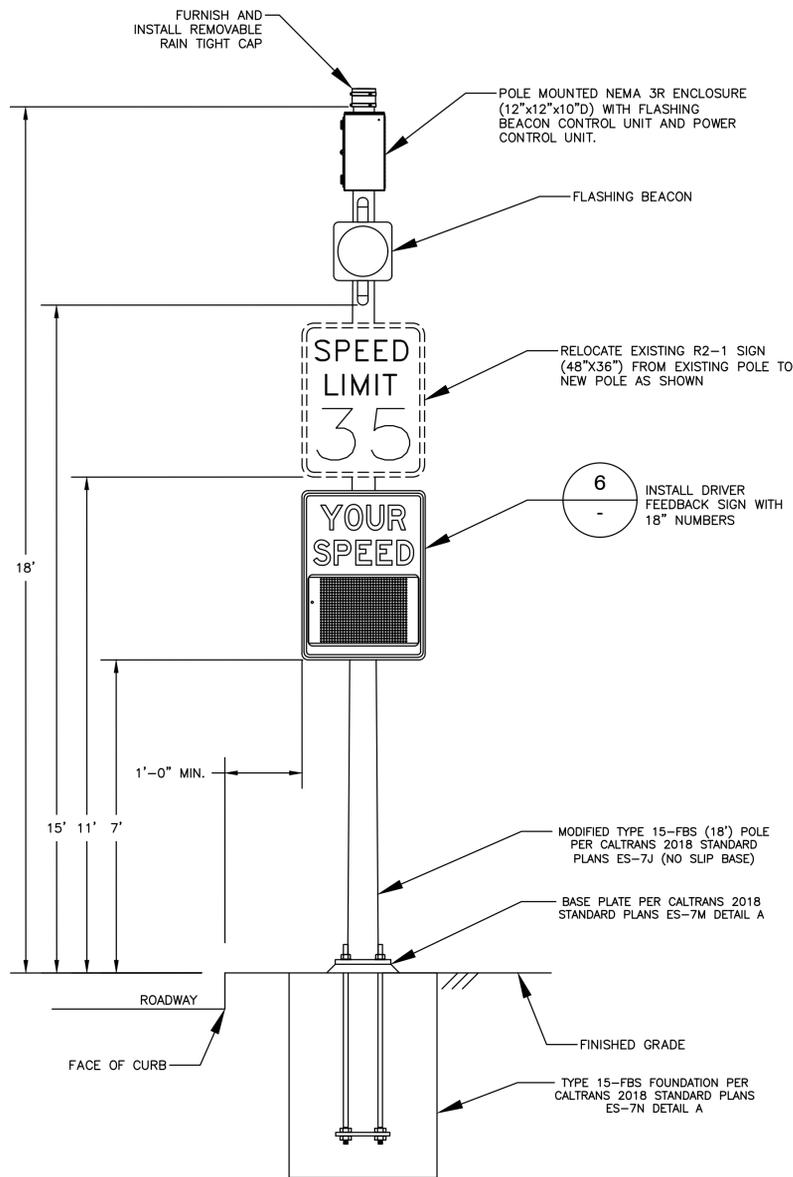


CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE
ELECTRICAL DETAILS

REVISION NO.	BY	DATE

Drawing Number:
E-2
5 OF 10
Project Specifications

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE DESIGN AND CONSTRUCTION OF THIS PROJECT, INCLUDING THE 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 THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



TYPE III-AF SERVICE EQUIPMENT ENCLOSURE LEGEND (120/240 V)
CTID # 04370090010884

ITEM No.	COMPONENT	NAME PLATE DESCRIPTION	REMARKS
1	NEUTRAL LUG		
2	LANDING LUG (NOTE 6)		
3	TEST BYPASS FACILITY		
4	METER SOCKET AND SUPPORT		
5	NEUTRAL BUS		
6	TERMINAL BLOCK		
7	GROUND BUS		
8	GROUNDING ELECTRODE		
9	100 A, 240 V, 2P, CB	MAIN CIRCUIT BREAKER	
10	PHOTOELECTRIC UNIT (SEE NOTE 7)		
11	30 A, 240 V, 4P, CB	LIGHTING	
12	15 A, 120 V, 1P, CB	LIGHTING	NOT USED
13	15 A, 120 V, 1P, TEST SWITCH	TEST SWITCH	
14	60 A, 2P, NO CONTACTOR		
15	30 A, 2P, NO CONTACTOR		NOT USED
16	15 A, 120 V, 1P, CB		NOT USED
17	30 A, 2P, NO CONTACTOR		NOT USED
18	15 A, 120 V, 1P, CB	FLASHING BEACONS	
19	50 A, 120 V, 1P, CB	SIGNALS	NOT USED
20	20 A, 120 V, 1P, CB	IRRIGATION	
21	30 A, 120 V, 1P, CB	RAMP METERING	NOT USED
22	20 A, 120 V, 1P, CB	TELEPHONE DEMARCATION CABINET	NOT USED
23	30 A, 120 V, 1P, CB	CCTV	NOT USED
24	30 A, 120 V, 1P, CB	TMS	NOT USED
25	30 A, 120 V, 1P, CB	HAR	NOT USED
26	30 A, 120 V, 2P, CB	CMS PANEL	NOT USED
27	30 A, 120 V, 1P, CB	CMS CONTROLLER	NOT USED

LEGEND

P	POLE	---	EXTERNAL CONDUCTOR
CB	CIRCUIT BREAKER	—	CONDUCTOR OR BUS
A	AMPERE	•	TIE POINT
V	VOLT	—○—	CONDUCTOR COIL
M	METERED	— —	CONTACTOR, CONTACT NO.
UM	UNMETERED	⊗	TERMINAL BLOCK
SN	SOLID NEUTRAL	— —	CONTACTOR, CONTACT NO.
NO	NORMALLY OPEN	— —	ENCLOSURE
NC	NORMALLY CLOSED	⊥	GROUND

- NOTES: (FOR THIS SHEET ONLY)
- VOLTAGE RATINGS OF SERVICE EQUIPMENT SHALL CONFORM TO THE SERVICE VOLTAGES INDICATED ON THE PLANS.
 - UNLESS OTHERWISE INDICATED ON THE PLANS, SERVICE EQUIPMENT ITEMS SHALL BE PROVIDED FOR EACH SERVICE EQUIPMENT ENCLOSURE AS SHOWN.
 - CONNECT TO REMOTE TEST SWITCH MOUNTED ON LIGHTING STANDARDS, SIGN POST OR STRUCTURE WHEN REQUIRED.
 - ITEMS NO. 1 AND 5 SHALL BE ISOLATED FROM THE SERVICE EQUIPMENT ENCLOSURE.
 - METER SOCKETS SHALL MEET SERVICE UTILITY REQUIREMENTS.
 - THE LANDING LUG SHALL BE SUITABLE FOR MULTIPLE CONDUCTORS.
 - PHOTOELECTRIC CONTROL SHALL BE TYPE II
 - SERVICE UTILITY WILL INSTALL THE TIME-OF-USE METER IF APPLICABLE.
 - UNLESS OTHERWISE NOTED, THE MAXIMUM NUMBER OF SINGLE-POLE CIRCUIT BREAKER SPACES IN THE ENCLOSURE IS FOURTEEN.
 - SEE STANDARD PLANS ES-2D FOR OTHER DETAILS

DATE: 04/29/2020
SCALE: NO SCALE
DESIGN: ATUL P.
DRAWN: ANDREW D.
CHECK: ATUL P.
ENGR: RUTA J.
PROJ. NO.: 2019-008

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TJKM

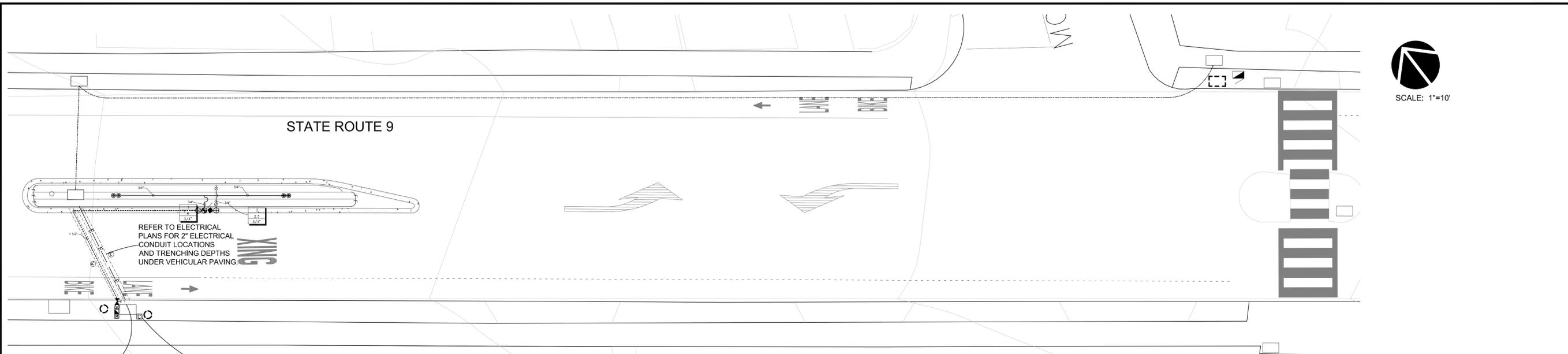


CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE
ELECTRICAL DETAILS

REVISION NO.	DATE	BY

Drawing Number:
E-3
6 OF 10
Project Specifications

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 THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



REFER TO ELECTRICAL PLANS FOR 2" ELECTRICAL CONDUIT LOCATIONS AND TRENCHING DEPTHS UNDER VEHICULAR PAVING.

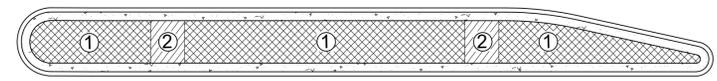
POINT OF CONNECTION:
 PROVIDE & INSTALL 1" BACKFLOW PREVENTER AT NEW 1" IRRIGATION WATER METER PER DETAIL 13, SHEET 8. REF. CIV. ENG. DWGS. FOR WATER METER INSTALLATION DETAILS.
 METER INSTALLED BY SAN JOSE WATER. LOCATION SHOWN IS APPROXIMATE.
 THE IRRIGATION PLAN AND THE PIPING DETAILS ARE DIAGRAMMATIC. PIPE LINES SHOWN PARALLEL IN THE DRAWINGS MAY BE PLACED IN A COMMON TRENCH, PROVIDED THAT A MINIMUM HORIZONTAL DISTANCE OF THREE INCHES (3") IS MAINTAINED BETWEEN BURIED LINES. VALVE LOCATIONS ARE SCHEMATIC AND SHOWN FOR GRAPHIC CLARITY. LOCATE ALL MAINLINE, VALVES AND WIRING IN LANDSCAPED AREAS.

IRRIGATION CONTROLLER:
 INSTALL A 'RAINBIRD ESPME4' 4 STATION CONTROLLER PER DETAIL 16, SHEET I-2, IN 336L CABINET AND FOUNDATION PER CAL TRANS DETAIL ES-3B AND AS DIRECTED BY THE ENGINEER. REFER TO ELECTRICAL DRAWINGS FOR 120 V SERVICE DETAILS.

GENERAL NOTES

- ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING PLANS BEFORE BEGINNING WORK.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
- THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR GRAPHIC CLARITY ONLY.
- THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE ENGINEER.
- INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
- ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CONTRACTOR IS TO PROVIDE TWO (2) ADDITIONAL PILOT WIRES FROM CONTROLLER ALONG ENTIRETY OF MAIN LINE TO THE LAST RCV ON EACH AND EVERY LEG OF MAIN LINE. LABEL SPARE WIRES AT BOTH ENDS.
- ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN SLEEVING TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
- ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER AND REMOTE CONTROL VALVES SHALL BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER AND REMOTE CONTROL VALVES WITHIN 18" OF HARDSCAPE.
- THE CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURERS SPECIFICATIONS. SWEENEY AND ASSOCIATES RECOMMENDS MEASURING FOR PROPER GROUND AT LEAST ONCE ANNUALLY, AND NECESSARY ADJUSTMENTS MADE TO COMPLY WITH MANUFACTURER SPECIFICATIONS.
- THE IRRIGATION PLAN AND THE PIPING DETAILS ARE DIAGRAMMATIC. PIPE LINES SHOWN PARALLEL IN THE DRAWINGS MAY BE PLACED IN A COMMON TRENCH, PROVIDED THAT A MINIMUM HORIZONTAL DISTANCE OF THREE INCHES (3") IS MAINTAINED BETWEEN BURIED LINES. VALVE LOCATIONS ARE SCHEMATIC AND SHOWN FOR GRAPHIC CLARITY.
- REFER TO THE PROJECT IRRIGATION SPECIFICATIONS FOR ADDITIONAL MATERIAL AND WORKMANSHIP REQUIREMENTS.

1. IRRIGATION PLAN SCALE: 1"=10'



LEGEND
 LOW WATER USE ZONE
 MODERATE WATER USE ZONE
 CONCRETE BAND

2. HYDROZONE PLAN SCALE: 1"=10'

TABLE A-1 HYDROZONE AREA INFORMATION

HYDROZONE	PLANT WATER USE TYPE	HYDROZONE AREA
1	MODERATE	41
2	LOW	314
TOTAL		355

SUMMARY OF HYDROZONE AREA INFORMATION

SUM OF LOW WATER USE AREAS	314
SUM OF MODERATE WATER USE AREAS	41
SUM OF ALL LANDSCAPE AREAS	355

TABLE A-2 INPUT VALUES FOR THE MAWA CALCULATION

ETO	ETAF	CONVERSION FACTOR	LANDSCAPE AREA	SPECIAL LANDSCAPE AREA	MAXIMUM APPLIED WATER ALLOWANCE
43	0.70	.62	355	0	6,625

TABLE B-1 PLANT FACTOR AND IRRIGATION INFORMATION

HYDROZONE	PLANT WATER USE TYPE	IRRIGATION TYPE	PLANT FACTOR	HYDROZONE AREA	PFXHA	IRRIGATION EFFICIENCY	PFXHA/IE	ESTIMATED TOTAL WATER USE (PFXHA/IE)X26.66
1	MODERATE	BUBBLER	0.5	41	21	0.81	25	675
2	LOW	SUB SURFACE DRIP	0.3	314	94	0.81	116	3100
TOTALS				355				3775

2. WATER USE CALCULATIONS

IRRIGATION LEGEND

- | | | |
|--|-----------------------------------|---|
| | 1" IRRIGATION WATER METER | REFER TO CIVIL DRAWINGS |
| | 1" GATE VALVE | REFER TO DETAIL 13, SHEET I-2 |
| | BACKFLOW PREVENTOR | FEBCO 825EBV 1" RP DEVICE - REF DETAIL 13, SHEET 8 |
| | REMOTE CONTROL VALVE | RAINBIRD EFB-CP SERIES |
| | IN LINE BALL VALVE | LASCO "SLO CLOSE" SCH. 80 PVC TRU-UNION BALL VALVE- SIZE PER RCV. |
| | QUICK COUPLER | RAINBIRD 33DRC |
| | CONTROLLER | RAINBIRD ESP4ME 4 STATION CONTROLLER WITH LNK WIFI MODULE AND WR2 RAIN SENSOR |
| | RAIN SENSOR | RAINBIRD WR2 RAIN SENSOR |
| | MASTER VALVE/FLOW SENSOR | "HYDROPOINT" FLOW 3-1" W/PHOTO DIODE REGISTER OR EQUAL |
| | CONTROL ZONE KIT | RAINBIRD XCZ-100-PRF-COM |
| | LOW FLOW CONTROL ZONE KIT | RAINBIRD XCZ-075-PRF (2 TO 5 GPM) |
| | ADJUSTABLE FLOODING BUBBLER | RAINBIRD 1300A-F |
| | FLUSH CAP | RAINBIRD-MDCCFAP |
| | AIR RELIEF VALVE | RAINBIRD-AR VALVE KIT (INSTALL AT HIGH POINT OF SYSTEM) |
| | 1" DIA. SUPPLY LINE | 1120/SCHEDULE 40 PVC PIPE-18" COVER |
| | LATERAL LINE | 1120/SCHEDULE 40 PVC CODED PIPE-12" COVER |
| | SUPPLY HEADER | 1120/CLASS 200 PIPE-12" COVER WITH SCHEDULE 40 FITTINGS |
| | FLUSH HEADER | 1120/CLASS 200 PIPE-12" COVER WITH SCHEDULE 40 FITTINGS |
| | XFS 0612100 SUB SURFACE DRIP LINE | RAINBIRD XFS SUB-SURFACE DRIP LINE WITH COPPER SHIELD TECHNOLOGY. DRIP TUBING SHALL BE INSTALLED 2" BELOW FINISHED SOIL GRADE (NOT COUNTING MULCH) AND IN PARALLEL ROWS A MAXIMUM OF 16" ON CENTER. THE PERIMETER ROW OF DRIP TUBING SHALL BE INSTALLED A MAXIMUM OF 4" FROM THE EDGE OF ANY HARDSCAPE. ALL SUBSEQUENT INTERIOR ROWS SHALL BE ADJUSTED TO PROVIDE AN EVEN SPACING ACROSS THE PLANTER WITHOUT EXCEEDING 16" MAXIMUM. DRIP TUBING SHALL BE EQUIPPED WITH COPPER OXIDE INFUSED EMITTERS AND A PHYSICAL BARRIER TO PREVENT ROOT INTRUSION INTO THE DRIP EMITTER. DRIP EMITTERS SHALL BE CONTINUOUS FLUSHING TYPE AND EQUIPPED WITH A CHECK VALVE AND ANTI-SIPHON FEATURE. TUBING STAKES SHALL BE MODEL #GDT5140900 AS MANUFACTURED BY GPH IRRIGATION PRODUCTS (866) 582-9684 OR APPROVED EQUAL. THE PLANS SYMBOLS REPRESENT THE APPROXIMATE DIRECTION AND SPACING OF THE DRIP TUBING ROWS. SEE SPACING REQUIREMENTS ABOVE AND IN DETAILS. |
| | IRRIGATION SLEEVE SIZE | SCHEDULE 80 PVC PIPE TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED (2" MINIMUM SIZE). SLEEVES UNDER PEDESTRIAN PAVING SHALL BE INSTALLED 24" BELOW FINISH GRADE. SLEEVES UNDER VEHICULAR PAVING SHALL BE INSTALLED 36" BELOW FINISH GRADE. |
| | IRRIGATION SLEEVING | |
| | CONDUIT SIZE | REFER TO SHEET E-1, ELECTRICAL PLAN |
| | LV WIRE IN CONDUIT | |
| | CONTROLLER STATION NUMBER | |
| | GALLONS PER MINUTE THROUGH VALVE | |
| | CONTROL VALVE SIZE | |

Date: 04/29/2020
 Scale: As Shown
 Design: Bruce Hill
 Drawn: Bruce Hill
 Check: Bruce Hill
 Proj. No: 2019-008

HILL ASSOCIATES
 Landscape Architecture/Planning
 100 Oakdale Drive
 Aptos, CA 95003
 408/7613884



PROJECT_NO: 19-813-0236

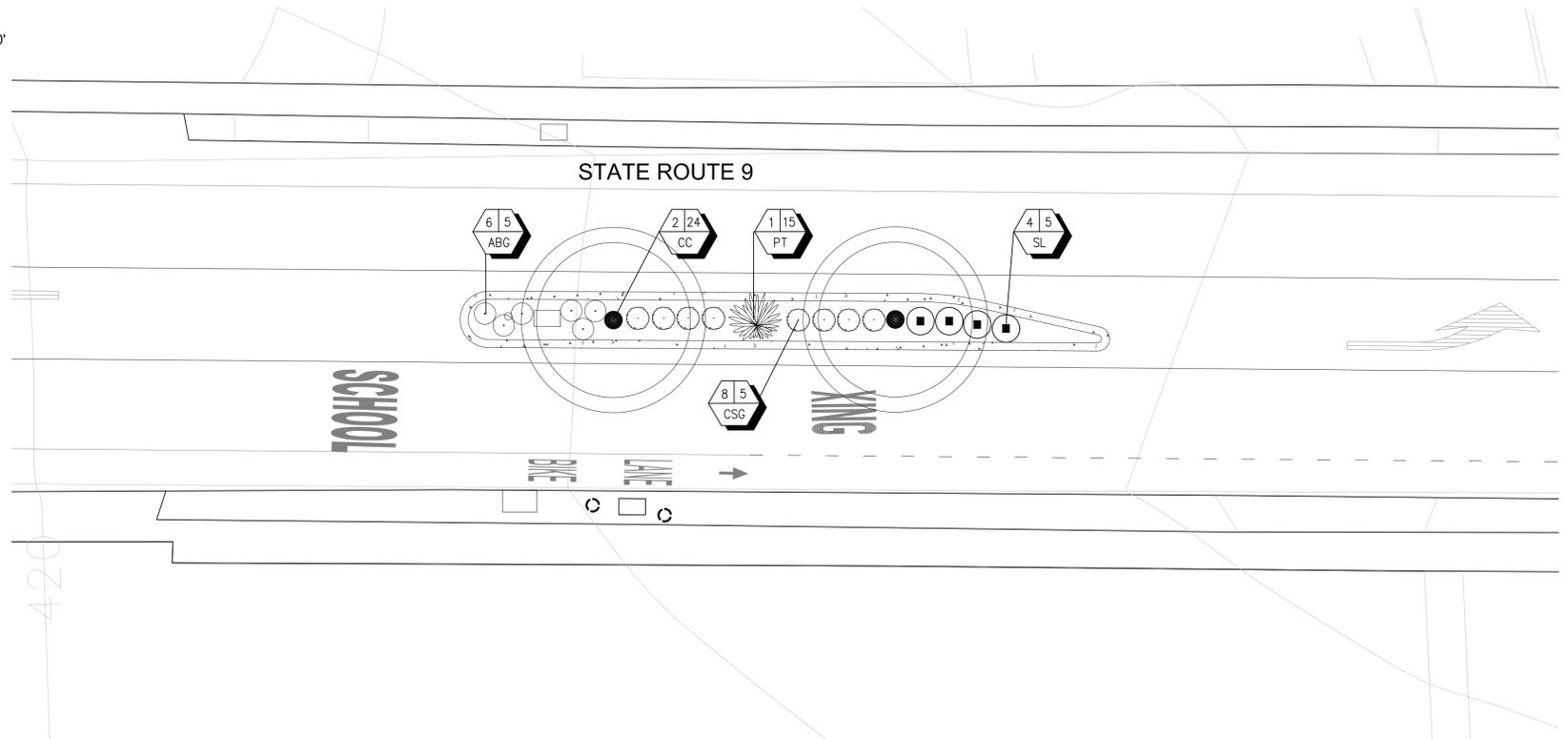
CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE

REVISION NO.	DATE	BY

Drawing Number: **I-1**
 7 OF 10

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 THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

SCALE: 1"=20'



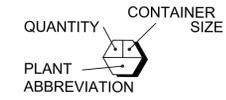
1. PLANTING PLAN

SCALE: 1"=10'

PLANT LIST

TREES									
SYMBOL	KEY	BOTANIC NAME	COMMON NAME	SIZE	HEIGHT AND SPREAD WHEN PLANTED	NOTES/SPACING	QUANTITY	WUCOLS IV WATER USE	
	CC	CERCIS CANADENSIS	EASTERN REDBUD	24" BOX	8'-10" X 4'-5"	PLANT PER CITY STANDARD DETAILS ST-234 AND ST-235	2	MOD	
SHRUBS									
SYMBOL	KEY	BOTANIC NAME	COMMON NAME	SIZE	HEIGHT AND SPREAD WHEN PLANTED	NOTES/SPACING	QUANTITY	WUCOLS IV WATER USE	
	ABG	ANIGOZANTHUS 'BUSH GOLD'	DWARF KANGAROO PAW VAR. 'BUSH GOLD'	5 GAL.	18" X 18"		6	LOW	
	CSG	COLEONEMA 'SUNSET GOLD'	BREATH OF HEAVEN VAR. 'SUNSET GOLD'	5 GAL.	18" X 18"		8	LOW	
	PT	PHORMIUM TENAX VAR. 'ATROPURPUREUM'	BRONZE FLAX	5 GAL.	18" X 18"		1	LOW	
	SL	SALVIA LEUCANTHA	MEXICAN BUSH SAGE	5 GAL.	18" X 18"		4	LOW	

PLANT KEY



GENERAL NOTES

- REFER TO SPECIFICATIONS FOR MATERIAL AND WORKMANSHIP REQUIREMENTS, SOIL AMENDMENTS, INSPECTION SCHEDULES AND GENERAL CONDITIONS.
- THE LANDSCAPE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AT THE SITE PRIOR TO THE START OF ANY WORK. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY.
- ALL PLANTED AREAS, EXCEPT THOSE AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED FIR OR REDWOOD BARK MULCH LAYER, APPLIED AFTER THE COMPLETION OF PLANTING OPERATIONS. THIS BARK MULCH SHALL NOT EXCEED 1/2" IN DIAMETER. SUBMIT SAMPLE TO ENGINEER FOR APPROVAL PRIOR TO PLACING BARK MULCH. REJECTED MATERIAL WILL BE REMOVED FROM THE SITE AT NO EXPENSE TO THE CITY.
- ALL SHRUBS SHALL BE PLANTED 1" ABOVE FINISH GRADE TO ALLOW FOR SETTLEMENT. ANY SHRUBS WHICH HAVE CROWNS BELOW FINISH GRADE AT THE FINAL INSPECTION WILL BE REPLACED AT NO EXPENSE TO THE CITY.
- THE LANDSCAPE SHALL BE MAINTAINED TO ENSURE WATER EFFICIENCY. A REGULAR MAINTENANCE SCHEDULE SHALL INCLUDE, BUT NOT BE LIMITED TO, CHECKING, ADJUSTING, AND REPAIRING THE IRRIGATION EQUIPMENT, RESETTING THE AUTOMATIC CONTROLLER, REPLISHING MULCH, FERTILIZING, PRUNING AND WEEDING IN ALL LANDSCAPE AREAS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- DECOMPOSED ORGANIC MATTER SHALL BE INCORPORATED INTO THE SOIL TO IMPROVE FILTRATION, WATER RETENTION AND SOIL STRUCTURE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- THE LANDSCAPE ARCHITECT SHALL CONDUCT A FINAL FIELD OBSERVATION TO CONFIRM THAT THE IRRIGATION SYSTEM WAS INSTALLED AS DESIGNED AND THAT PLANTS WERE INSTALLED AS SPECIFIED.



Date: 04/20/2020
 Scale: 1"=10'
 Design: Bruce Hill
 Drawn: Bruce Hill
 Check: Bruce Hill
 Engr.:
 Proj. No: 2019-008

HILL ASSOCIATES
 Landscape Architecture/Planning
 100 Oakdale Drive
 Aplos, CA 95003
 408/7613884



PROJECT_NO:19-813-0236
CROSSWALK IMPROVEMENTS ON STATE ROUTE 9 AT MASSOL AVENUE
PLANTING PLAN

REVISION NO.	BY	DATE

Drawing Number:
P-1
 9 OF 10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Atifa Ferouz
REGISTERED CIVIL ENGINEER
October 18, 2019
PLANS APPROVAL DATE
No. C80402
Exp. 3-31-21
CIVIL
STATE OF CALIFORNIA



Date: 04/20/2020
Scale: 1" = 20'
Design: Admas Z.
Drawn: Abel A.
Check: Admas Z.
Eng.: Admas Z.
Proj. No.: 2019-1008

ActiveWyz Engineering, Inc.
7301 Oakport Street, Suite 4225
www.activwyz.com
info@activwyz.com
510.989.2420

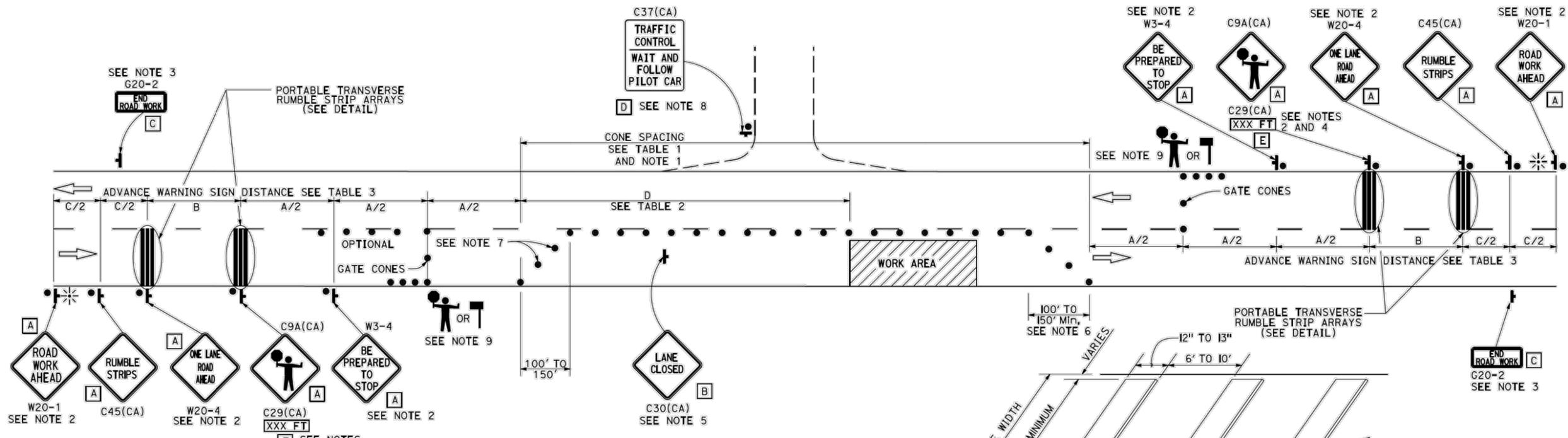


CROSSWALK IMPROVEMENTS ON STATE
ROUTE 9 AT MASSOL AVENUE
TRAFFIC CONTROL PLAN

NOTES:

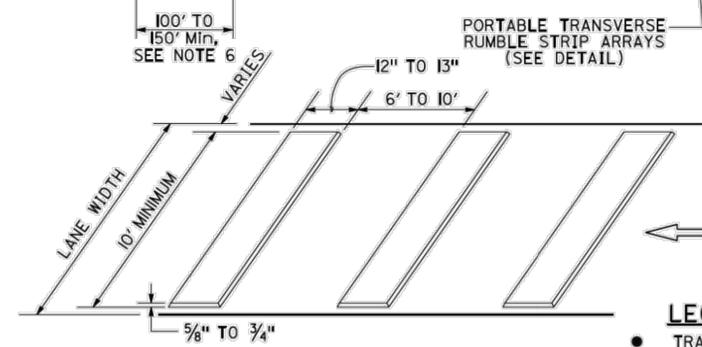
See Standard Plan T9 for tables.
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
- Length may be reduced by the Engineer to address site conditions.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within the traffic control area.
- Automated Flagger Assistance Devices (AFAD) may be used if allowed by the special provisions or approved by the Engineer.



LEGEND

- TRAFFIC CONE
- ⚡ TEMPORARY TRAFFIC CONTROL SIGN
- ☀ PORTABLE FLASHING BEACON
- 🚧 FLAGGER
- 🚦 AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM
FOR LANE CLOSURE ON
TWO LANE CONVENTIONAL
HIGHWAYS**
NO SCALE

RSP T13 DATED OCTOBER 18, 2019 SUPERSEDES STANDARD PLAN T13
DATED MAY 31, 2018 - PAGE 291 OF THE STANDARD PLANS BOOK DATED 2018.

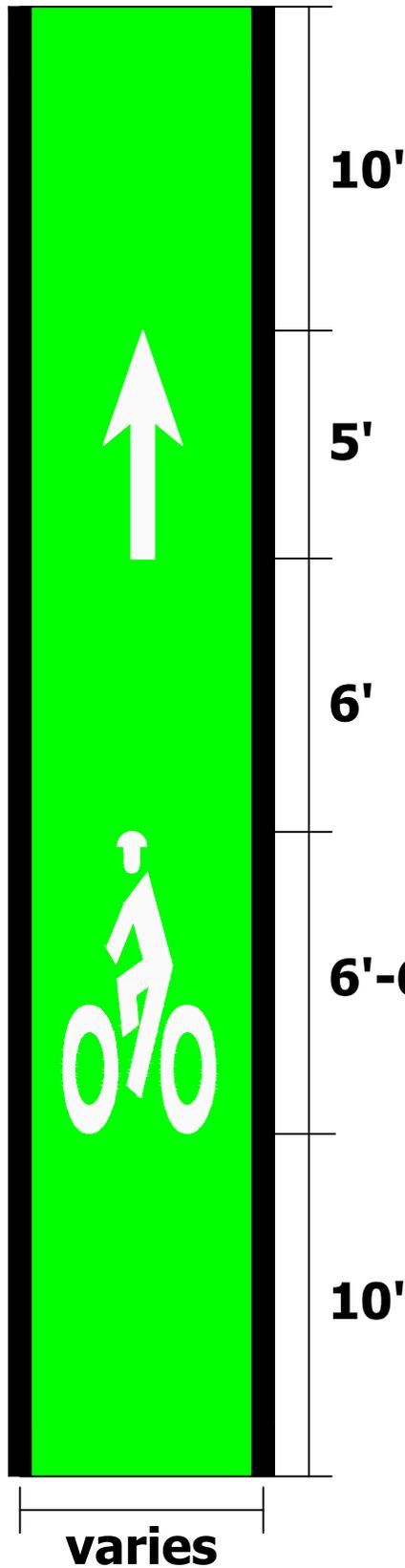
REVISED STANDARD PLAN RSP T13

CONTRACTOR AGREES THAT HE SHALL ASSUME GO-AND-COMPLY RESPONSIBILITY FOR THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THE REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL OBTAIN AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

REVISION NO.	DATE	BY

APPENDIX B
Standard Plans

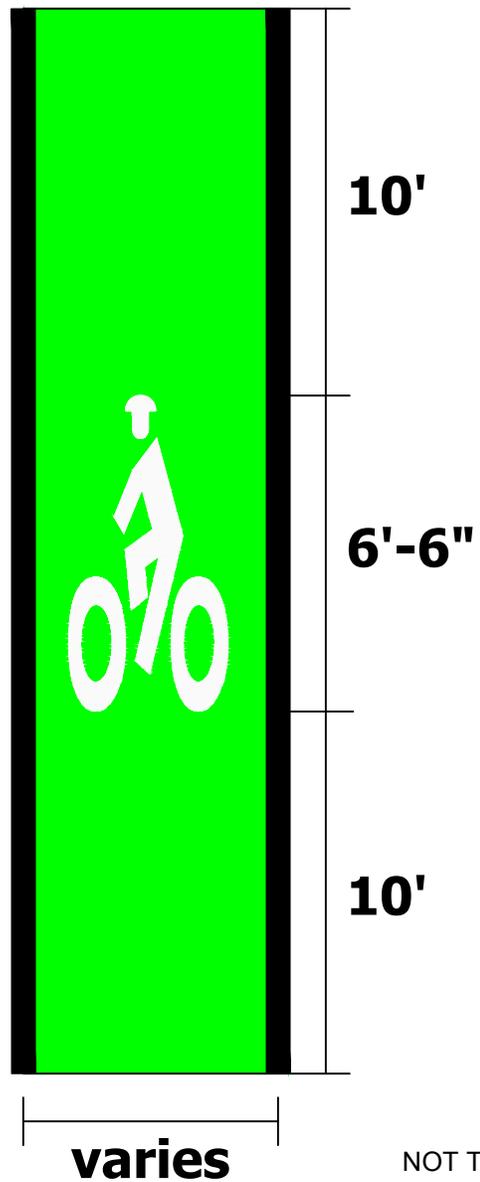
(A)



NOTES:

1. If used, install (A) for bike lane after every intersection and at mid-block as shown on the plans.
2. If used, install (B) at mid-block for bike lane as shown on the plans.
3. The spacing of bike lane symbols should not be greater than 300'.

(B)



NOT TO SCALE

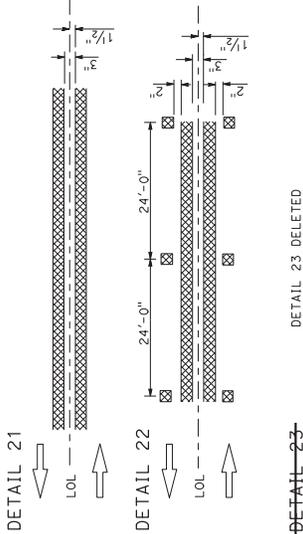
APPROVED BY	DATE		GREEN BACK BIKE LANE SYMBOL	STD. PLAN NO.
TOWN ENGINEER	December 21, 2017			TR-A

Dist	County	Route	Project	Sheet Total
				NO. SHEETS

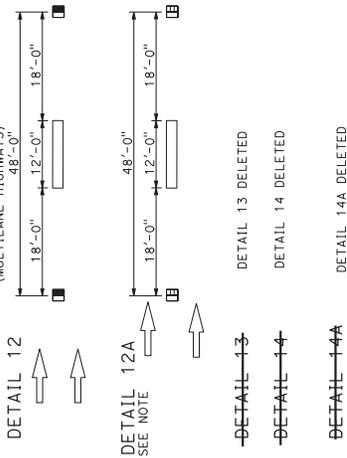
REGISTERED CIVIL ENGINEER
Alta Eforouz
 No. CB0402
 Exp. 3-31-19
 STATE OF CALIFORNIA

MAY 31, 2018
 DATE OF EXPIRATION
 THE STATE OF CALIFORNIA
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.

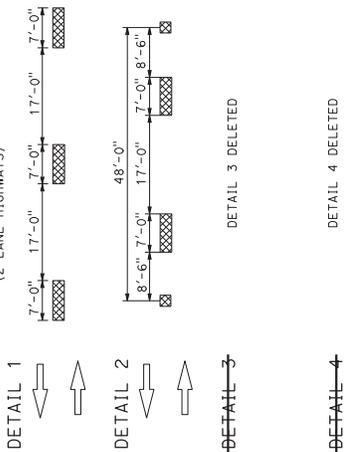
NO PASSING ZONES-TWO DIRECTION



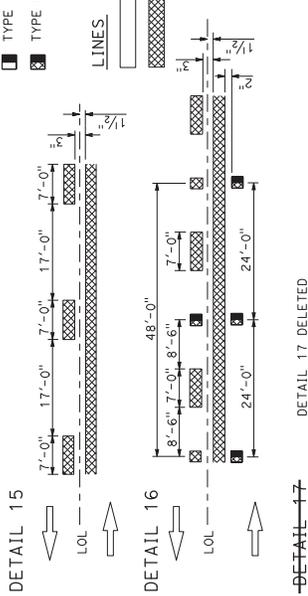
LANELINES (Cont)
(MULTILANE HIGHWAYS)



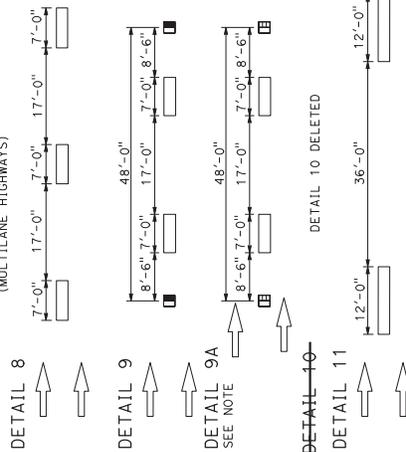
CENTERLINES
(2 LANE HIGHWAYS)



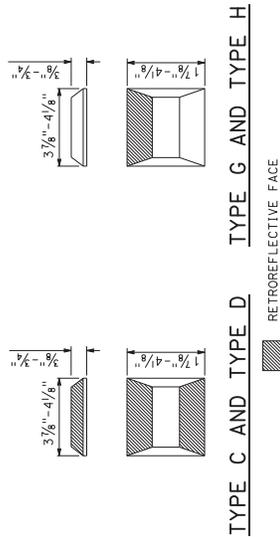
NO PASSING ZONES-ONE DIRECTION



LANELINES
(MULTILANE HIGHWAYS)



- LEGEND**
- MARKERS**
- ☐ TYPE C RED-CLEAR RETROREFLECTIVE
 - ▣ TYPE D TWO-WAY YELLOW RETROREFLECTIVE
 - ▤ TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 - ▥ TYPE H ONE-WAY YELLOW RETROREFLECTIVE
- LINES**
- ▭ 6" WHITE
 - ▨ 6" YELLOW



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKERS
 AND TRAFFIC LINES
 TYPICAL DETAILS**

NO SCALE

A20A

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DIST#	COUNTY	ROUTE	PRIEST MILES TOTAL PROJECT	SHEET TOTAL SHEETS



Atila Feroza
 REGISTERED CIVIL ENGINEER
 APR 19, 2019
 EXPIRES APRIL 19, 2021
 THE STATE OF CALIFORNIA
 BY APPOINTMENT OF THE BOARD OF PROFESSIONAL ENGINEERS
 THIS SEAL IS VALID FOR THE STATE OF CALIFORNIA ONLY. IT IS THE RESPONSIBILITY OF THE USER TO VERIFY THE AUTHORITY OF THE ENGINEER.

TO ACCOMPANY PLANS DATED _____

LEGEND

MARKERS

- TYPE D
- TYPE H
- TYPE RY

RETROREFLECTIVE

- YELLOW
- RED-YELLOW

LINE

- 6" WHITE
- 6" YELLOW

MEDIAN ISLANDS

DETAIL 28

DETAIL 29

DETAIL 30 DELETED

LEFT EDGE LINES
(DIVIDED HIGHWAYS)
See Note

EDGE OF TRAVELED WAY

DETAIL 24

DETAIL 25

DETAIL 25A

DETAIL 25B

DETAIL 26

DETAIL 26A

DETAIL 26B

RIGHT EDGE LINES

DETAIL 27A

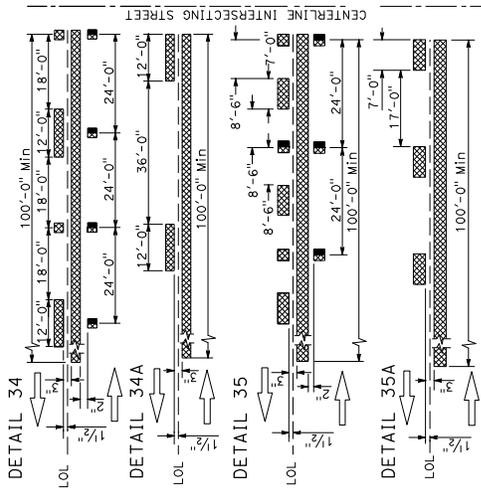
DETAIL 27B

DETAIL 27C

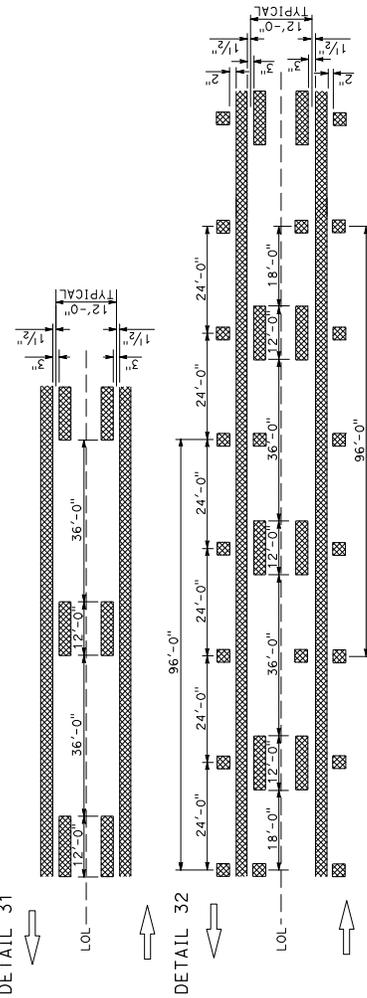
RIGHT EDGE LINE EXTENSION THROUGH INTERSECTIONS

DETAIL 27C

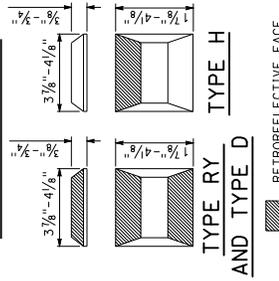
INTERSECTION TREATMENTS



TWO-WAY LEFT TURN LANES



MARKER DETAILS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

RSP A20B DATED APRIL 19, 2019, SUPERSEDES STANDARD PLAN A20B DATED MAY 31, 2018 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2018.

REVISED STANDARD PLAN RSP A20B

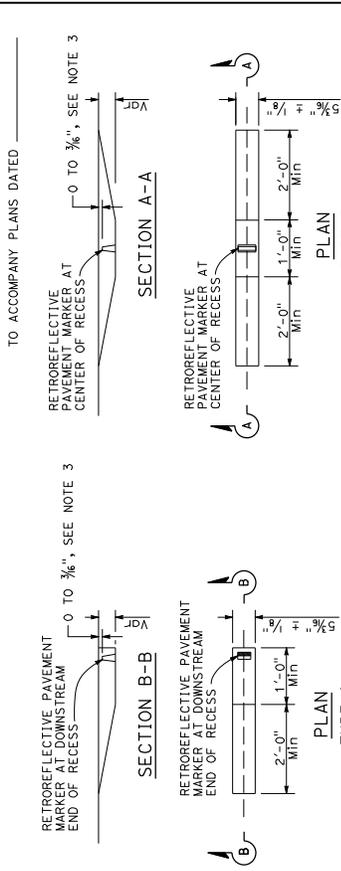
LEFT EDGE LINES NOTE:
On freeways use traffic stripe details with Type RY markers.

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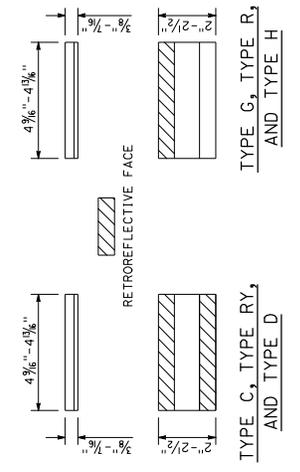
DI+1	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

Alfio Ferrara
REGISTERED CIVIL ENGINEER
October 19, 2018
DATE OF EXPIRATION: 12 MONTHS
THE STATE OF CALIFORNIA
BY ACTING SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS OF THIS PLAN SHEET.

PROFESSIONAL ENGINEER
Alfio Ferrara
No. CB0402
Exp. 3-31-19
STATE OF CALIFORNIA



RECESS DETAIL FOR RETROREFLECTIVE PAVEMENT MARKER
See Note 4



RETRORREFLECTIVE PAVEMENT MARKER FOR RECESSED INSTALLATION
See Notes 1 and 2.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES AND TYPICAL DETAILS

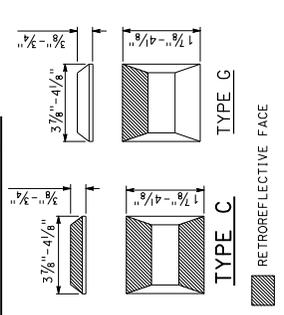
NO SCALE
RSP A20D DATED OCTOBER 19, 2018 SUPERSEDES STANDARD PLAN A20D DATED MAY 31, 2018 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2018.

REVISED STANDARD PLAN RSP A20D

LEGEND

- MARKERS**
- TYPE C RED-CLEAR RETROREFLECTIVE
 - TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 - 6" YELLOW LINE

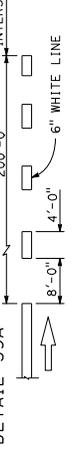
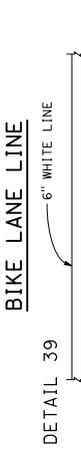
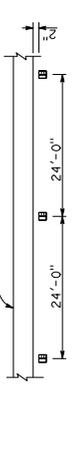
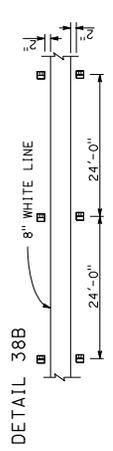
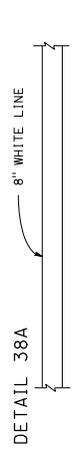
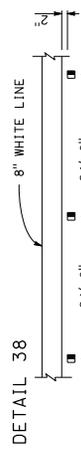
MARKER DETAILS



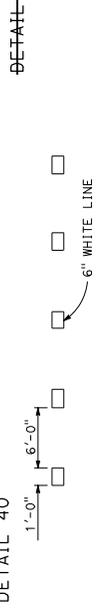
DETAIL FOR RECESSED TRAFFIC STRIPE
See Notes A and B.

- RECESSED NOTES:**
- A. See typical traffic line details for pavement marking patterns.
 - B. See standard specifications for recess depth and recess striping material thickness.

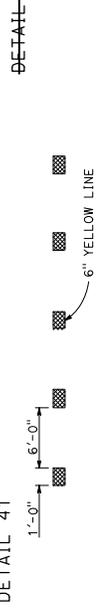
CHANNELIZING LINE



LANE LINE EXTENSIONS THROUGH INTERSECTIONS



CENTER LINE EXTENSIONS THROUGH INTERSECTIONS



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DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL NO. SHEETS

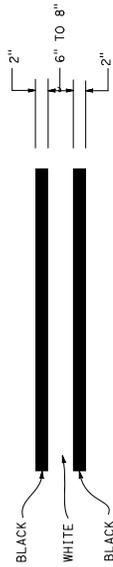
Alta Feroz
 REGISTERED CIVIL ENGINEER
 No. CB0402
 No. 3-31-21
 STATE OF CALIFORNIA
 BOARD OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEERS

APR 19, 2019
 PLAN DATE
 THE STATE OF CALIFORNIA, ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THESE PLANS UNLESS OTHERWISE SPECIFIED ON THESE PLANS SHEETS.

TO ACCOMPANY PLANS DATED _____

NOTE:

- See Standard Plans A20A, A20B, A20C, A20D, and A20F for pavement markers and traffic lines typical details.



TYPICAL LANE LINE OR RIGHT EDGE LINE CONTRAST DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKERS
AND TRAFFIC LINES
TYPICAL DETAIL FOR CONTRAST STRIPING**

NO SCALE

RSP A20E DATED APRIL 19, 2019 SUPERSEDES STANDARD PLAN A20E
DATED MAY 31, 2018 -- PAGE 16 OF THE STANDARD PLANS BOOK DATED 2018.

REVISED STANDARD PLAN RSP A20E

11-3-14

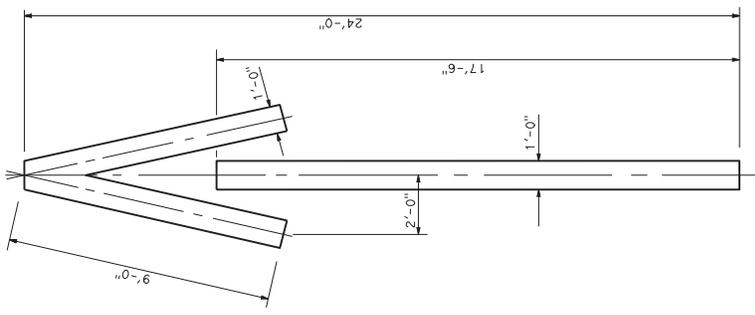
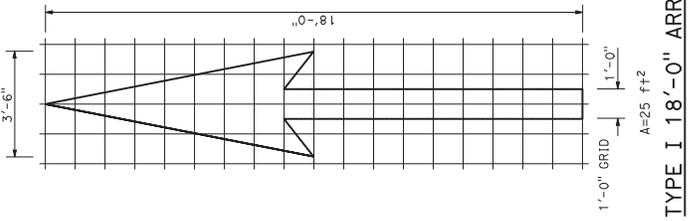
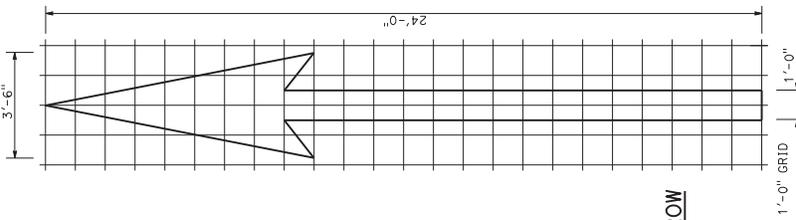
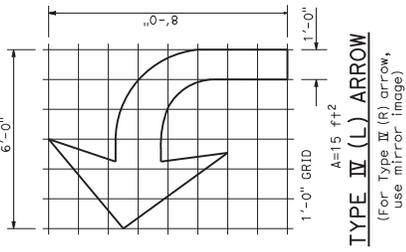
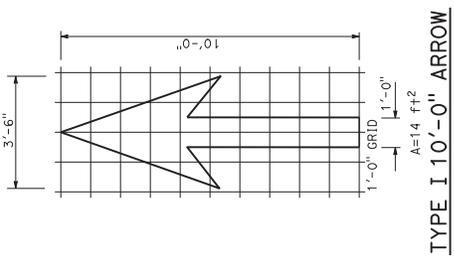
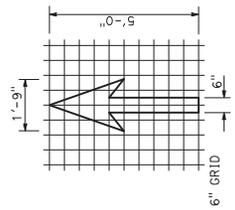
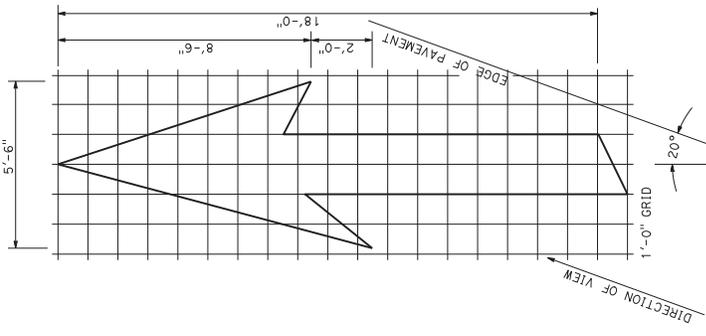
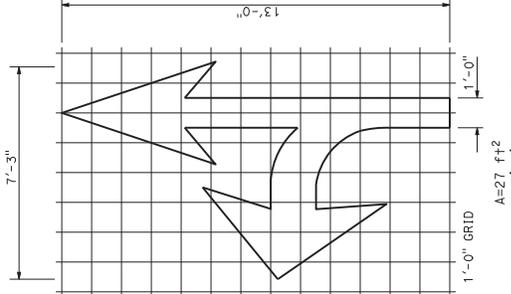
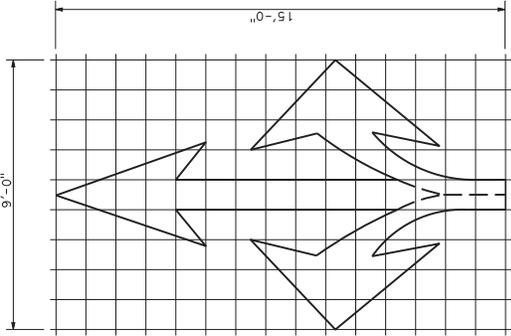
Dist	County	Route	Post Miles Total Project	SHEET TOTAL No. of SHEETS

Oliver Jean
REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVED

REGISTERED PROFESSIONAL ENGINEER
Arling Ferguson
No. CB0402
Exp. 3-31-19
CIVIL
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DESIGNERS SHALL NOT BE RESPONSIBLE FOR
ANY ERRORS OR OMISSIONS OR FOR THE
CONSEQUENCES OF THIS PLAN SHEET.



NOTE:
Minor variations in dimensions may be accepted by the Engineer.

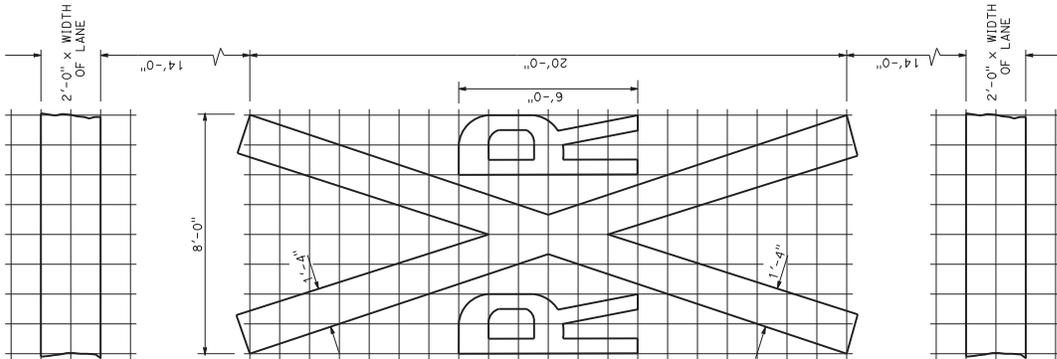
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

A 24A

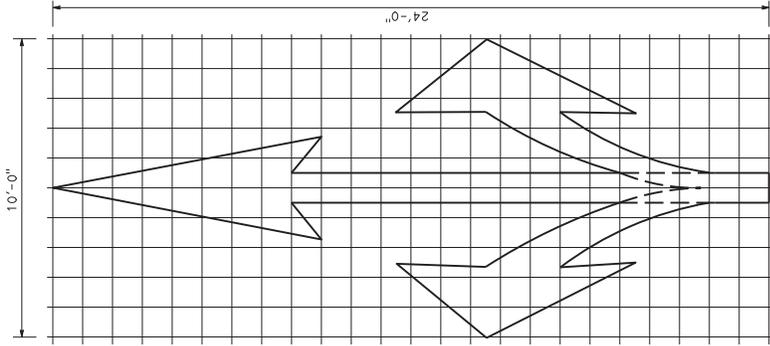
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
Oliver Jean
 No. 31-2018
 May 31, 2018
 PLANS APPROVED
 THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 THIS PLAN AND THE WORK THEREON SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES OR INJURIES TO PERSONS OR PROPERTY OF ANY KIND OR CONSEQUENCES OF THIS PLAN SHEET.

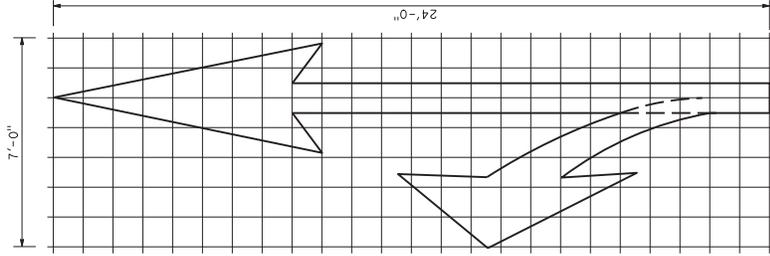
REGISTERED PROFESSIONAL ENGINEER & ARCHITECT
 AITFG FERRAZ
 No. 3-31-19
 Exp. 3-31-19
 CIVIL
 STATE OF CALIFORNIA



RAILROAD CROSSING SYMBOL
 * 70 ft+2 does not include the 2'-0" x variable width transverse lines.

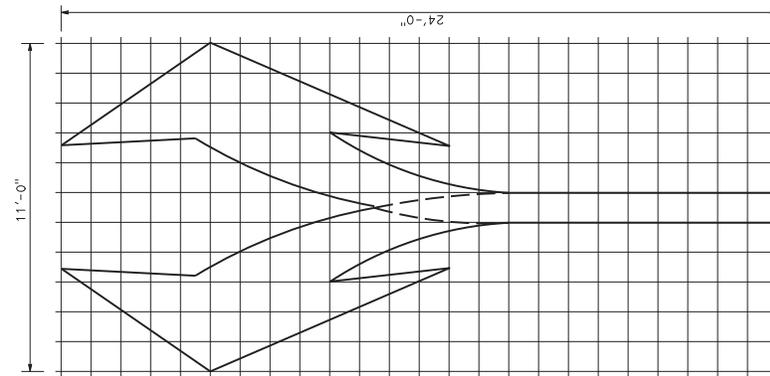


TYPE II (B) ARROW

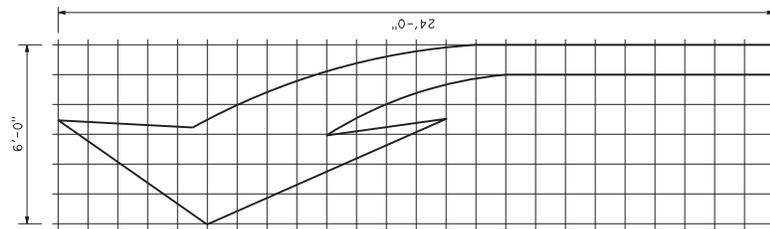


TYPE II (L) ARROW

(For Type II (R) use mirror image)



TYPE III (B) ARROW



TYPE III (L) ARROW

(For Type III (R) use mirror image)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKINGS
 ARROWS AND SYMBOLS**

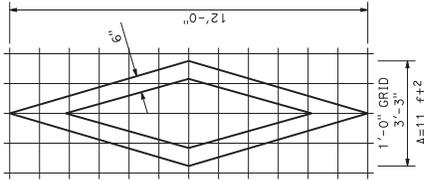
NO SCALE

A 24B

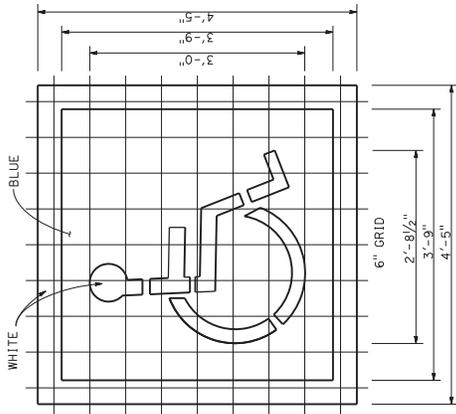
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
Alfonso J. Ferruz
 No. 31,2018
 MAY 31, 2018
 PROFESSIONAL ENGINEER & ARCHITECT
 AITFG FERRUZ
 No. C00402
 Exp. 3-31-19
 CIVIL
 STATE OF CALIFORNIA
 THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
 OR ANY AGENCIES SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF THE INFORMATION
 CONTAINED ON THIS PLAN SHEET.

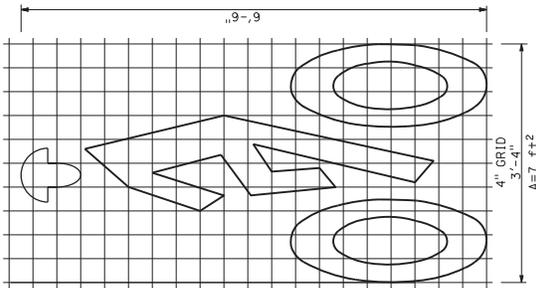
NOTE:
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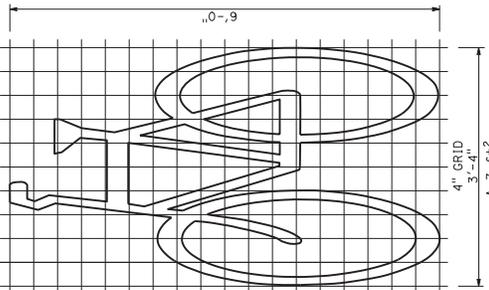
DIAMOND SYMBOL



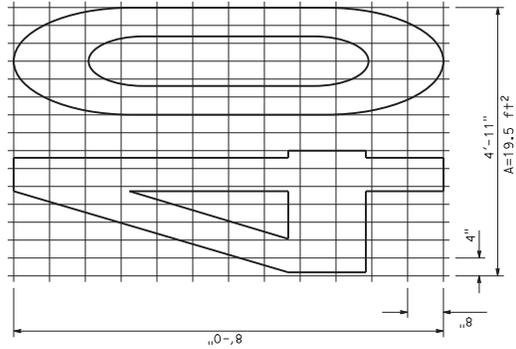
INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) MARKING



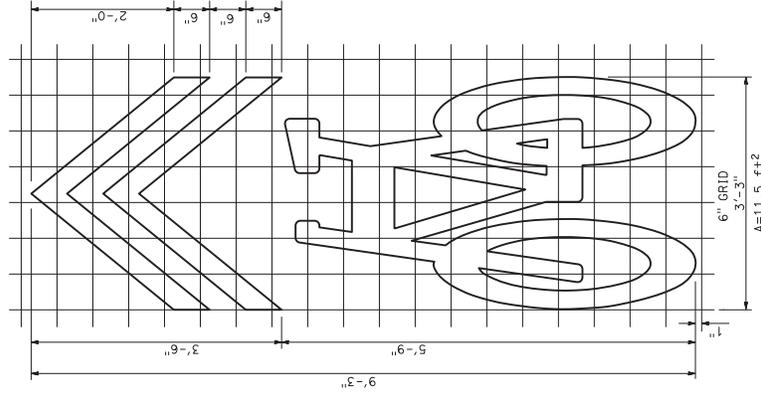
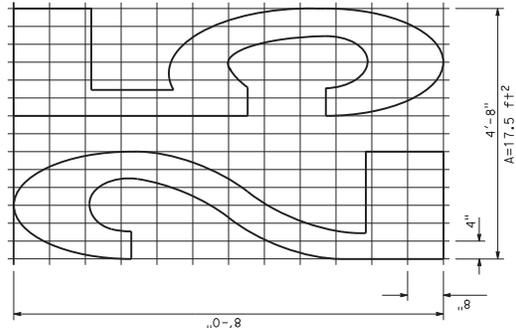
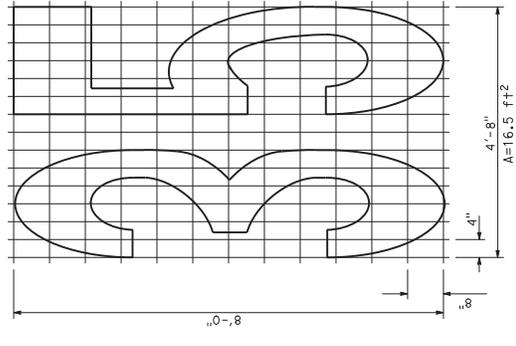
BIKE LANE SYMBOL WITH PERSON



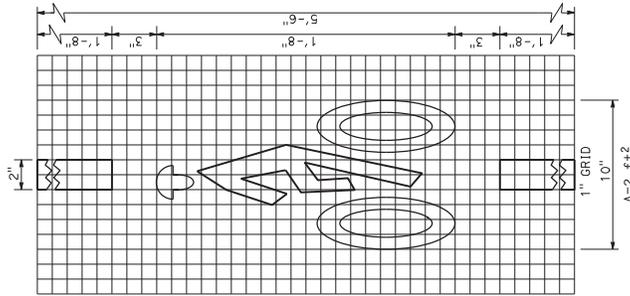
BIKE LANE SYMBOL WITHOUT PERSON



NUMERALS



SHARED ROADWAY BICYCLE MARKING



BICYCLE LOOP DETECTOR SYMBOL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

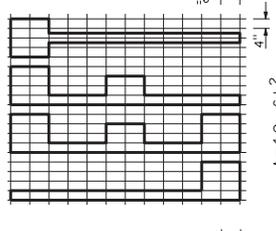
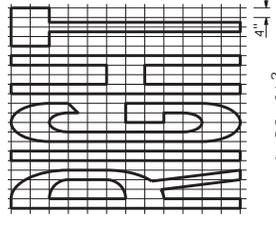
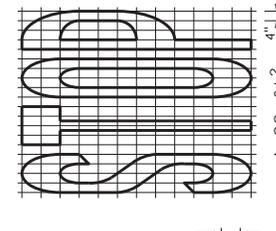
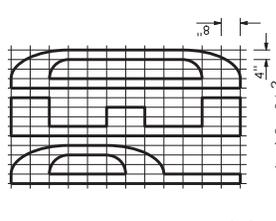
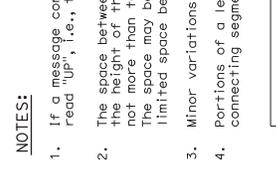
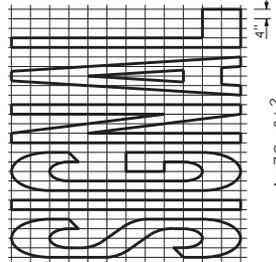
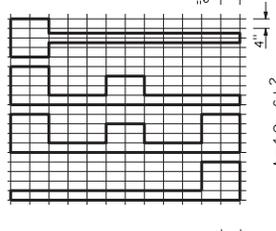
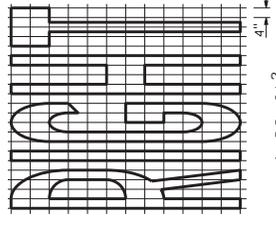
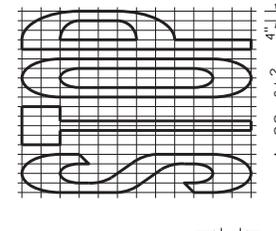
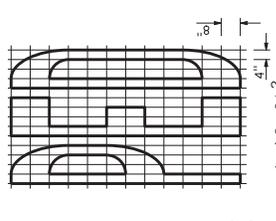
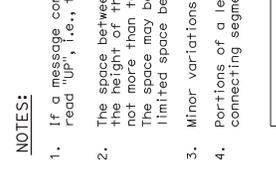
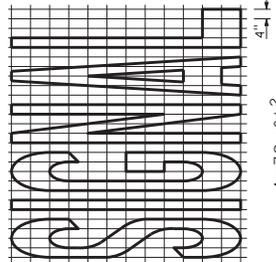
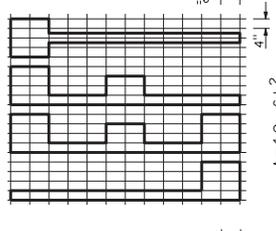
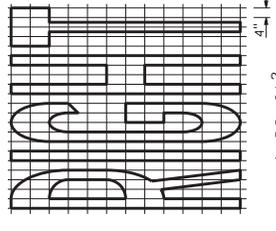
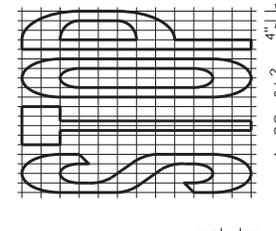
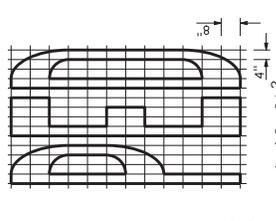
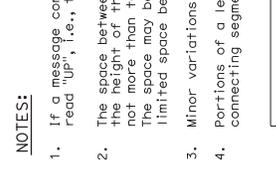
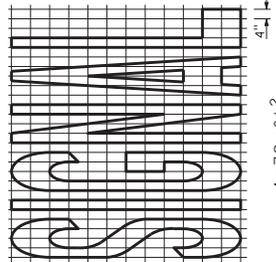
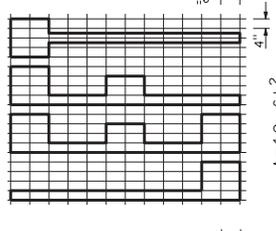
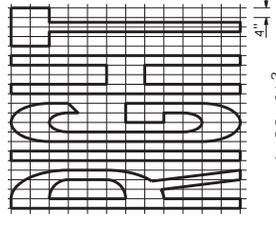
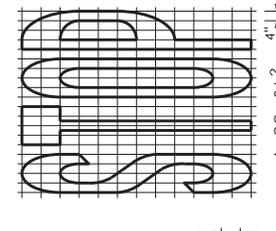
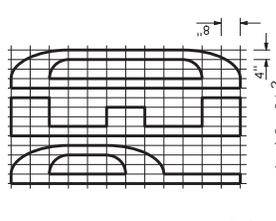
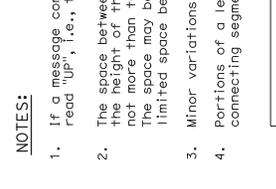
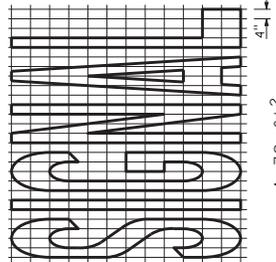
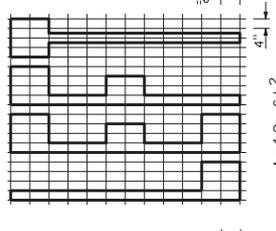
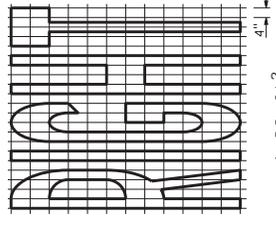
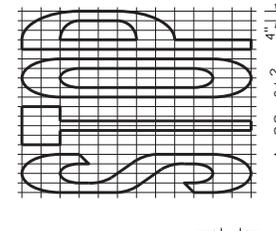
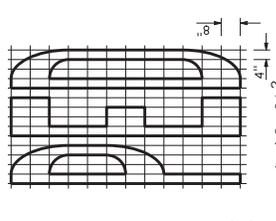
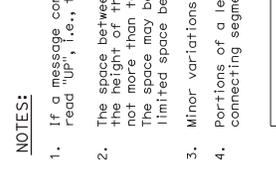
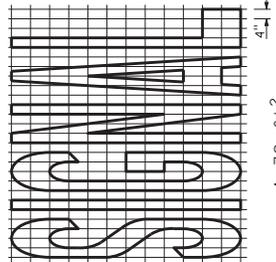
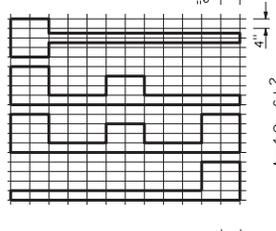
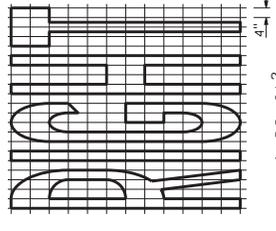
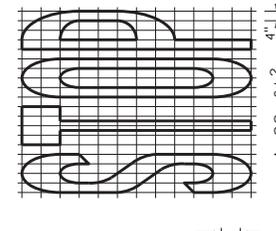
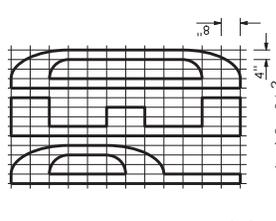
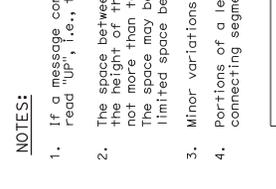
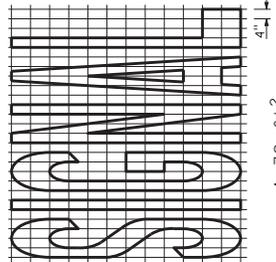
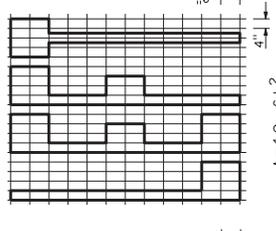
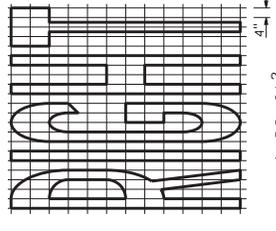
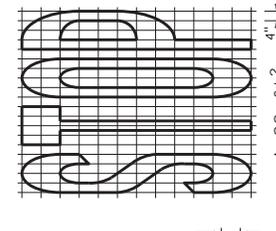
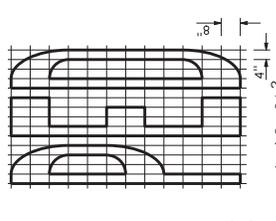
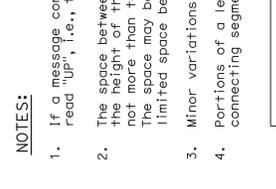
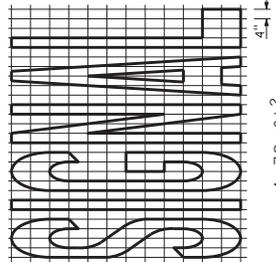
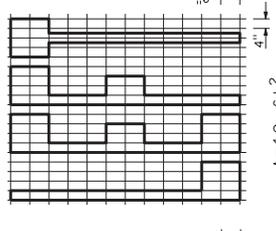
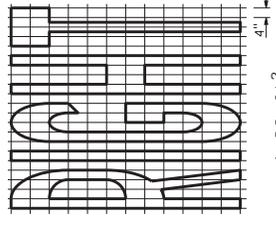
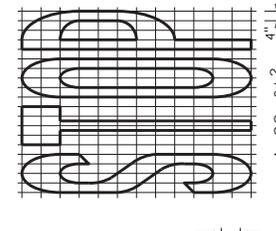
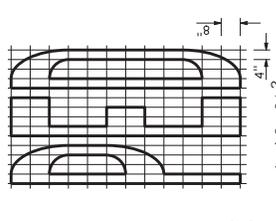
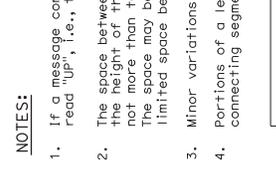
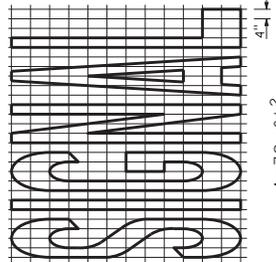
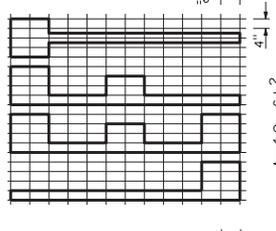
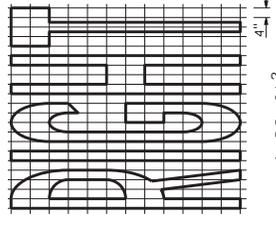
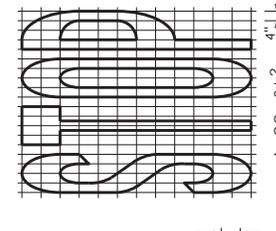
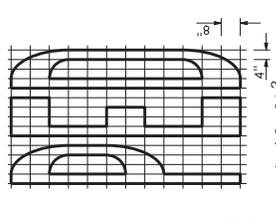
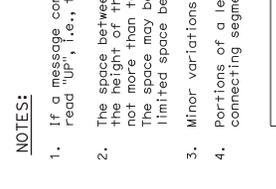
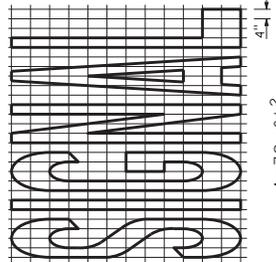
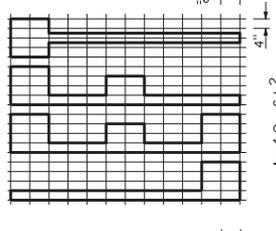
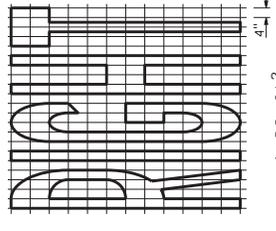
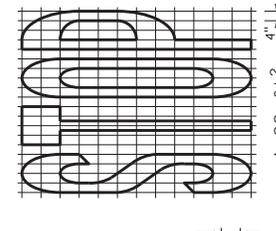
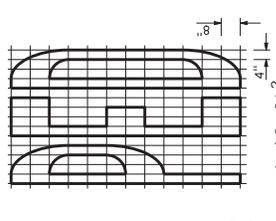
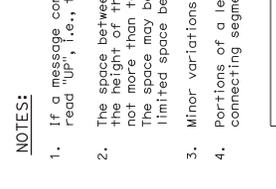
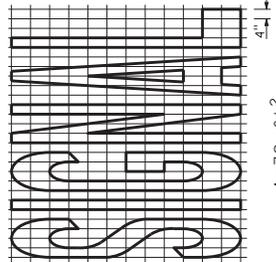
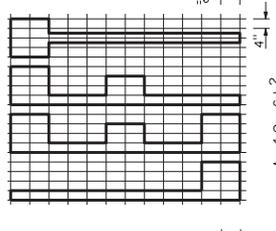
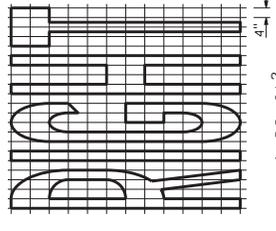
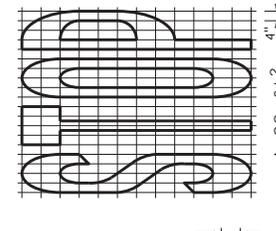
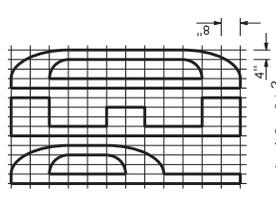
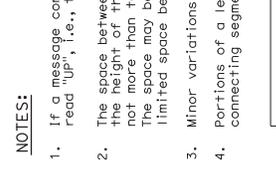
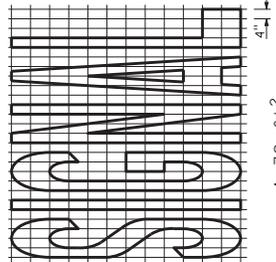
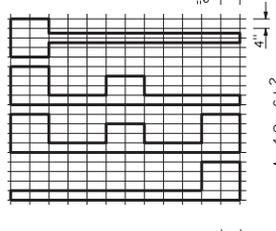
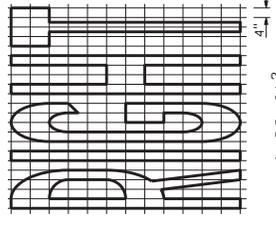
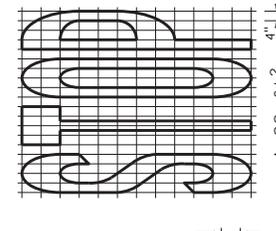
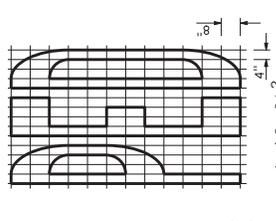
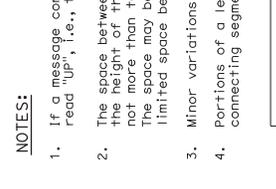
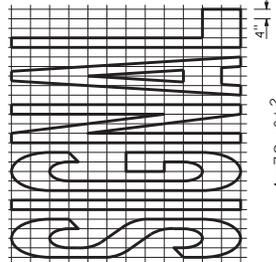
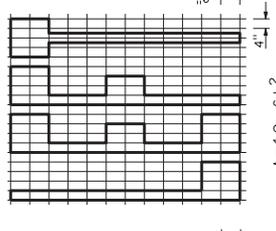
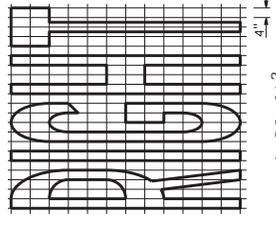
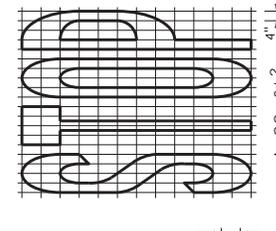
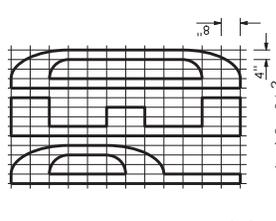
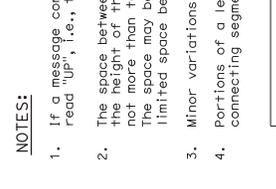
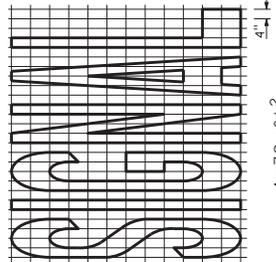
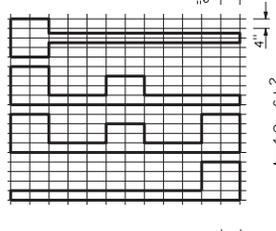
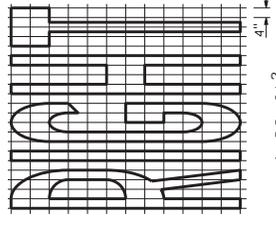
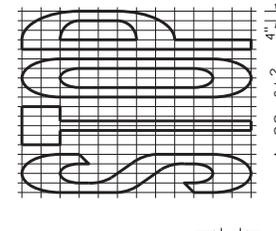
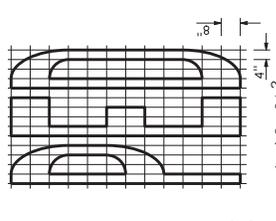
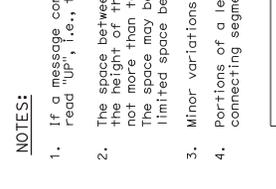
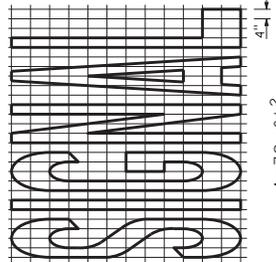
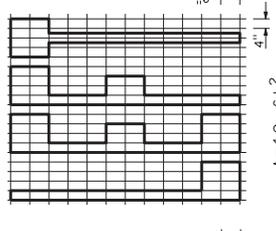
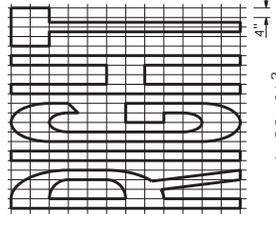
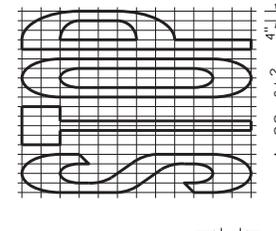
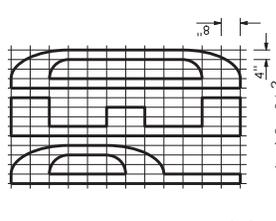
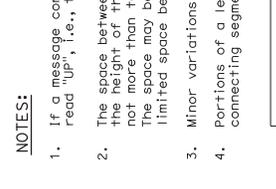
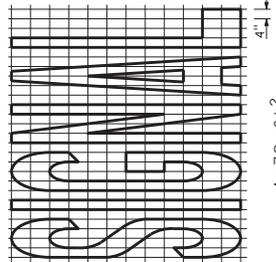
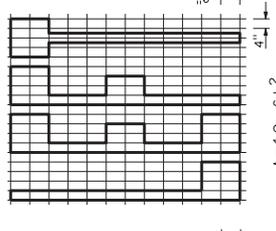
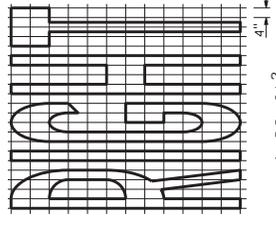
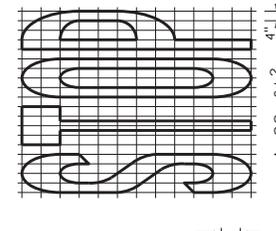
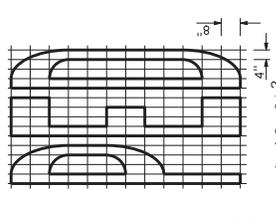
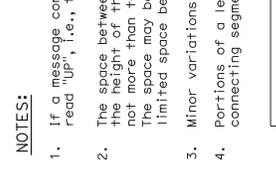
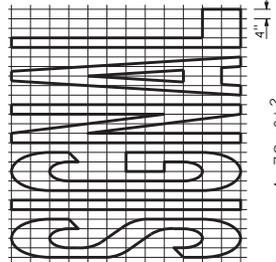
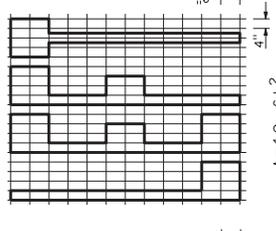
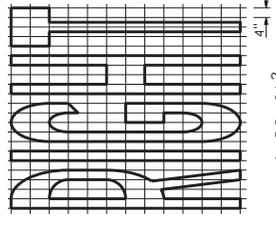
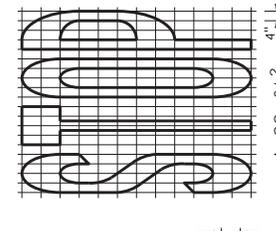
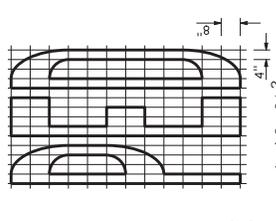
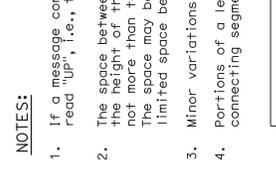
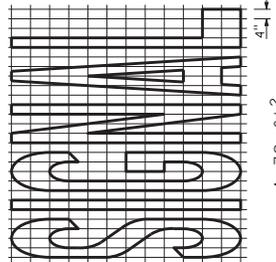
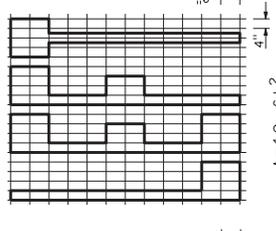
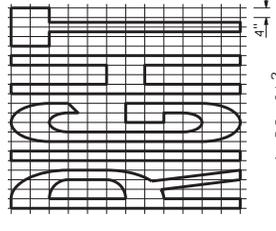
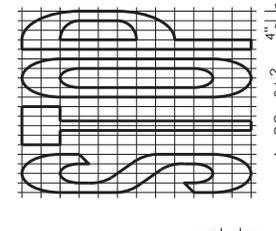
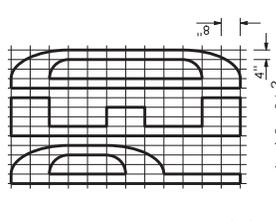
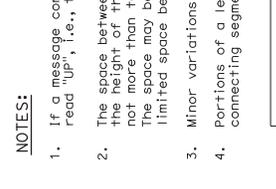
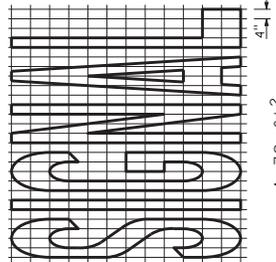
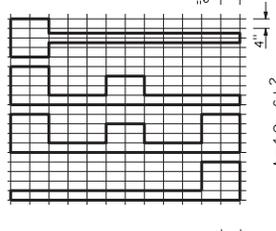
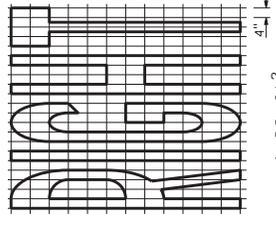
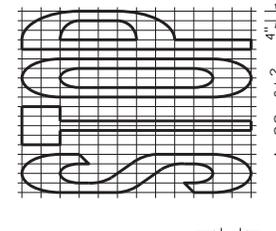
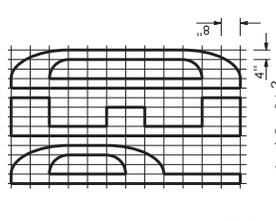
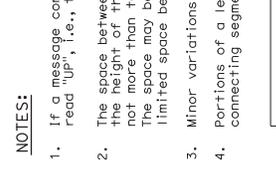
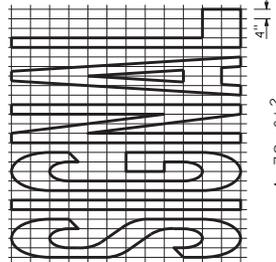
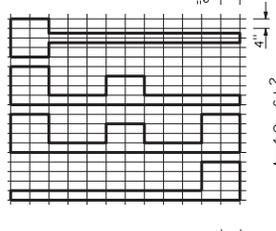
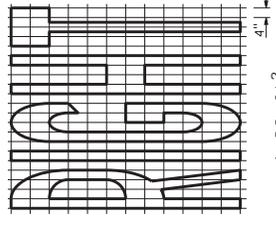
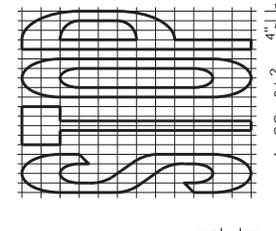
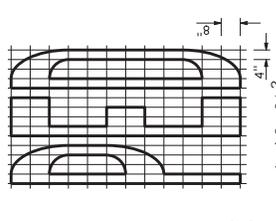
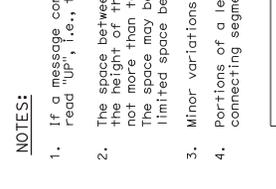
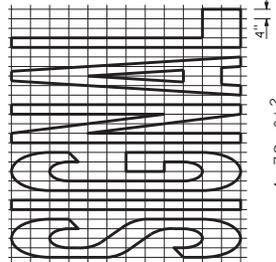
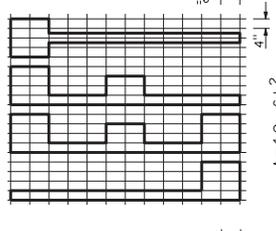
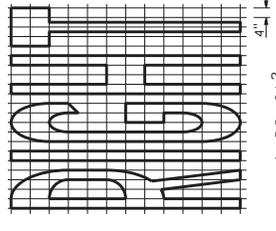
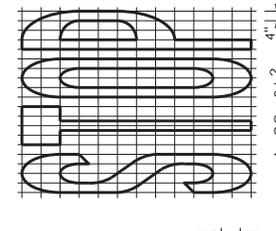
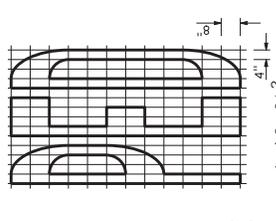
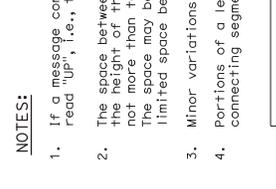
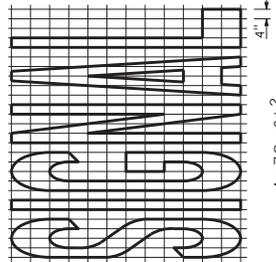
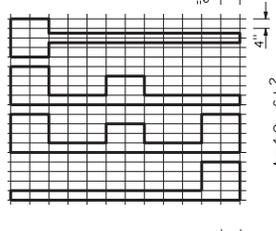
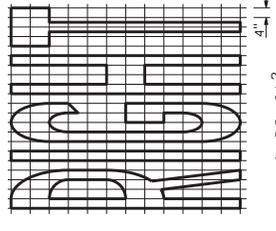
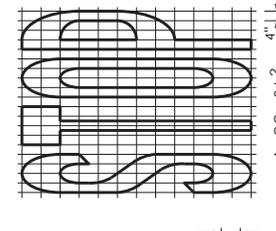
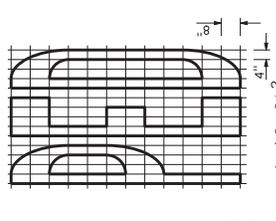
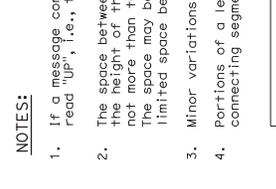
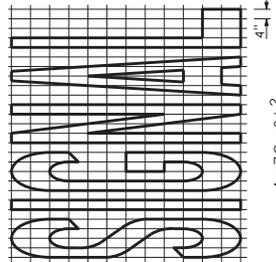
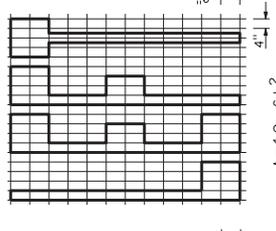
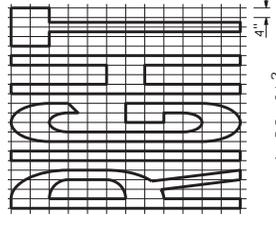
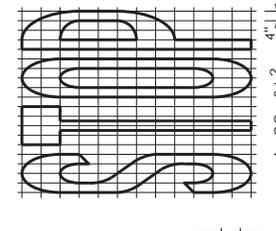
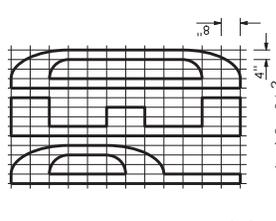
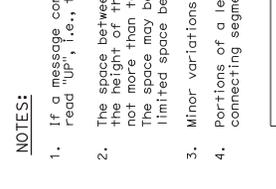
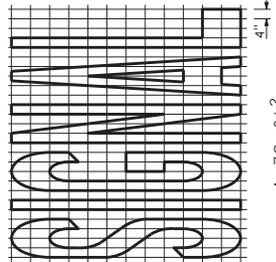
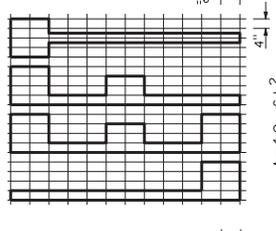
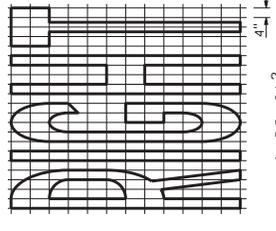
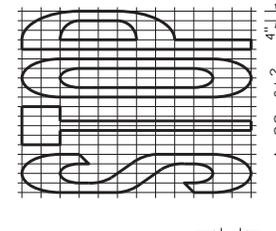
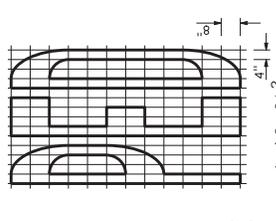
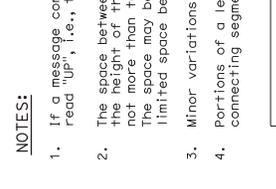
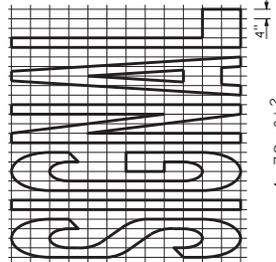
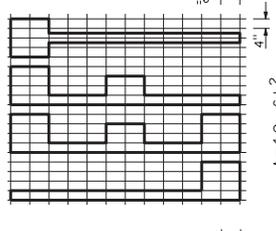
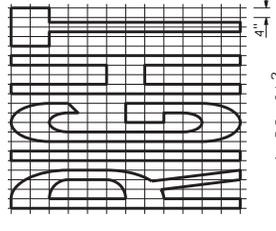
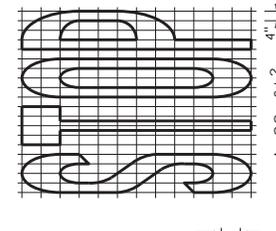
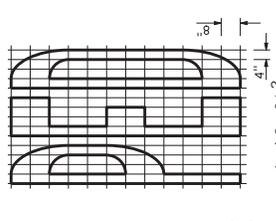
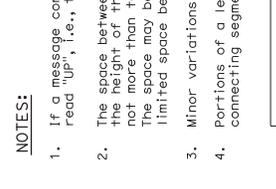
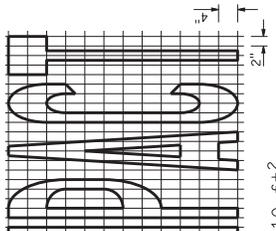
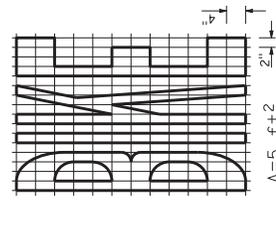
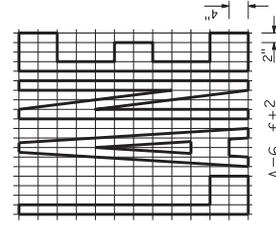
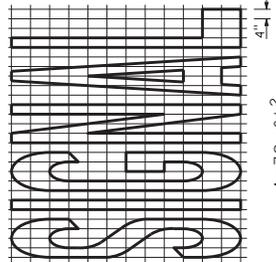
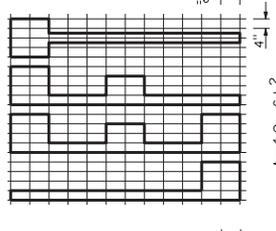
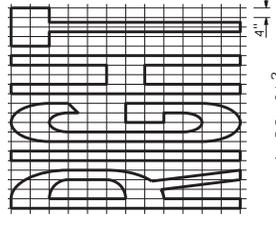
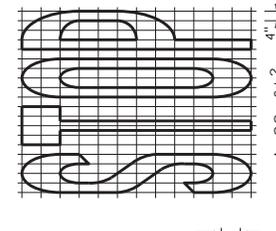
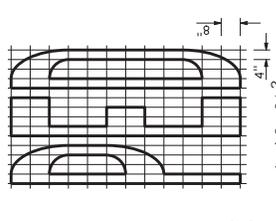
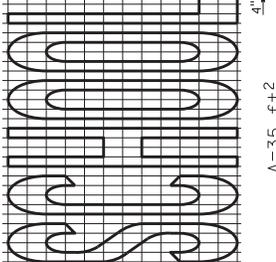
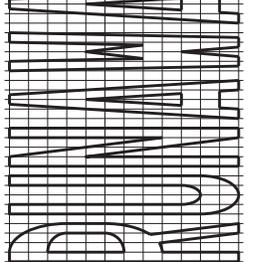
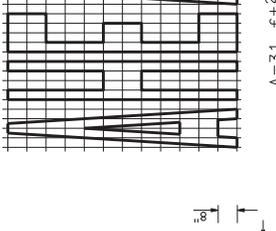
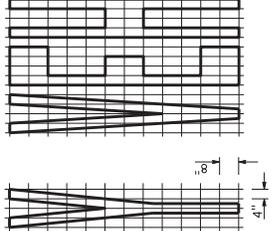
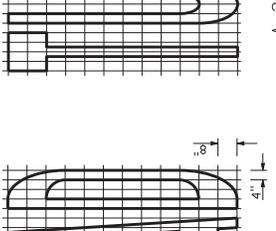
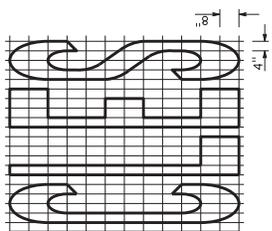
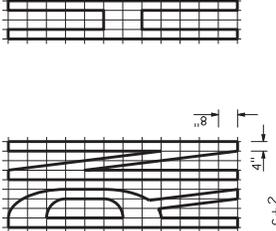
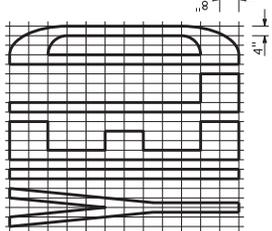
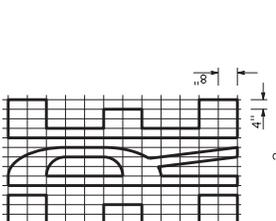
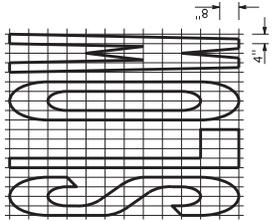
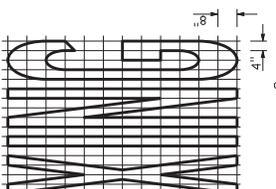
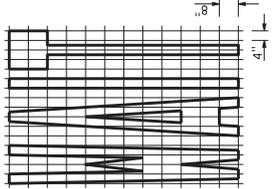
**PAVEMENT MARKINGS
SYMBOLS AND NUMERALS**

NO SCALE

A 24C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

Oliver Jean
 REGISTERED CIVIL ENGINEER
 No. 31,2018
 PLANS APPROVAL DATE
 May 31, 2018
 THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 THIS PLAN AND ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF THE STATE OF CALIFORNIA AND IS LOANED TO YOU FOR YOUR CONVENIENCE ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE STATE OF CALIFORNIA.



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Dist#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS

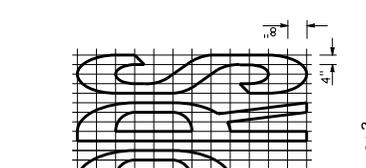
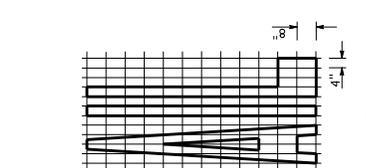
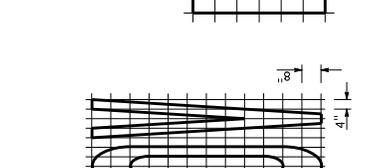
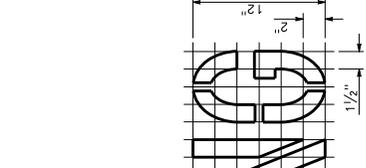
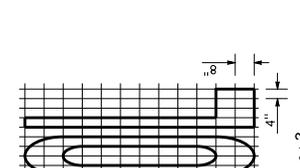
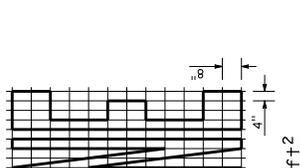
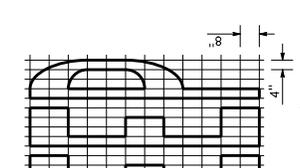
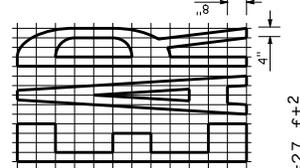
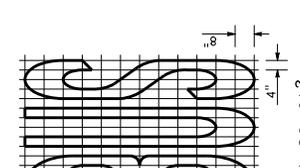
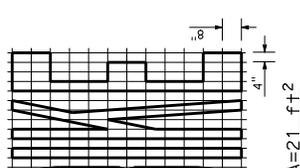
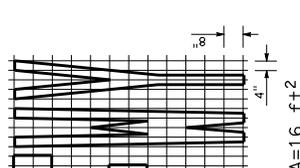
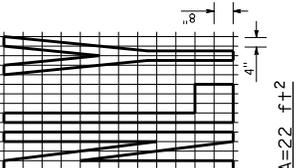
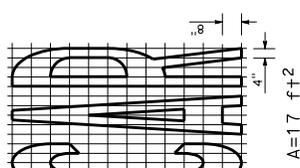
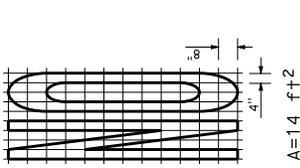
October 19, 2018
 REGISTERED CIVIL ENGINEER
Althea Jean
 PROFESSIONAL ENGINEER
 No. C80402
 Exp. 3-31-19
 STATE OF CALIFORNIA
 DIVISION OF HIGHWAYS
 THE STATE OF CALIFORNIA, BY ITS OFFICERS, DOES HEREBY CERTIFY THAT THE ABOVE NAMED ENGINEER HAS BEEN DULY LICENSED AND IS A MEMBER IN GOOD STANDING OF THE PROFESSIONAL ENGINEERS AND SURVEYORS SOCIETY OF CALIFORNIA.
 THIS STATEMENT IS NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE FOUND IN THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED _____

WORD MARKINGS		
ITEM	f+t	ITEM
LANE	24	NO
POOL	23	BIKE
CAR	17	BUS
CLEAR	27	ONLY
KEEP	24	FNY
HOV	18	EXPRS
TRAIL	23	

NOTES:

- If a message consists of more than one word, it must read "up", i.e., the first word must be nearest the driver.
- The space between words must be at least four times the height of the characters for low letters and at least three times the height of the characters for high letters. The space may be reduced appropriately where there is limited space because of local conditions.
- Minor variations in dimensions may be accepted by the Engineer.
- Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
- The words "NO PARKING" pavement marking is to be used for parking facilities. For typical A90A and A90B markings, see Standard Plans A90A and A90B.
- The words "NO PARKING" shall be printed on a contrasting background and located so that it is visible to traffic enforcement officials.



A=2 f+t
See Notes 5 and 6

A=18 f+t

A=23 f+t

A=30 f+t

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
WORD MARKINGS
NO SCALE

RSP A24E DATED OCTOBER 19, 2018 SUPERSEDES STANDARD PLAN A24E
DATED MAY 31, 2018 - PAGE 21 OF THE STANDARD PLANS BOOK DATED 2018.

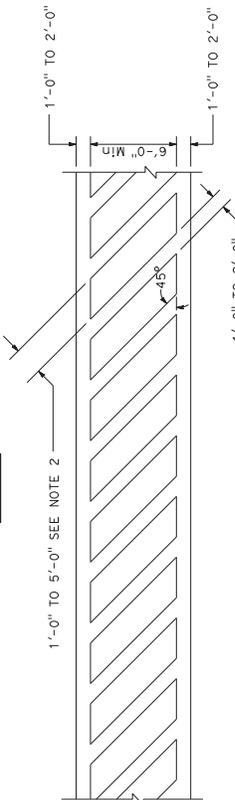
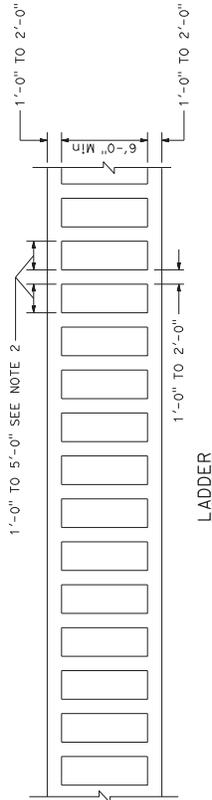
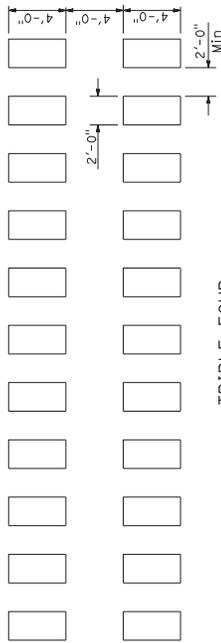
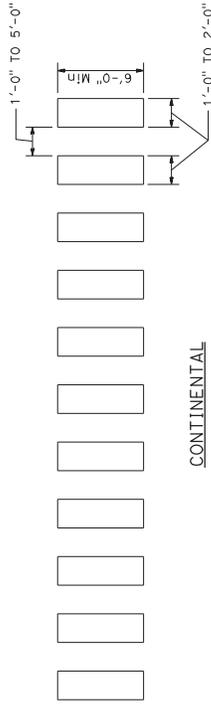
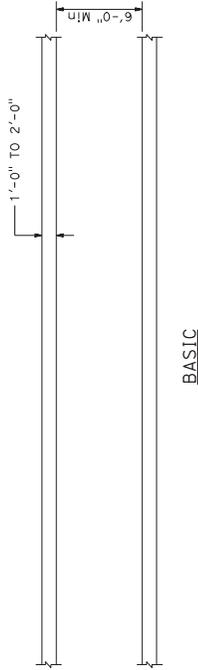
REVISED STANDARD PLAN RSP A24E

Dist	County	Route	Post Miles Total Project	SHEET TOTAL No. of SHEETS

REGISTERED CIVIL ENGINEER
Alfego Erazou
 May 31, 2018
 No. C80402
 Exp. 3-31-19
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER & ARCHITECT
 THE STATE OF CALIFORNIA OFFICE OF PROFESSIONAL ENGINEERS AND ARCHITECTS SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS OF THIS SHEET.

NOTES:

1. Spaces between markings must be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except those near schools must be yellow.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**

NO SCALE

A 24F

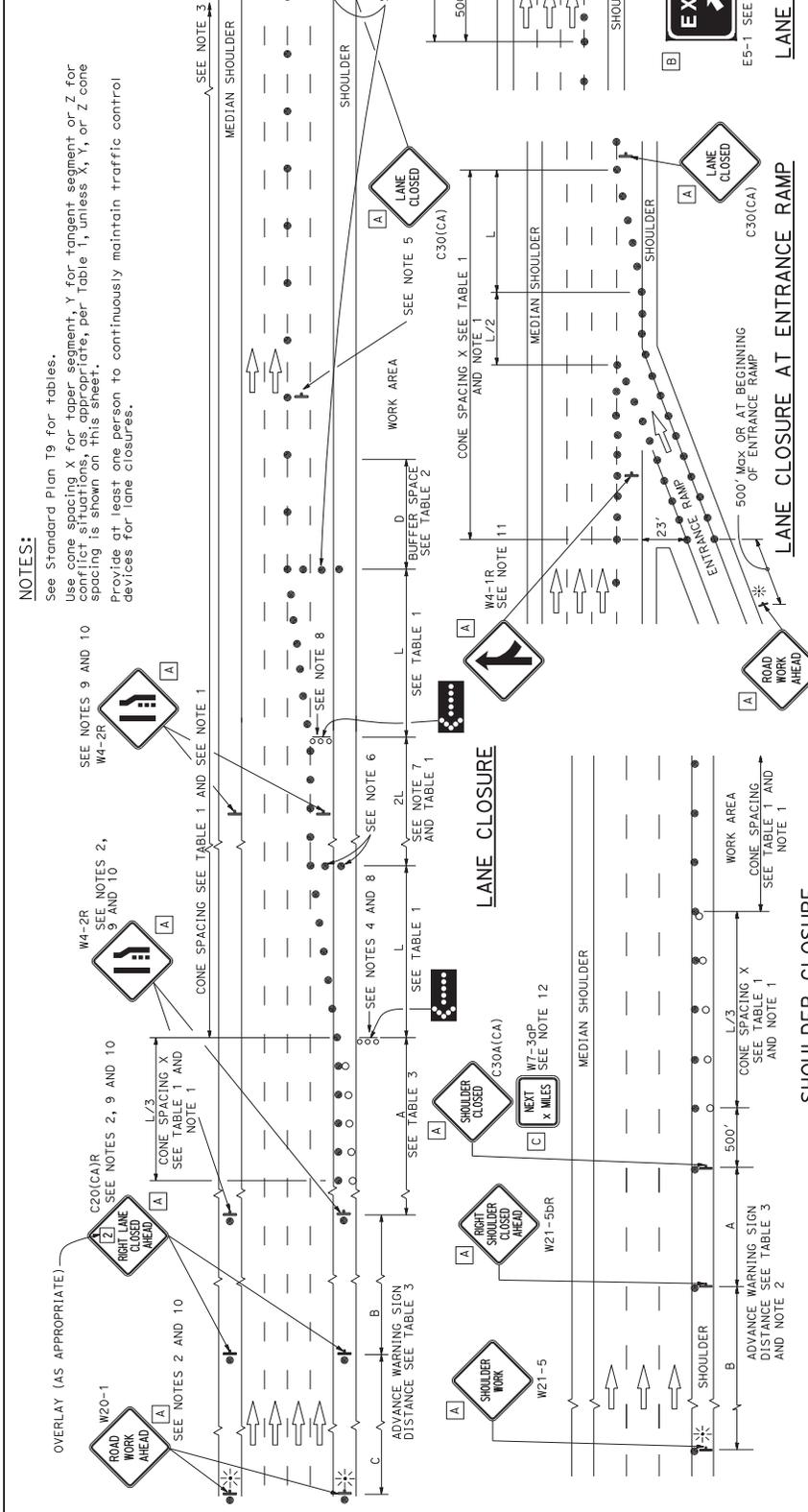
Project #19-813-0236
 Crosswalk Improvements on State Route 9 at Massol Avenue

Project Mileage: 0.15
 Total Project: 1.00
 Sheet Total: 10
 Sheet No.: 10

Client: *Alta EPOUZA*
 Registered Civil Engineer
 No. CB0402
 Exp. 3-31-19
 State of California

Date: May 31, 2018
 Drawn by: *Alta EPOUZA*
 Checked by: *Alta EPOUZA*

Professional Engineer Seal: *Alta EPOUZA*
 No. CB0402
 Exp. 3-31-19
 State of California



Project #19-813-0236
 Crosswalk Improvements on State Route 9 at Massol Avenue

NOTES:
 See Standard Plan T9 for Tables.
 Use cone spacing X for taper segment, Y for tangent segment, Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Provide at least one person to continuously maintain traffic control devices for lane closures.

LEGEND
 ● TRAFFIC CONE
 ○ TRAFFIC CONE (OPTIONAL TAPER)
 † TEMPORARY TRAFFIC CONTROL SIGN
 ⚡ FLASHING ARROW SIGN (FAS)
 ⚡ FAS SUPPORT OR TRAILER
 ✨ PORTABLE FLASHING BEACON

NOTES:
 1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
 2. Each advance warning sign shall be equipped with reflective triangles, cones, and flashers. Each sign shall be at least 48" x 72" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the top of the sign. Advance warning signs shall be placed for lane closure during hours of darkness.
 3. A C30-2 "END ROAD WORK" sign, with minimum size of 48" x 72" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 4. A minimum 1500' sight distance shall be provided for the advance warning sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
 5. Place a C30(CA) sign every 1000' throughout length of lane closure.
 6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a lane closure ends, and every type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades shall be perpendicular to the work.
 7. The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
 8. Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type I.
 9. Median lane closures shall conform to the details as shown except that C30(CA) and W4-2L signs shall be used.
 10. Duplicate sign installations are not required:
 a) on opposite shoulder if at least one-half of the available lanes remain open to traffic.
 b) in the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
 11. The E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
 12. A W7-3gp "NEXT X MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.
 13. For the warning sign requirements at the Exit Ramp, when work is proposed on the local street, see CA MUTCD Figure 6H-22 to 6H-27.

LANE CLOSURE AT ENTRANCE RAMP
 SEE NOTE 2
 W4-1R SEE NOTE 11
 C30(CA)
 SHOULDER
 MEDIAN SHOULDER
 WORK AREA
 BUFFER SPACE
 SEE TABLE 2
 D
 L
 2L
 SEE NOTE 7 AND TABLE 1
 SEE NOTE 6
 SEE NOTES 4 AND 8
 SEE TABLE 3
 L/3
 CONE SPACING SEE NOTE 1
 SEE TABLE 1 AND NOTE 1
 W4-2R SEE NOTES 2, 9 AND 10
 W7-3GP SEE NOTE 12
 C30(CA)
 SHOULDER CLOSED
 NEW 3GP "NEXT X MILES"
 W21-5
 RIGHT SHOULDER WORK AHEAD
 W21-5BR
 SHOULDER WORK AHEAD
 W20-1
 ROAD WORK AHEAD
 W20-1
 ROAD WORK AHEAD

LANE CLOSURE AT EXIT RAMP
 SEE NOTE 13
 E5-1 SEE NOTE 11
 SC18(CA)
 SHOULDER
 MEDIAN SHOULDER
 WORK AREA
 BUFFER SPACE
 SEE TABLE 2
 D
 L
 2L
 SEE NOTE 7 AND TABLE 1
 SEE NOTE 6
 SEE NOTES 4 AND 8
 SEE TABLE 3
 L/3
 CONE SPACING SEE NOTE 1
 SEE TABLE 1 AND NOTE 1
 W4-2R SEE NOTES 2, 9 AND 10
 W7-3GP SEE NOTE 12
 C30(CA)
 SHOULDER CLOSED
 NEW 3GP "NEXT X MILES"
 W21-5
 RIGHT SHOULDER WORK AHEAD
 W21-5BR
 SHOULDER WORK AHEAD
 W20-1
 ROAD WORK AHEAD
 W20-1
 ROAD WORK AHEAD

SHOULDER CLOSURE
 SEE NOTE 2
 W4-1R SEE NOTE 11
 C30(CA)
 SHOULDER
 MEDIAN SHOULDER
 WORK AREA
 BUFFER SPACE
 SEE TABLE 2
 D
 L
 2L
 SEE NOTE 7 AND TABLE 1
 SEE NOTE 6
 SEE NOTES 4 AND 8
 SEE TABLE 3
 L/3
 CONE SPACING SEE NOTE 1
 SEE TABLE 1 AND NOTE 1
 W4-2R SEE NOTES 2, 9 AND 10
 W7-3GP SEE NOTE 12
 C30(CA)
 SHOULDER CLOSED
 NEW 3GP "NEXT X MILES"
 W21-5
 RIGHT SHOULDER WORK AHEAD
 W21-5BR
 SHOULDER WORK AHEAD
 W20-1
 ROAD WORK AHEAD
 W20-1
 ROAD WORK AHEAD

LANE CLOSURE AT EXIT RAMP
 SEE NOTE 13
 E5-1 SEE NOTE 11
 SC18(CA)
 SHOULDER
 MEDIAN SHOULDER
 WORK AREA
 BUFFER SPACE
 SEE TABLE 2
 D
 L
 2L
 SEE NOTE 7 AND TABLE 1
 SEE NOTE 6
 SEE NOTES 4 AND 8
 SEE TABLE 3
 L/3
 CONE SPACING SEE NOTE 1
 SEE TABLE 1 AND NOTE 1
 W4-2R SEE NOTES 2, 9 AND 10
 W7-3GP SEE NOTE 12
 C30(CA)
 SHOULDER CLOSED
 NEW 3GP "NEXT X MILES"
 W21-5
 RIGHT SHOULDER WORK AHEAD
 W21-5BR
 SHOULDER WORK AHEAD
 W20-1
 ROAD WORK AHEAD
 W20-1
 ROAD WORK AHEAD

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS
 NO SCALE

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

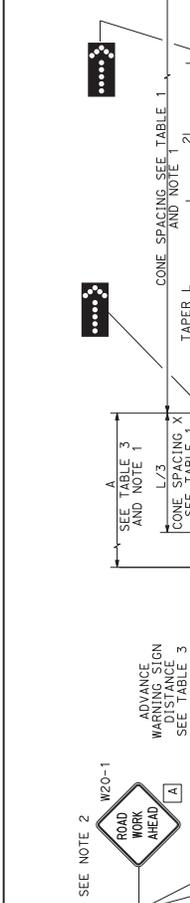
T10

Dist	County	Route	Post Miles	SHEET TOTAL
			TOTAL PROJECT	No. SHEETS

REGISTERED CIVIL ENGINEER
Alfonso J. Lopez
 No. 31,201.8
 License Expires 03/31/19
 PROFESSIONAL ENGINEER
 No. C80402
 State of California
 THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
 ANY AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF THIS PLAN SHEET.

NOTES:

See Standard Plan T9 for tables. Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet. Provide at least one person to continuously maintain traffic control devices for lane closures.



LANE CLOSURE WITH PARTIAL SHOULDER USE

TO ACCOMPANY PLANS DATED

WORK AREA

6' Max

SEE NOTE 5

SEE NOTE 6

SEE NOTE 7

SEE NOTE 8

SEE NOTE 9

SEE NOTE 10

SEE NOTE 11

SEE NOTE 12

SEE NOTE 13

SEE NOTE 14

SEE NOTE 15

SEE NOTE 16

SEE NOTE 17

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SEE NOTE 99

SEE NOTE 100

COMPLETE CLOSURE

SEE NOTE 2

SEE NOTE 3

SEE NOTE 4

SEE NOTE 5

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SEE NOTE 7

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SEE NOTE 91

SEE NOTE 92

SEE NOTE 93

SEE NOTE 94

SEE NOTE 95

SEE NOTE 96

SEE NOTE 97

SEE NOTE 98

SEE NOTE 99

SEE NOTE 100

LEGEND

● TRAFFIC CONE

○ TRAFFIC CONE (OPTIONAL TAPER)

⊥ TEMPORARY TRAFFIC CONTROL SIGN

⬇ FLASHING ARROW SIGN (FAS)

⬇ FAS SUPPORT OR TRAILER

⬇ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

A 48" x 48"

B 48" x 18"

C 48" x 30"

NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be made of reflective material. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A 620-2 "END ROAD WORK" sign, with minimum size of 48" x 24", as appropriate, shall be placed at the end of the work area. The sign shall be placed at the obvious end of the work area with a larger project's limits.
4. A minimum 150' of sight distance shall be provided for flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
5. Place a C30(CA) sign every 1000' throughout length of lane closure.
6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 1000' as shown on the "Lane Closure with Partial Shoulder Use" detail. Two Type I barricades with cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
7. The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
8. Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type I.
9. All traffic cone shall conform to the details shown except that C20(CA)R and W4-2R signs shall be used.
10. A minimum of Two Type II or III barricades shall be placed across each closed lane and shoulder at the location shown and every 2000' within the complete closure. The W4-2R signs shall be placed on the shoulder. The transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

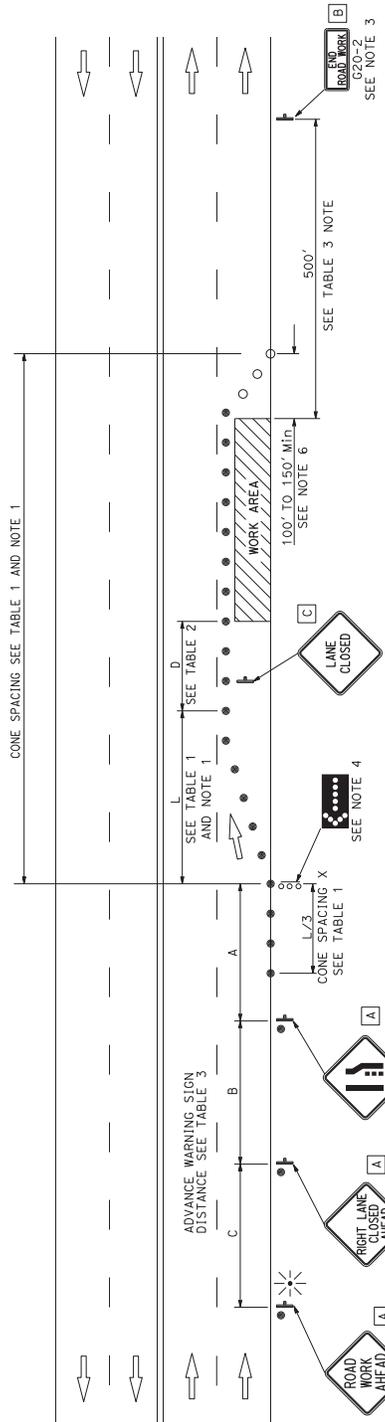
NO SCALE

T10A

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL NO. SHEETS

REGISTERED CIVIL ENGINEER
Alfio Efronza
 No. CB0402
 Exp. 3-31-19
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

MAY 31, 2018
 PROJECT DATE
 THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF THE INFORMATION, DATA, AND CALCULATIONS ON THIS PLAN SHEET.



NOTES:

See Standard Plan T9 for tables.
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
 Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL LANE CLOSURE

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
 2. Each advance warning sign shall be equipped with at least two flags on any closure. Each flag shall be at least 16" x 16" in size and shall be reflective in color.
 3. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 4. A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 5. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊥ TEMPORARY TRAFFIC CONTROL SIGN
- ⬇️ FLASHING ARROW SIGN (FAS)
- ⬇️ FAS SUPPORT OR TRAILER
- ⚡ PORTABLE FLASHING BEACON

- 5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
- 6. Length may be reduced by the Engineer to address site conditions.
- 7. Median lane closures shall conform to the details shown except that G20(CA) and W4-2L signs shall be used.
- 8. For approach speeds over 50 MPH, use the "Traffic Control System for Lane Closure on Freeways and Expressways" plan for lane closure details and requirements.

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

NO SCALE

T11

DIST	COUNTY	ROUTE	FIRST MILE TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER
Alta Feroz
 No. CB0402
 Exp. 3-31-19
 STATE OF CALIFORNIA
 PROFESSIONAL ENGINEER

MAY 31, 2018
 EXPIRES

THIS PLAN SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA AND THE CORRECTNESS OF THIS PLAN SHEET.

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

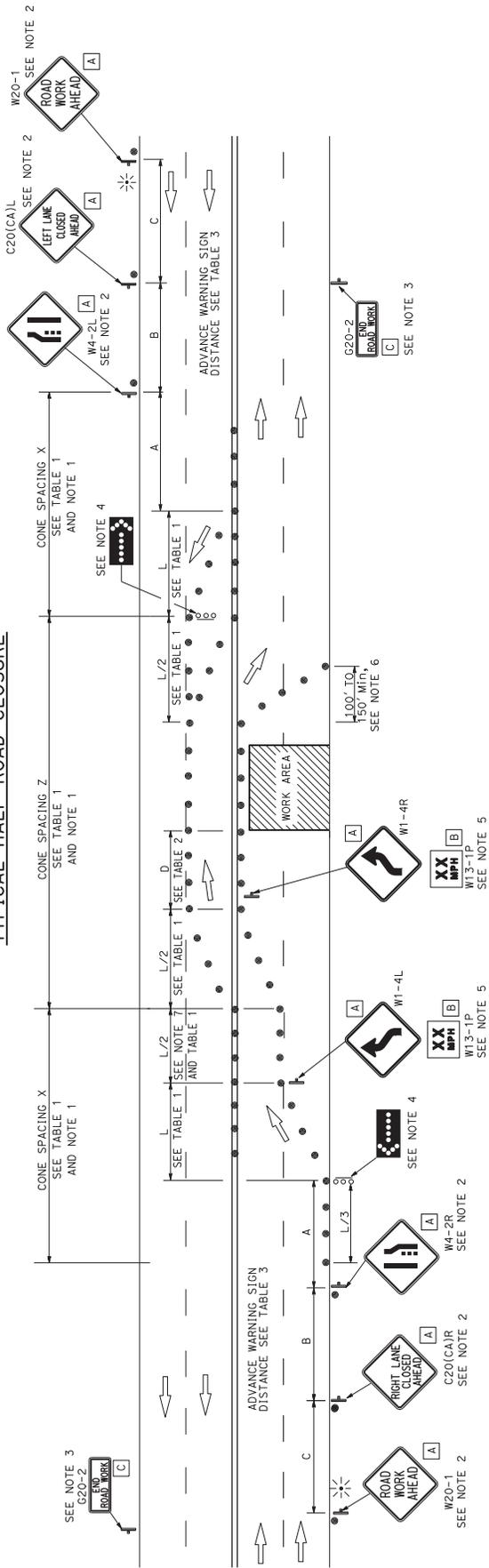
SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⊞ FAS SUPPORT OR TRAILER
- ⊞ PORTABLE FLASHING BEACON

TYPICAL HALF ROAD CLOSURE



- NOTES:**
- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
 - Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
 - A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
 - A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
 - Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advisory speed is more than the posted or maximum speed limit.
 - Length may be reduced by the Engineer to address site conditions.
 - The tangent (L/2) shall be used.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR HALF ROAD CLOSURE ON
 MULTILANE CONVENTIONAL
 HIGHWAYS AND EXPRESSWAYS**

NO. SCALE

T12

DIS#	COUNTY	ROUTE	POST MILE NO.	SHEET TOTAL SHEETS

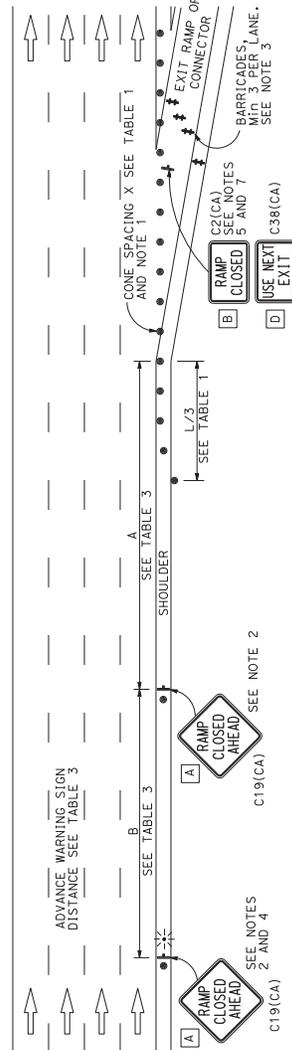
Oliver Jean
REGISTERED CIVIL ENGINEER
No. CB0402
Exp. 3-31-19
STATE OF CALIFORNIA
PROFESSIONAL ENGINEER

MAY 31, 2019
DATE OF EXPIRATION
THIS SEAL IS VALID FOR THE STATE OF CALIFORNIA ONLY. IT IS VOID IN ALL OTHER STATES. THE SEALING SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE PLAN SHEET.

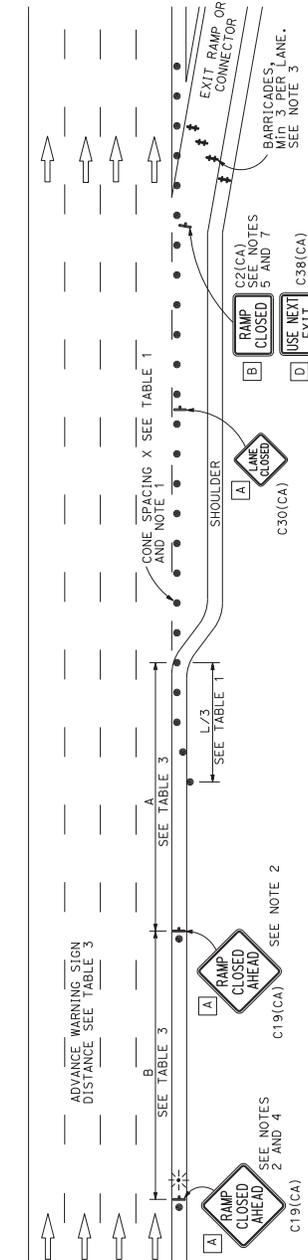
- LEGEND**
- TRAFFIC CONE
 - TEMPORARY TRAFFIC CONTROL SIGN
 - BARRICADES
 - PORTABLE FLASHING BEACON

- SIGN PANEL SIZE (Min)**
- | | |
|---|-----------|
| A | 48" x 48" |
| B | 48" x 30" |
| C | 36" x 36" |
| D | 48" x 36" |

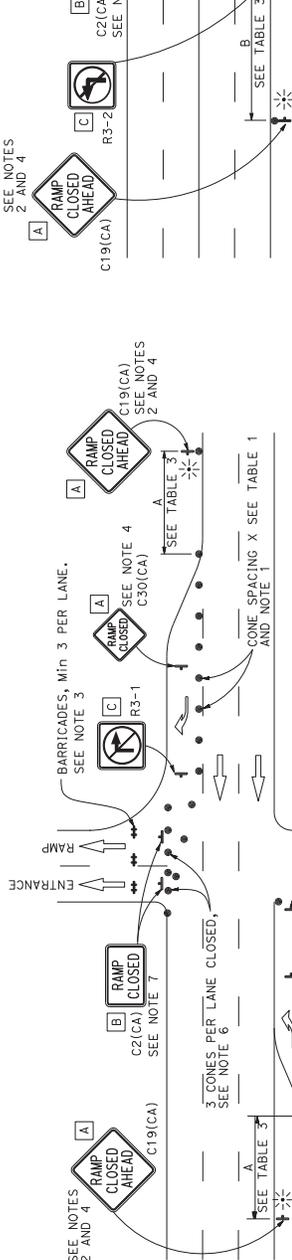
TYPICAL RAMP CLOSURES



EXIT RAMP OR CONNECTOR



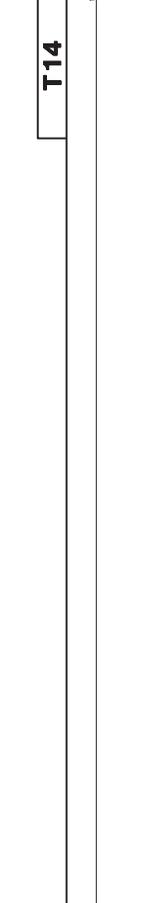
EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITHOUT TURNING POCKETS



ENTRANCE RAMP WITH TURNING POCKETS



NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only. Each advance warning C19(CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. A flashing beacon shall be placed on top of the first C19(CA) sign during hours of darkness.
- Barricades shall be Type I, II or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19(CA) "RAMP CLOSED AHEAD" and C30(CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "closed" may be mounted. As directed by the Engineer on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
- The existing "EXIT" signs shall be covered during ramp closures.
- A minimum of 3 cones shall be placed transversely across each closed lane and shoulder.
- C2(CA) sign shall be black and white.

NOTES:

- See Standard Plan T9 for tables.
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.
Provide at least one person to continuously maintain traffic control devices for lane closures.

T14

APPENDIX C
Blueprint for a Clean Bay

Blueprint for a Clean Bay

Best Management Practices to Prevent Stormwater Pollution from Construction-Related Activities



B A S M A A



Bay Area
Stormwater Management
Agencies Association

The Bay Area Stormwater Management Agencies Association (BASMAA), a consortium of Bay Area municipalities from Alameda, Contra Costa, Marin, San Mateo, Santa Clara, Solano, and Sonoma Counties, developed this booklet as a resource for all general contractors, home builders, and subcontractors working on construction sites.

Project #19-813-0236

Appendices - Page 33

Project Specifications

Crosswalk Improvements on State Route 9 at Massot Avenue

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Introduction

Stormwater pollution is a national environmental problem. In California, stormwater runoff is a major source of water pollution. To help combat the problems of stormwater pollution, federal and state governments have developed a program for monitoring and permitting discharges to municipal storm drain systems, creeks, and water bodies such as San Francisco Bay.

Municipalities in the Bay Area are required by the Clean Water Act to develop stormwater management programs that include requirements for construction activities. Your construction project will need to comply with local municipal requirements. If your construction activity will disturb one acre or more, you must also obtain coverage under the General Construction Activity Permit (see Requirements for Dischargers).

Blueprint for a Clean Bay is an introductory guide to stormwater quality control on construction sites. It contains several principles and techniques that you can use to help prevent stormwater pollution. BASMAA has developed this booklet as a resource for all general contractors, home builders, and subcontractors working on construction sites.

Blueprint for a Clean Bay is not a design manual or a Stormwater Pollution Prevention Plan (SWPPP) (see Requirements for Dischargers). For more information on the General Permit, designing stormwater quality controls, or producing a Stormwater Pollution Prevention Plan, please refer to:

- the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook for Construction,
- the Regional Water Quality Control Board's (RWQCB) Guidelines for Construction Projects, or
- consult your local program or the State Water Resources Control Board (SWRCB) (see below).

Please note that this booklet is concerned only with the management of construction sites and activities during construction.

Stormwater Pollution

Storm Drain System

Stormwater or runoff from sources like sprinklers and hoses flows over the ground into the storm drain system. In the San Francisco Bay Area, storm drain systems consist of gutters, storm drains, underground pipes, open channels, culverts, and creeks. Storm drain systems are designed to drain directly to the Bay, Delta, or Pacific Ocean with no treatment.

Pollution From Construction Sites

Stormwater runoff is part of a natural hydrologic process. However, land development and construction activities can significantly alter natural drainage patterns and pollute stormwater runoff. Runoff picks up pollutants as it flows over the ground or paved areas and carries these pollutants into the storm drain system. Common sources of pollutants from construction sites include: sediments from soil erosion; construction materials and waste (e.g., paint, solvents, concrete, drywall); landscaping runoff containing fertilizers and pesticides; and spilled oil, fuel, and other fluids from construction vehicles and heavy equipment.

Adverse Effects from Stormwater Pollution

Stormwater pollution is a major source of water pollution in California. It can cause declines in fisheries, damage habitats, and limit water recreation activities. Stormwater pollution poses a serious threat to the overall health of the ecosystem.

For more information on stormwater requirements, call the State Water Resources Control Board's Stormwater Information Line at (916) 341-5537 or your local program.

Requirements for Dischargers

Municipal Stormwater Program

Municipalities in the Bay Area are required by federal regulations to develop programs to control the discharge of pollutants to the storm drain system, including the discharge of pollutants from construction sites and areas of new development or significant redevelopment. As a result, your development and construction projects are subject to new requirements designed to improve stormwater quality such as, expanded plan check and review, contract specifications, stormwater treatment measures, runoff monitoring, and increased site inspection. For more information on municipal requirements, please contact the municipal representative listed on the back cover of this booklet.

Projects Equal To Or Greater Than 1 Acre

If your construction activity will disturb one acre or more, you must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the SWRCB for stormwater discharges associated with construction activity. To obtain coverage under the General Permit, a Notice of Intent (NOI) must be filed with the SWRCB. The General Construction Permit requires you to prepare and carry out a “Stormwater Pollution Prevention Plan” or SWPPP. Your SWPPP must identify appropriate stormwater pollution prevention measures or best management practices (BMPs), like the ones described in this booklet, to reduce pollutants in stormwater discharges from the construction site both during and after construction is complete. A best management practice or BMP is defined as any program, technology, process, practice, operating method, measure, or device that controls, prevents, removes, or reduces pollution. The General Permit also requires permanent stormwater quality controls (see BASMAA’s Start at the Source manual and CASQA’s BMP Handbooks New Development and Redevelopment for examples). You should keep a copy of your SWPPP readily available onsite throughout construction.

Projects Less Than 1 Acre

If your project is less than one acre, you may still need to use BMPs to comply with local municipal requirements. Check with the local stormwater program (listed on back

Best Management Practices

cover), or planning or engineering department for details.

General Practices

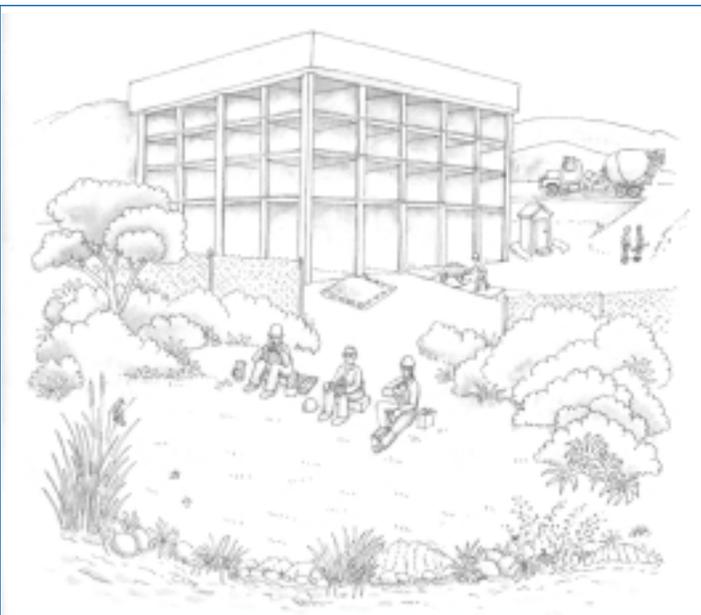
The following are some general principles that can significantly reduce pollution from construction activity and help make compliance with stormwater regulations easy:

- ❑ Identify all storm drains, drainage swales and creeks located near the construction site and make sure all subcontractors are aware of their locations to prevent pollutants from entering them.
- ❑ Clean up leaks, drips, and other spills immediately so they do not contact stormwater.
- ❑ Refuel vehicles and heavy equipment in one designated location on the site and take care to clean up spills immediately.
- ❑ Wash vehicles at an appropriate off-site facility. If equipment must be washed on-site, do not use soaps, solvents, degreasers, or steam cleaning equipment, and prevent wash water from entering the storm drain. If possible, direct wash water to a low point where it can evaporate and/or infiltrate.
- ❑ Never wash down pavement or surfaces where materials have spilled. Use dry cleanup methods whenever possible.
- ❑ Avoid contaminating clean runoff from areas adjacent to your site by using berms and/or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams and/or berms where appropriate.
- ❑ Protect all storm drain inlets using filter fabric cloth or other best management practices to prevent sediments from entering the storm drainage system during construction activities.
- ❑ Keep materials out of the rain — prevent runoff pollution at the source. Schedule clearing or heavy earth moving activities for periods of dry weather. Cover exposed piles of soil, construction materials and wastes with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.

For more information on the General Permits, call the State Water Resources Control Board’s Stormwater Information Line at (916) 341-5537 or your local program.

Best Management Practices

- ❑ Keep pollutants off exposed surfaces. Place trash cans around the site to reduce litter. Dispose of non-hazardous construction wastes in covered dumpsters or recycling receptacles.
- ❑ Practice source reduction — reduce waste by ordering only the amount you need to finish the job.
- ❑ Do not over-apply pesticides or fertilizers and follow manufacturers instructions for mixing and applying materials.
- ❑ Recycle leftover materials whenever possible. Materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires are recyclable (check with the local planning or building department for more information).
- ❑ Dispose of all wastes properly. Materials that cannot be reused or recycled must be taken to an appropriate landfill or may require disposal as hazardous waste. Never throw debris into channels, creeks or into wetland areas. Never store or leave debris in the street or near a creek where it may contact runoff.
- ❑ Illegal dumping is a violation subject to a fine and/or time in jail. Be sure that trailers carrying your materials are covered during transit. If not, the hauler may be cited and fined.
- ❑ Train your employees and inform subcontractors about the stormwater requirements and their own responsibilities.



Specific Practices

Following is a summary of specific best management practices for erosion and sediment control and contractor activities. For more information on erosion and sediment control BMPs and their design, please refer to the RWQCB Erosion and Sediment Control Field Manual (August 2002), the CASQA Stormwater Best Management Practice Handbook for Construction (January 2003), and the Association of Bay Area Governments (ABAG) Manual of Standards for Erosion & Sediment Control Measures (May 1995).

Erosion Prevention and Sediment Control

Prevent erosion

Soil erosion is the process by which soil particles are removed from the land surface, by wind, water and/or gravity. Soil particles removed by stormwater runoff are pollutants that when deposited in local creeks, lakes, Bay or Delta, can have negative impacts on aquatic habitat. Exposed soil after clearing, grading, or excavation is easily eroded by wind or water. The following practices will help prevent erosion from occurring on the construction site:

- ❑ Plan the development to fit the topography, soils, drainage pattern and natural vegetation of the site.
- ❑ Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure.
- ❑ Phase grading operations to reduce disturbed areas and time of exposure.
- ❑ Avoid excavation and grading during wet weather.
- ❑ Limit on-site construction routes and stabilize construction entrance(s) and exit(s).
- ❑ Remove existing vegetation only when absolutely necessary.
- ❑ Construct diversion dikes and drainage swales to channel runoff around the site.
- ❑ Use berms and drainage ditches to divert runoff around exposed areas. Place diversion ditches across the top of cut slopes.

Best Management Practices

- ❑ Plant vegetation on exposed slopes. Where replanting is not feasible, use erosion control blankets (e.g., jute or straw matting, glass fiber or excelsior matting, mulch netting).
- ❑ Consider slope terracing with cross drains to increase soil stability.
- ❑ Cover stockpiled soil and landscaping materials with secured plastic sheeting and divert runoff around them.
- ❑ As a back-up measure, protect drainage courses, creeks, or catch basins with fiber rolls, silt fences, sand/gravel bags and/or temporary drainage swales.
- ❑ Once grading is completed, stabilize the disturbed areas using permanent vegetation as soon as possible. Use temporary erosion controls until vegetation is established.
- ❑ Conduct routine inspections of erosion control measures especially before and immediately after rainstorms, and repair if necessary.
- ❑ fabric fences, block and gravel filters, catch basin filter inserts, excavated drop inlet sediment traps, or a combination of these.
- ❑ Collect and detain sediment-laden runoff in sediment traps (an excavated or bermed area or constructed device) to allow sediments to settle out prior to discharge.
- ❑ Use sediment controls and filtration to remove sediments from dewatering discharges.
- ❑ Prevent construction vehicle tires from tracking soil onto adjacent streets by constructing a temporary stone pad with a filter fabric underliner near the site exit where dirt and mud can be removed.
- ❑ When cleaning sediments from streets, driveways and paved areas on construction sites, use dry sweeping methods where possible. If water must be used to flush pavement, collect runoff to settle out sediments and protect storm drain inlets.

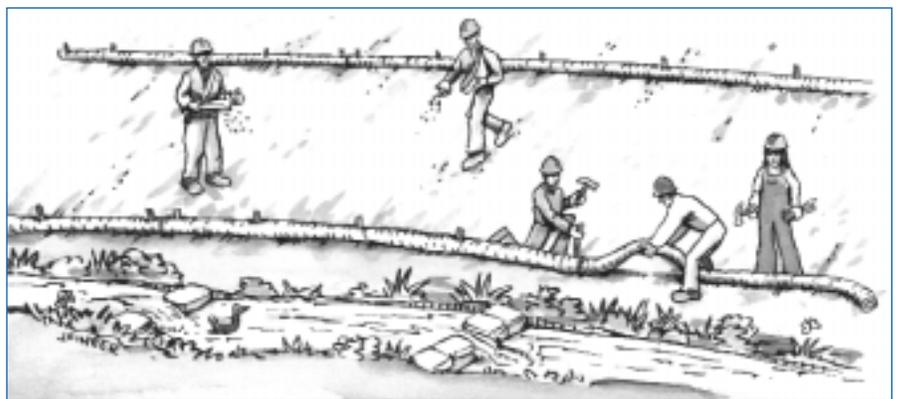
Control sediment

Sedimentation is defined as the process of depositing sediments carried away by runoff. Sediments consist of soil particles, clays, sands, and other minerals. The purpose of sediment control practices is to remove sediments from stormwater before they are transported off-site or reach a storm drain inlet or nearby creek. The most effective sediment control practices reduce runoff velocity and trap or detain runoff allowing sediments to settle out.

- ❑ Use terracing, rip rap, sand/gravel bags, rocks, fiber rolls, and/or temporary vegetation on slopes to reduce runoff velocity and trap sediments. Do not use asphalt rubble or other demolition debris for this purpose.
- ❑ Use check dams in temporary drains and swales to reduce runoff velocity and promote sedimentation.
- ❑ Protect storm drain inlets from sediment-laden runoff. Storm drain inlet protection devices include sand/gravel bag barriers, filter

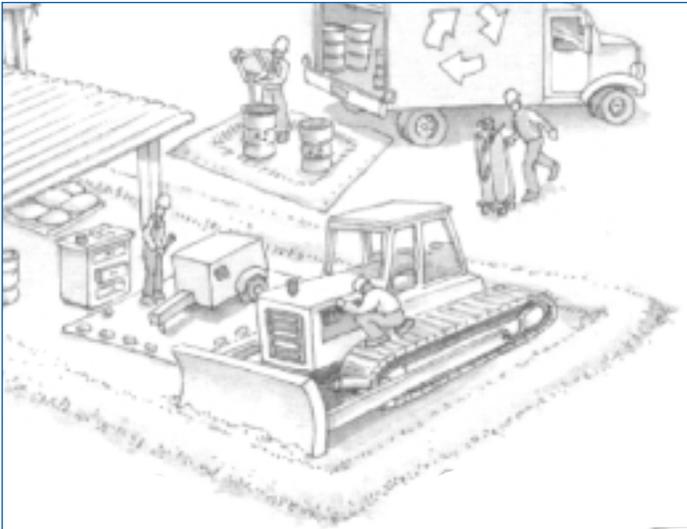
Note: Performance of erosion and sediment controls is dependent on proper installation, routine inspections and maintenance of the controls. Straw bale barriers are an example of a BMP that has not been as effective as expected due to improper use. Most of the BMPs described above are temporary and if left alone can quickly fall into disrepair and/or become ineffective. Routine inspections and maintenance, particularly before and after a storm event, must be part of any erosion and sediment control plan.

The RWQCB's Field Manual, the CASQA Stormwater Best Management Practice Handbook for Construction, and the ABAG Manual of Standards for Erosion and Sediment Control provide specific details and design criteria for erosion and sediment control plans.



Drainage swales channel runoff around a construction site. Planting temporary vegetation on freshly graded areas, and trenching and staking fiber rolls and/or silt fences downslope are common techniques for preventing erosion and controlling sediment.

Best Management Practices



Make sure equipment repair area is bermed or well away from creeks and storm drains.

General Site Maintenance

Prevent spills and leaks

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are common sources of stormwater pollution and soil contamination. Construction material spills can also cause serious problems. Careful site planning, preventive maintenance, and good materials handling practices can eliminate most spills and leaks.

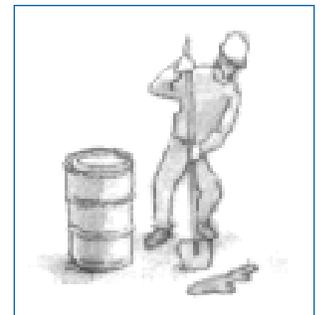
- ❑ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
- ❑ Designate specific areas of the construction site, well away from creeks or storm drain inlets, for vehicle and equipment parking and routine maintenance.
- ❑ Perform major maintenance, repair jobs and vehicle and equipment washing off-site when feasible, or in designated and controlled areas on-site.

- ❑ If you must drain and replace motor oil, radiator coolant, or other fluids on-site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in labeled separate containers, and recycle whenever possible. Note that in order to be recyclable, such liquids must not be mixed with other fluids. Non-recycled fluids generally must be disposed of as hazardous wastes.

Clean up spills immediately after they happen

When vehicle fluids or materials such as paints or solvents are spilled, cleanup should be immediate, automatic, and routine.

- ❑ Sweep up spilled dry materials (e.g., cement, mortar, or fertilizer) immediately. Never attempt to “wash them away” with water, or bury them. Use only minimal water for dust control.
- ❑ Clean up liquid spills on paved or impermeable surfaces using “dry” cleanup methods (e.g., absorbent materials like cat litter, sand or rags).
- ❑ Clean up spills on dirt areas by digging up and properly disposing of the contaminated soil.
- ❑ Report significant spills to the appropriate spill response agencies immediately (See reference list on the back cover of this booklet for more information).



Clean up spills on dirt areas by removing contaminated soil.

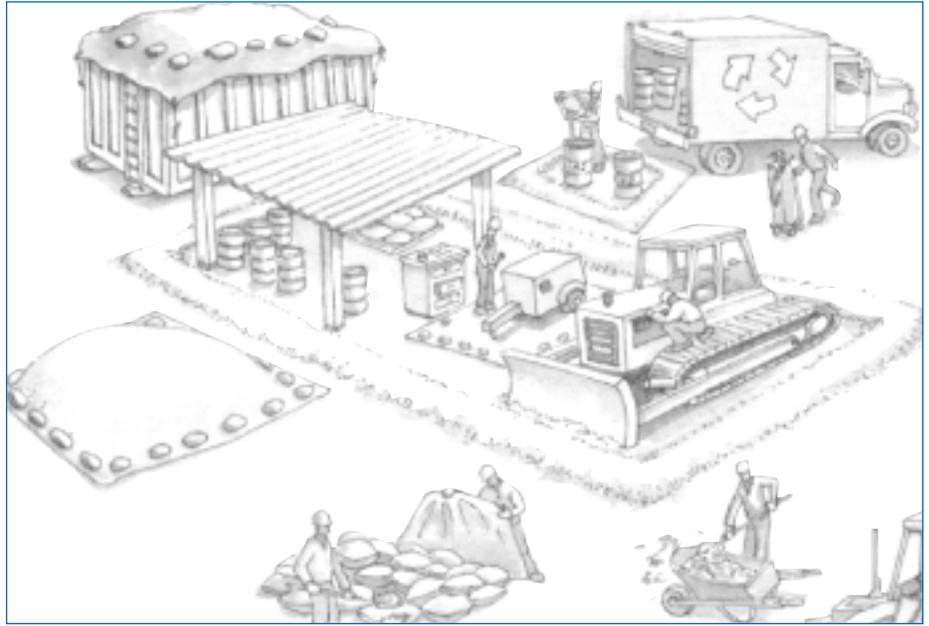
Note: Used cleanup rags that have absorbed hazardous materials must either be sent to a certified industrial laundry or dry cleaner, or disposed of through a licensed hazardous waste disposal company.

Best Management Practices

Store materials under cover

Wet and dry building materials with the potential to pollute runoff should be stored under cover and/or surrounded by berms when rain is forecast or during wet weather.

- ❑ Store stockpiled materials and wastes under a temporary roof or secured plastic sheeting or tarp.
- ❑ Berm around storage areas to prevent contact with runoff.
- ❑ Plaster or other powders can create large quantities of suspended solids in runoff, which may be toxic to aquatic life and cause serious environmental harm even if the materials are inert. Store all such potentially polluting dry materials—especially open bags—under a temporary roof or inside a building, or cover securely with an impermeable tarp. By properly storing dry materials, you may also help protect air quality, as well as water quality.
- ❑ Store containers of paints, chemicals, solvents, and other hazardous materials in accordance with secondary containment regulations and under cover during rainy periods.



Store building materials under cover. Make sure dumpsters are properly covered to keep out rain.

Cover and maintain dumpsters

Open and/or leaking dumpsters can be a source of stormwater pollution.

- ❑ Cover open dumpsters with plastic sheeting or a tarp. Secure the sheeting or tarp around the outside of the dumpster. If your dumpster has a cover, close it.
- ❑ If a dumpster is leaking, contain and collect leaking material. Return the dumpster to the leasing company for repair/exchange.
- ❑ Do not clean dumpsters on-site. Return to leasing company for periodic cleaning, if necessary.

Collect and properly dispose of paint removal wastes

Paint removal wastes include chemical paint stripping

residues, paint chips and dust, sand blasting material and wash water. These wastes contain chemicals that are harmful to the wildlife in our creeks and the water bodies they flow to. Keep all paint wastes away from the gutter, street, and storm drains.

- ❑ Non-hazardous paint chips and dust from dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash. Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyl tin must be disposed of as a hazardous waste.
- ❑ When stripping or cleaning building exteriors with high-pressure water, cover or berm storm drain inlets. If possible (and allowed by your local wastewater treatment plant), collect (mop or vacuum) building cleaning water and discharge to the sanitary sewer. Alternatively, discharge non-contaminated wash water onto a dirt area and spade into the soil. Be sure to shovel or sweep up any debris that remains in the gutter and dispose of as garbage.

Clean up paints, solvents, adhesives, and cleaning solutions properly

Although many paint materials can and should be recycled, liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes. When

Best Management Practices

they are thoroughly dry, empty paint cans, used brushes, rags, absorbent materials, and drop cloths are no longer hazardous and may be disposed of as garbage.

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or creek.
- ❑ For water-based paints, paint out brushes to the extent possible and rinse to a drain leading to the sanitary sewer (i.e., indoor plumbing).
- ❑ For oil-based paints, paint out brushes to the extent possible, and filter and reuse thinners and solvents. Dispose of unusable thinners and residue as hazardous waste.
- ❑ Recycle, return to supplier or donate unwanted water-based (latex) paint. You may be able to recycle clean empty dry paint cans as metal (check with the local planning or building department for more information).
- ❑ Dried latex paint may be disposed of in the garbage.
- ❑ Unwanted paint (that is not recycled), thinners, and sludges must be disposed of as hazardous waste.
- ❑ More and more paint companies are recycling excess latex paint (check with the local planning or building department for more information).

Keep fresh concrete and cement mortars out of gutters, storm drains, and creeks

Concrete and cement-related mortars that wash into gutters and storm drains are toxic to fish and the aquatic environment.

- ❑ Locate mortar/stucco mixers inside bermed areas to avoid discharge to street or storm drains.
- ❑ Avoid mixing excess amounts of fresh concrete or cement mortar.
- ❑ Store dry and wet materials under cover, protected from rainfall and runoff.
- ❑ Wash out concrete transit mixers only in designated wash-out areas where the water will flow into settling ponds or onto dirt or stockpiles of aggregate base or sand. Pump water from settling ponds to the sanitary sewer, where allowed. Whenever possible, recycle washout by pumping back into

mixers for reuse. Never dispose of washout into the street, storm drains, drainage ditches, or creeks.

- ❑ Whenever possible, return contents of mixer barrel to the yard for recycling. Dispose of small amounts of excess concrete, grout, and mortar in the trash.

Service and maintain portable toilets

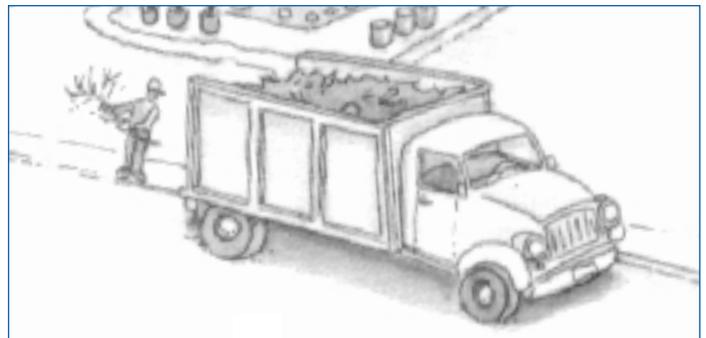
Leaking portable toilets are a potential health and environmental hazard.

- ❑ Inspect portable toilets for leaks.
- ❑ Be sure the leasing company adequately maintains, promptly repairs, and replaces units as needed.
- ❑ The leasing company must have a permit to dispose of waste to the sanitary sewer.
- ❑ Do not place on or near storm drain inlets.

Dispose of cleared vegetation properly

Cleared vegetation, tree trimmings, and other plant material can cause environmental damage if it gets into creeks. Such “organic” material requires large quantities of oxygen to decompose, which reduces the oxygen available for fish and other aquatic life.

- ❑ Do not dispose of plant material in a creek or drainage facility or leave it in a roadway where it can clog storm drain inlets.
- ❑ Avoid disposal of plant material in trash dumpsters or mixing it with other wastes. Compost plant material or take it to a landfill or other facility that composts yard waste (check with the local planning or building department for more information).



Recycle yard waste and tree prunings at a landfill that chips and composts plant material.

Demolition Waste Management

Make sure all demolition waste is properly disposed of

Demolition debris that is left in the street or pushed over a bank into a creek bed or drainage facility causes serious problems for flood control, storm drain maintenance, and the health of our environment. Different types of materials have different disposal requirements or recycling options.

- ❑ Materials that can be recycled from demolition projects include: metal framing, wood, concrete, asphalt, and plate glass.
- ❑ Materials that can be salvaged for reuse from old structures include: doors, banisters, floorboards, windows, 2x4s, and other old, dense lumber.
- ❑ Unusable, unrecycleable debris should be confined to dumpsters, covered at night and during wet weather, and taken to a landfill for disposal.
- ❑ Hazardous debris such as asbestos must be handled in accordance with specific laws and regulations and disposed of as a hazardous waste. For more information of asbestos handling and disposal regulations, contact the Bay Area Air Quality Management District.
- ❑ Arrange for an adequate debris disposal schedule to ensure that dumpsters do not overflow.
- ❑ Most local planning or building departments have lists of recycling and disposal services for construction and demolition debris.

Roadwork and Pavement Construction

Plan roadwork and pavement construction to avoid stormwater pollution

Road paving, surfacing, and asphalt removal happen right in the street, with numerous opportunities for stormwater pollution from the asphalt mix, saw-cut slurry, or excavated material. Properly proportioned asphalt mix and well-compacted pavement avoid a host of water pollution problems.

- ❑ Apply concrete, asphalt, and seal coat during dry weather to prevent contaminants from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when paving or applying seal coat, slurry seal, fog seal, etc.
- ❑ Always park paving machines over drip pans or absorbent materials, since they tend to drip continuously.
- ❑ When making saw-cuts in pavement, use as little water as possible. Cover each catch basin completely with filter fabric during the sawing operation and contain the slurry by placing sand/gravel bags around the catch basin. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site.
- ❑ Wash down exposed aggregate concrete only when the wash water can: (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, divert runoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- ❑ Allow aggregate rinse to settle, and pump the water to the sanitary sewer if allowed by your local wastewater authority.
- ❑ Never wash sweepings from exposed aggregate concrete into a street or storm drain. Collect and return to aggregate base stockpile, or dispose with trash.
- ❑ Recycle broken concrete and asphalt (check with the local planning or building department for more information).

Contaminated Pondered Stormwater, Groundwater, and Soil Guidance

Look for ponded stormwater, groundwater, and/or soil contamination

Pondered stormwater, groundwater and soil may become contaminated if exposed to hazardous materials. If any of the following conditions apply, contaminated ponded stormwater, groundwater, and/or soil may be present and pose a potential health and environmental hazard:

- ❑ The project site is in an area of previous commercial/industrial activity;
- ❑ There is a history of illegal dumping on the site or adjacent properties;
- ❑ The construction site is subject to a Superfund, state, or local cleanup order;
- ❑ Ponded stormwater, groundwater and/or water generated by dewatering exhibits an oily-sheen and/or smells of petroleum;
- ❑ Soil appears discolored, smells of petroleum and/or exhibits other unusual properties;

- ❑ Abandoned underground storage tanks, drums, or other buried debris are encountered during construction activities; or
- ❑ Spills have occurred on the site or adjacent properties involving pesticides and herbicides; fertilizers; detergents; plaster and other products; petroleum products such as fuel, oil, and grease; or other hazardous chemicals such as acids, lime, glues, paints, solvents, and curing compounds.

Take appropriate action

Pondered stormwater, groundwater, or water generated by dewatering that is contaminated cannot be discharged to a street, gutter, or storm drain. If contamination is suspected, the water should be contained and held for testing. Call the appropriate local agency and/or the Regional Water Quality Control Board for further guidance (See reference list on the back cover of this booklet for more information).

Remember: The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

Pollution Control Agencies and Sources of Information

Storm water quality management programs

Alameda Countywide Clean Water Program
951 Turner Court, Hayward, CA 94545
(510) 670-5543
www.cleanwaterprogram.com

Contra Costa Clean Water Program
255 Glacier Drive, Martinez, CA
94553-4897 (925) 313-2392
(800) NO DUMPING
www.cccleanwater.org

Fairfield-Suisun Urban Runoff Management Program
1010 Chadbourne Road
Fairfield, CA 94534 (707) 429-8930

Marin County Stormwater Pollution Prevention Program
3501 Civic Center Drive, Room 304,
San Rafael, CA 94903 (415) 499-6528
www.mcstoppp.org

San Francisco Stormwater Management Program
3801 3rd Street, Suite 600
San Francisco, CA 94124 (415) 695-7310
http://stormwater.sfwater.org

San Mateo Countywide Stormwater Pollution Prevention Program
555 County Center, Fifth Floor
Redwood City, CA 94063
(650) 363-4305
www.flowstobay.org

Santa Clara Valley Urban Runoff Pollution Prevention Program
699 Town & Country Village
Sunnyvale, CA 94086 (800) 794-2482
www.scvurppp.org

Sonoma County Water Agency
2150 West College Avenue
Santa Rosa, CA 95401
(707) 526-5370
www.scwa.org

Vallejo Sanitation and Flood Control District
450 Ryder Street, Vallejo, CA 94590
(707) 644-8949
www.vsfcd.com

Bay Area Stormwater Management Agencies Association (BASMAA)
1515 Clay Street, Suite 1400,
Oakland, CA 94612 (510) 622-2326
(888) BayWise www.basmaa.org

Agencies to call in the event of a spill

You are required by law to report all significant releases or suspected significant releases of hazardous materials, including oil.

To report a spill, call the following agencies:

1. Dial 911 or your local emergency response number.
2. Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

For spills of "Federal Reportable Quantities" of oil, chemicals, or other hazardous materials to land, air, or water, notify the National Response Center (800-424-8802). If you are not sure whether the spill is of a "reportable quantity," call the federal Environmental Protection Agency (800) 424-9340 for clarification.

For further information, see *California Hazardous Material Spill/ Release Notification Guidance* (State Office of Emergency Services, Hazardous Materials Division).

Agencies to call if you find or suspect contaminated soil or groundwater

Regional Water Quality Control Board:

San Francisco Bay Region
(510) 622-2300

Central Valley Region
(916) 255-3000

California Environmental Protection Agency (Cal EPA), Department of Toxic Substances Control (DTSC)
(510) 540-3732

Documents and available resources

From State Water Resources Control Board (SWRCB)
(916) 341-5537
www.swrcb.ca.gov

General Construction Activity Storm Water Permit

From Friends of the San Francisco Estuary
(510) 622-2465
www.abag.ca.gov/bayarea/sfep

Field Manual

Guidelines for Construction Projects

Hold On to Your Dirt – Video

Keep it Clean – Video

From Association of Bay Area Governments (ABAG)
(510) 464-7900
www.abag.ca.gov

Manual of Standards for Erosion and Sediment Control Measures

From Cal EPA, DTSC
(916) 322-3670
www.dtsc.ca.gov

Waste Minimization for the Building Construction Industry - Fact Sheet

From California Stormwater Quality Association (CASQA)
www.cabmphandooks.com

Stormwater Best Management Practice Handbook – Construction

THANKS

BASMAA adapted this booklet from one originally developed and generously shared by the Santa Clara Valley Nonpoint Source Pollution Control Program.

Illustrations by John Finger

APPENDIX D
Town of Los Gatos
Storm Water Pollution Control Ordinance

ARTICLE III. - STORM WATER POLLUTION CONTROL

Sec. 22.30.010. - Definitions.

The following words and phrases, when used in this article, shall be as defined herein. Words and phrases used in this article and not otherwise defined shall be as defined in the regulations promulgated by the U.S. Environmental Protection Agency to implement the requirements of the federal Clean Water Act, or as defined by the State Water Resources Control Board to implement the California Water Code.

Applicable materials means all materials used in industrial or commercial establishments that are stored outdoors, that may be exposed to storm water, and that have the reasonable potential to degrade the quality of runoff from the site. These include, but are not limited to, all materials containing cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc, which are pollutants that have specifically been identified as known to contribute to impairment of applicable water quality standards.

Deemed complete means that a project applicant has submitted a development application package for discretionary approval that is determined to be a complete and acceptable application by the development review committee. For public projects (funded and owned by the town), projects are deemed complete if funding has been approved by the town council and construction has been scheduled by October 15, 2003.

Discharge means the discharge, addition, placement, deposit, release or dumping of any pollutant or combination of pollutants to surface waters from any point source. This definition includes, but is not limited to, additions of pollutants into waters from: surface runoff and discharges through pipes, sewers, channels, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works.

Grease means, and includes, fats, oils, waxes, or other related constituents. Grease may be of mineral origin, including kerosenes, lubricating oil, and road oil. Grease may also be of vegetable or animal origin, including butter, lard, margarine, vegetable fats and oils, fats in meats, cereals, seeds, nuts, and certain fruits. Grease is generally present as, but need not be, a floatable solid, a liquid, a colloid, an emulsion, or in a solution.

Grease generating activity means any commercial or industrial activity that uses or produces grease on an ongoing basis.

Grease removal device means an interceptor or other mechanical device designed, constructed, and intended to remove, hold, or otherwise prevent the passage of grease to the (sanitary sewer or) municipal storm drain system.

Impervious surface means a constructed or modified surface that does not allow rainfall to percolate through to the subsoil and thus creates storm water runoff. Impervious surface includes, but is not limited to, building rooftops, pavement, sidewalks, patios, driveways or other hardscape where such surfaces are not constructed with pervious materials and/or are not designed so as to have zero (0) storm water discharge.

Interceptor means a receptacle or trap designed and constructed to intercept, separate, and prevent the passage of prohibited substances into the (sanitary sewer or) municipal storm drain system.

Major development or redevelopment project means a project that creates, adds, or replaces one (1) acre (forty-three thousand five hundred sixty (43,560) square feet) or more of impervious surface, for those project applications that are deemed complete on or after October 15, 2003. For those project applications that are deemed complete on or after April 15, 2005, a major development or redevelopment project means a project that creates, adds, or replaces ten thousand (10,000) square feet or more of impervious surface.

Municipal storm drain system means and includes, but shall not be limited to, those facilities within the municipality by which storm water may be conveyed to waters of the United States, including any roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains, which are not part of a publicly owned treatment works (POTW).

NPDES permit means a valid National Pollutant Discharge Elimination System permit issued by the California Regional Water Quality Control Board, San Francisco Bay Region, in accordance with regulations promulgated by the U.S. Environmental Protection Agency to implement the requirements of the federal Clean Water Act.

Pollutants mean and include all sewage, sewage sludge, garbage, biological materials, radioactive materials, and chemical, industrial, and agricultural waste discharged into water.

Project with significant pollution potential means any project determined by the town to be likely to have sources of pollutants on-site and/or to contribute pollutants to stormwater after project completion, based on a review of the proposed uses of or activities planned for the site.

Storm water means all rainfall runoff, surface runoff, and drainage.

Watercourses mean and include all natural waterways and definite channels and depressions in the earth that carry water, even though such waterways may only carry water during rains and storms and may not carry storm water at and during all times and seasons. Watercourses include facilities owned and operated by the Santa Clara Valley Water District.

(Ord. No. 1940, § I, 5-3-93; Ord. No. 2125, § I, 1-20-04)

Sec. 22.30.015. - Requirements for non-storm water discharges.

- (a) *Discharge prohibition.* No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials other than storm water. In addition, no person shall discharge or cause to be discharged into the municipal storm drain system or watercourses, any pollutants or waters containing any pollutants that cause or threaten to contribute to a violation of applicable water quality standards. It shall also be unlawful to discharge, or cause to be discharged into any storm drain or natural outlet or channel, any sewage, industrial waste or other polluted waters or materials without a valid NPDES permit or written authority from the U.S. Environmental Protection Agency or its designated enforcement agent.
- (b) *Exceptions to discharge prohibition.* The preceding discharge prohibition shall not apply to any discharge that is specifically authorized by an NPDES permit to flow to a storm drain or natural outlet or channel. In addition, the California Regional Water Quality Control Board, San Francisco Bay Region, has determined that the discharge prohibition shall not apply to the following "permissible" activities: water line flushing, landscape irrigation/lawn watering, uncontaminated foundation drains, uncontaminated non-industrial roof drains, irrigation water, uncontaminated groundwater infiltration, residential car washings, flows from fire fighting, flows from potable water sources, and dechlorinated swimming pool waters.
- (c) *Protection against accidental discharge.* The owner or operator of a commercial or industrial establishment shall provide reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain

system or watercourses. Facilities to prevent accidental discharge of prohibited materials or other wastes shall be provided and maintained at the owner or operator's expense.

- (d) *Report of accidental discharges.* Where an accidental discharge of prohibited materials or other wastes has entered the municipal storm drain system or a watercourse, such incident shall be reported to West Valley Sanitation District as soon as possible, but in no event later than twenty-four (24) hours after such a discharge. An accidental discharge of toxics must be reported immediately to Central Fire District—Phone 911. If the accidental discharge of prohibited materials or other wastes emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years. A notice shall be permanently posted in a conspicuous place on the premises of each commercial or industrial establishment advising employees of the department or agency to call in case of such an accidental discharge.

(Ord. No. 1940, § 1, 5-3-93)

Sec. 22.30.020. - Water protection.

- (a) *Watercourse protection requirements.* Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property reasonably free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse. The owner or lessee shall not remove healthy bank vegetation beyond that actually necessary for maintenance, nor remove said vegetation in such a manner as to increase the vulnerability of the watercourse to erosion.
- (b) *Acts requiring permit.* No person shall commit or cause to be committed any of the following acts unless a written permit has first been obtained from the building and engineering services department:
 - (1) Discharge into or connect any pipe or channel to a watercourse;

- (2) Modify the natural flow of water in a watercourse;
- (3) Carry out development within a setback designed in whole or in part to protect a watercourse;
- (4) Deposit in, plant in, or remove any material from, a watercourse, including its banks, except as required for necessary maintenance;
- (5) Construct, alter, enlarge, connect to, change, or remove any structure in a watercourse; or
- (6) Place any loose or unconsolidated material along the side of or within a watercourse or so close to a side as to cause a diversion of the flow, or to cause a probability of such material being carried away by storm water passing through such watercourse.

(Ord. No. 1940, § 1, 5-3-93)

Sec. 22.30.025. - Outdoor storage of materials.

- (a) *Proper outdoor storage of materials required.* All applicable materials stored outdoors at a commercial or industrial establishment shall be managed in a manner that minimizes the discharge of pollutants to storm water and as is required to meet water quality standards. Establishments covered by the general NPDES permit for storm water discharges "associated with industrial activities" that has been promulgated for Santa Clara County by the California Regional Water Quality Control Board, San Francisco Bay Region, shall address this requirement in applicable provisions of their storm water pollution prevention plan.
- (b) *Protection against accidental discharge.* The owner or operator of a commercial or industrial establishment shall provide reasonable protection from accidental discharge of applicable materials to the municipal storm drain system or watercourses. Specifically, secondary containment systems or equivalent measures approved by Building and Engineering Services Department shall be provided for all applicable materials that are liquids. All facilities to prevent the accidental discharge of applicable materials to the municipal storm drain system and watercourses shall be provided and maintained at the owner or operator's expense.
- (c)

Report of accidental discharge to the storm drain. Where applicable materials have entered the municipal storm drain system or a watercourse due to an accidental discharge at a commercial or industrial establishment, the owner or operator of such establishment shall report such incident to Central Fire Protection District as soon as possible, but in no event later than twenty-four (24) hours after such a discharge. The owner or operator of such establishment shall also retain an on-site written record of all accidental discharges of applicable materials (whether or not such discharge actually entered the municipal storm drain system or a watercourse) and the actions taken to prevent their recurrence. Such records shall be retained for at least five (5) years. A notice shall be permanently posted in a conspicuous place on the premises of each commercial or industrial establishment advising employees of the department or agency to call in case of such an accidental discharge.

(Ord. No. 1940, § I, 5-3-93)

Sec. 22.30.030. - Grease disposal and control.

- (a) *Grease disposal prohibited.* No person shall dispose of any grease, or cause any grease to be disposed, by discharge into any drainage piping, (any public or private sanitary sewer), any part of the municipal storm drain system, or any land, street, public way, river, stream, or other watercourse.
- (b) *Grease removal device required.* The owner or operator of every newly constructed, remodeled, or converted commercial or industrial establishment with one (1) or more grease generating activities shall install or cause to be installed for each grease generating activity, a grease removal device (of an approved design) for preventing the passage of grease to the municipal storm drain system and watercourses.
- (c) *Maintenance of grease removal devices required.* The contents of all grease removal devices shall be removed periodically as necessary to prevent a violation of this chapter. At a minimum, the contents shall be removed every ninety (90) days. All grease removal devices shall be kept in good repair, and shall be maintained in continuous operation at the owner or operator's expense.

(Ord. No. 1940, § I, 5-3-93)

Sec. 22.30.035. - New development/redevelopment.

- (a) *Storm water management required for major projects.* Every applicant for a building permit and/or grading permit for a major development or redevelopment project shall identify the potential for storm water to be discharged from the project site following completion of construction activity and shall demonstrate that the plans, drawings, or specifications for such project include the installation of management techniques, practices, and control measures designed to mitigate the potential adverse impacts of storm water that may be discharged from the project site on an ongoing basis, including storm water treatment measures. In addition, applicants for building and/or grading permits for projects with significant pollution potential may be required to demonstrate that sources of pollutants will be controlled onsite with appropriate measures. The storm water management techniques, practices, and control measures ("mitigation measures") shall be selected, designed, and maintained in accordance with the town's current NPDES storm water discharge permit, and the town's policy for storm water management requirements for new development and redevelopment projects.
- (b) *Issuance of permits.* The town shall not issue a building permit or a grading permit for a major development or redevelopment project or a project with significant pollution potential until it has reviewed the mitigation measures proposed by the applicant pursuant to the preceding paragraph and determined that they are sufficient to address the potential adverse impacts of storm water that may be discharged from the project site on an ongoing basis.
- (c) *Occupancy.* The town shall not issue a certificate of occupancy for a major development or redevelopment project or a project with significant pollution potential until it has determined that the mitigation measures identified in the building permit and/or the grading permit issued for such project have been adequately implemented and that appropriate arrangements have been made to ensure that these management techniques, practices, and control measures will be maintained on an ongoing basis, in accordance with the town's current NPDES storm water discharge permit and the town's policy for storm water management requirements for new development and redevelopment project.

(Ord. No. 1940, § I, 5-3-93; Ord. No. 2125, § II, 1-20-04)

Sec. 22.30.040. - Enforcement.

- (a) *Criminal penalties.* Any person who knowingly violates any provision of this article shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by imprisonment in the county jail for a term not to exceed six (6) months or by a fine not to exceed one thousand dollars (\$1,000.00) or by both. Each and every violation of this article shall constitute a separate offense. Every day each such violation continues shall be an additional offense.
- (b) *Civil penalties.* Any person who discharges any applicable materials, greases or pollutants into a watercourse or the municipal storm drain system in violation of any provision of this article shall be civilly liable to the Town of Los Gatos in a sum not to exceed two thousand dollars (\$2,000.00) per day for each day in which the violation occurs. In determining the amount of such award, the court shall consider proof of such matters as justice may require. Subsequent or repeated violation, which are not committed contemporaneously with the initial violation, shall be treated as separate cause of action and shall be subject to a separate award of damages.
- (c) *Civil liability.* Any person who violates any provision of this article shall be civilly liable to the Town of Los Gatos for all costs, including attorneys fees, associated with the investigation, elimination and remediation of environmental conditions caused by the discharge of pollutants into the municipal storm drain system or a watercourse in violation of this article.
- (d) *Remedies cumulative.* The remedies provided for in this article are cumulative and not exclusive and shall be in addition to any and all other remedies available to the Town of Los Gatos under state and federal law.

(Ord. No. 1940, § I, 5-3-93)

Sec. 22.30.045. - Inspection and right of entry.

- (a) Whenever deemed necessary to make an inspection to ensure compliance with the requirements of this article or to enforce any provision of this article, or whenever the Town officer or agent, has reasonable cause to believe that there may be any condition upon any property or in any structure that may violate the requirements of this article, the authorized Town officer or agent may enter such property or structure at all reasonable times to inspect the same or to perform any duty

imposed upon the Town officer or agent by this article. Should entry be refused, the officer or agent shall have recourse to every remedy provided by law to gain entry.

- (b) When a Town officer or agent has first obtained a property inspection or search warrant or other remedy provided by law to secure entry, no person having charge, care or control of any building or property shall fail or neglect after proper request is made as herein provided, to promptly permit entry by the authorized officer or agents. Violation of this subsection shall be a misdemeanor.

(Ord. No. 1990, § II, 10-17-94)

