

TOWN OF ATHERTON

BID FORMS and SPECIAL PROVISIONS

for

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT

Project Number: 56079

SUBMIT BIDS TO:

Office of the City Clerk
Atherton Town Hall
91 Ashfield Road
Atherton, CA 94027

by 11:00 a.m. 11th day, April, 2017

BIDS WILL BE OPENED AND READ PUBLICLY

at Town Hall at 11:00 a.m.

TIME FOR COMPLETION – **45** WORKING DAYS

Prepared under the direction of
Marty Hanneman, P.E.
Town of Atherton City Engineer
R.C.E. 46398
Expires March 31, 2017

The plans and specifications for this project are available online at:

<http://www.ci.atherton.ca.us/bids.aspx>

Additional important information is contained in the Town of Atherton's
Standard Specifications, which are available on line at

<http://www.ci.atherton.ca.us/DocumentCenter/View/285>

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PART I. BID REQUIREMENTS

ADVERTISEMENT FOR BIDS

TOWN OF ATHERTON
STATE OF CALIFORNIA

Notice: The Town of Atherton (Town) hereby gives notice that it will accept bids for construction of the following public work:

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT Project Number: 56079

1. **Scope of Work:** Grind and replace approximately 950 square feet of asphalt to a 4-inch depth over 8-inch base for roadway and 4-inch base for sidewalk in various locations at intersection. This work to include all necessary traffic control and will involve performing of traffic signal modifications, providing accessible curb ramps, upgraded pedestrian push buttons, countdown style pedestrian heads, improved pedestrian and bike paths and removing barriers along the pedestrian path per Town of Atherton Standard specifications and special provisions.

This project focuses on providing safe access for students, families, residents and visitors walking or biking through this intersection. Specific improvements include providing safe and accessible curb ramps, upgraded pedestrian push buttons, countdown style pedestrian heads, improved pedestrian and bike paths and removing barriers along the pedestrian path.

2. **Plans & Specifications:** Plans & Specifications may be obtained at the Town of Atherton's website at: <http://www.ci.atherton.ca.us/bids.aspx> at no cost. Additional information is contained in Town of Atherton Standard Specifications, which are available at: <http://www.ci.atherton.ca.us/DocumentCenter/View/285>. Contractor shall be responsible for any addendums that may be posted on the Town's website. No Planholders list will be made be available.
3. **Project Schedule:** The work shall be completed within Forty-Five (45) working days from the First Day of Construction as defined in the Notice to Proceed.
4. **Bid Submission:** SEALED BIDS will be received at the office of the City Clerk, 91 Ashfield Road, Atherton, California 94027, **until 11:00 a.m.** Pacific Standard Time on **11th day, April, 2017**, at which time bids will be publicly opened and read aloud.
5. **Engineer's Estimate:** for the project is: **\$310,000**
6. **Bid Requirements:** Bids must be for the entire work, and shall be submitted in sealed envelopes clearly marked: "Bid of (Contractor) for **Middlefield Road Complete Streets Intersection Improvements, Project No: 56079**", along with date and time of bid opening.

Bidders shall refer to the **Bid Requirements** section of the project Plans and Specifications for additional information and requirements.

7. **Required Contractor's License:** A **California Class "A" General Engineering license** for performing the work outlined in the Plans and Specifications is required at the time of the Bid to Bid this contract.
8. **Portion of Work to be Performed by the Contractor:** The General Contractor shall perform, with his own organization, work of a value amounting to not less than 50% of the total contract, excluding specialty items as may be indicated on the bid schedule.
9. **Department of Industrial Relations Registration:** A Contractor or Subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Public Contract Code 4104, or engage in the performance of any contract for public work, as that term is defined in Division 2, Part 7, Chapter 1 of the Labor Code, unless currently registered and qualified to perform public work pursuant to Labor Code Section 1725.5. (<http://www.dir.ca.gov/Public-Works/PublicWorks.html>)
10. **Reservation of Rights:** The Town reserves the right to reject any or all bids; to make any awards or any rejections in what it alone considers to be in the best interest of the Town, and waive any informalities or irregularities in the bids.
11. **Substitution of Securities:** The successful bidder may substitute securities for retention monies withheld to ensure performance of the contract, in accordance with California Public Contract Code, Section 22300.
12. **Prevailing Wage Rates:** Bidders are hereby notified that provisions of California Labor Code regarding prevailing wages and apprentices are applicable to the work to be performed under this contract. Pursuant to Section 1773 et seq. the general prevailing wage rates have been determined by the Director of the California Department of Industrial Relations and appear in the California Prevailing Wage Rates. Copies are on file at the office of the City Engineer and are available to interested parties upon request. The successful bidder shall post a copy of the wage rates at the job site
13. **Bid Preparation Cost:** Bidders are solely responsible for the cost of plan and specification printing and preparing their Bids.
14. **Town Contact:** Questions regarding the project should be directed to Nadia Bosan, PE, PTOE, by written Requests for Information (RFI) to: Public Works Department, 91 Ashfield Road, Atherton, CA 94027, no later than ten (10) business days before bid opening. RFIs may be emailed to nbosan@interwestgrp.com or faxed to (916) 273-4690.
15. **Understanding:** By submitting a bid in response to this advertisement for bids, the bidder shall be conclusively deemed to have read, understood and agreed with all of the information and materials contained in the bid documents, including but not limited to the standard specifications, the special provisions, the required nature and amount of insurance and the documentation evidencing said insurance.

By: _____
Marty Hanneman, P.E., City Engineer

Date: _____

BID REQUIREMENTS

1. Examination of Plans, Specifications, Special Provisions and Site of Work: The bidder is required to examine carefully the site of work contemplated and it will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of work to be performed and materials to be furnished and as to the requirements of the specifications, special provisions and the contract. It is mutually agreed that submission of a bid shall be considered prima facie evidence that the bidder has made such examination.
2. Bid Form: All bids must be made on the official bid forms included with the project plans and specifications as obtained from the Town or bid exchange plan-rooms. All bids must be signed by the bidder with bidders' business address.

If the bid is made by an individual, the individual's name and post office address must be shown. If made by a firm or partnership, then the name and post office address of each member of the firm or partnership must be shown. If made by a corporation, then the bid must show the name of the State under the laws of which the corporation is chartered and the name, titles and business addresses of the President, Secretary and Treasurer. A certification by the legal representative of the firm must be included in the bid.

3. Rejection of Bid Containing Alterations, Erasures or Irregularities: Bids may be rejected if they show any alterations of form, additions not called for, conditional or alternative bids, incomplete bids, erasures or irregularities of any kind.
4. Bid Withdrawal: The Bid may be withdrawn upon request by the bidder without prejudice prior to, but not after the time fixed for opening of bids provided that the request is in writing, has been executed by the bidder or the bidders duly authorized representative and is filed with the City Clerk.
5. Omissions and Discrepancies: If the bidder finds discrepancies in, or omissions on, the drawings, or other contract documents, or if bidder is in doubt as to their meaning, the bidder should notify the Town contact listed in the Notice Inviting Bids in writing, who may send a written instruction to all bidders.
6. Interpretations and Addenda: No oral interpretations shall be made to any bidder as to the meaning of any of the contract documents, or be effective to modify any of the provisions of the contract documents. Every request for an interpretation shall be made in writing and forwarded to the Town contact listed in the Notice Inviting Bids.
7. Bidder's Guaranty: All bids shall be presented under sealed cover and shall be accompanied by cash, cashier's check, certified check, or bid bond made payable to the Town of Atherton for an amount equal to at least ten percent (10%) of the amount of said bid, and no bid shall be considered unless such cash, cashier's check, certified check or bid bond is enclosed therewith. If a bidder uses a different bid bond form than that provided in this package, it must be the exact equivalent. If it is not, the bid shall be deemed non-responsive.

8. Return of Bid Guaranty: Within ten (10) days after the award of the contract, the Town will return the bid guaranties accompanying the bids, which are not to be considered in making the award. All other bid guaranties will be held until the contract has been finally executed, after which they will be returned to the respective bidders whose bids they accompany.
9. Award of Contract: The award of the contract, if it is awarded, will be to the lowest responsive and responsible bidder whose bid complies with all the requirements prescribed. The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items that are specifically identified in the bid solicitation as being used for the purpose of determining the lowest bid price. The award, if made, will be made within sixty (60) calendar days after the opening of the bids. All bids will be compared on the basis of the estimated quantities of work to be done.
10. Execution of Contract: The contract and contract documents shall be signed by the successful bidder and returned together with the contract bonds, within ten (10) days, not including Sundays, after the bidder has received notice the contract has been awarded. No bid shall be considered binding upon the City until the execution of the contract. Failure to execute the contract and file acceptable bonds as provided herein within ten (10) days, not including Sundays, after the bidder has received notice that the contract has been awarded, shall be just cause for the annulment of the award and the forfeiture of the bid guaranty.
11. Sureties: The successful bidder shall also promptly secure with a responsible corporate surety or corporate sureties satisfactory bonds conditioned upon faithful performance by the said bidder of all the requirements under the contract and upon the payment of claims of any material workers and laborers thereunder.
12. Removal of Defective and Unauthorized Work: All work which is defective in its construction or deficient in any of the requirements of these specifications, special provisions or plans shall be remedied or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed for such correction. Any work done beyond the lines and grades shown on the plans or established by the Director of Public Works, or his designee, or any extra work done without written authority will be considered as unauthorized and will not be paid for.
13. Defective Work: Upon failure on the part of the Contractor to comply with any order of the Director of Public Works, or his designee, made under these provisions, the Director of Public Works shall be the authority to cause defective work to be removed and to deduct the costs thereof from any monies due or to become due to the Contractor.
14. Final Inspection: Whenever the work provided and contemplated by the contract shall have been satisfactorily completed and the final clean up performed, the Director of Public Works, or his designee, will make the final inspection at the site.

15. Amount of Bonds: The faithful performance bond shall be in the sum of not less than one hundred percent (100%) of the contract price.

The bond for material workers and laborers shall be in an amount equal to not less than one hundred percent (100%) of the contract price. Form of bond required maybe examined at the office of the Director of Public Works; copies will be furnished, if desired, to prospective bidders.

Payment and Performance Bonds shall be executed by a California Admitted Surety insurer with a minimum Best's Insurance Guide rating of A+, Class VII.

Whenever any surety or sureties on any such bond, or on any bonds required by law for the protection of the claims of laborers and material workers, become insufficient or the City Council has cause to believe such surety or sureties have become insufficient, a demand in writing may be made of the Contractor for such further bond or bonds or additional surety, not exceeding that originally required, as is considered necessary, considering the extent of the work remaining to be done. Thereafter, no payment shall be made upon the contract to the Contractor or any assignee of the Contractor until such further bond or bonds or additional surety has been furnished.

16. Compliance with Laws and Regulations: No bid for work will be accepted from a Contractor who is not licensed in accordance with the law under the provisions of Chapter 9 of Division III, of the Business and Professions Code of the State of California, as amended. All bids submitted and all contracts awarded hereunder must be submitted, filed, made and executed in accordance with all applicable laws of the State of California and of the United States of America which relate to bids and contracts of the nature referred to herein, whether such laws are expressly referred to herein or not.

17. Qualifications Statement: Each bidder shall submit with this bid a statement setting forth his/her/its experience and qualifications. The statement shall be made on the forms provided by the Town and must accompany each bid. The three lowest bidders will be required to submit Subcontractor's experience and qualifications statements within 48 hours of the bid opening, on forms provided by the Town.

END OF BID REQUIREMENTS

PART II. BIDDING DOCUMENTS

PROPOSAL TO THE TOWN OF ATHERTON

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT PROJECT NO: 56079

Bid of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of _____, doing business as * _____ to the Town of Atherton.

*(Insert a "corporation", a "partnership" or an "individual".)

In compliance with your Advertisement for Bids, the undersigned as BIDDER hereby proposes to perform all WORK for the construction of **MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT** in strict accordance with the Contract Documents therefore. BIDDER, declares and certifies that he has carefully examined the location of the proposed work, the proposed form of the Construction Contract, and the Plans, Specifications and Special Provisions and other Contract Documents referred to therein; that he proposes, and agrees if this Proposal is accepted, that he will contract with the Town of Atherton, in the form of the Construction Contract annexed hereto, to provide all necessary labor, machinery, tools, apparatus and other means of construction and to do all the work and furnish all the materials specified in the Construction Contract, in the manner and time therein prescribed and according to the requirements of the City Engineer as therein set forth, and that he will accept in full payment therefore for the unit prices set fourth in the annexed BID SCHEDULE.

BIDDER certifies to comply with the California Labor Code requirements and General Prevailing Wage Determinations made by the Director of Industrial Relations.

Accompanying this Bid is * _____

*(Insert "Cash," "Cashier's Check," "Certified Check" or Bidder's Bond" as the case may be) made out to the Town of Atherton, in an amount equal to at least ten percent (10%) of the total bid. If this proposal is accepted and the undersigned should fail to sign and return the Construction Contract, together with all bonds and insurance required by Sections 3.02 and 3.03 of the Standard Specifications within fifteen (15) working days of receipt of

the Construction Contract, or fail to provide an acceptable schedule required by Section 6.03 of the Standard Specifications or an acceptable recycling plan required by section 16.02 of the Standard Specifications within twenty (20) working days of receipt of the Construction Contract, the Town may, at its option, determine that the BIDDER has abandoned the Contract. Thereupon this Proposal and the acceptance thereof shall be null and void, and the forfeiture of such bid security accompanying this Proposal shall operate and the same shall become the property of the Town of Atherton.

BIDDER hereby agrees to commence WORK under this contract within ten (10) working days of the date shown at the top of the NOTICE TO PROCEED and to fully complete the WORK within **45** working days from the FIRST DAY OF CONSTRUCTION as defined in the NOTICE TO PROCEED. BIDDER further agrees to pay as liquidated damages, the sum of **\$700.00** for each working day beyond the completion date deadline that the WORK has not been substantially completed, as provided in Section 6.06 of the Standard Specifications.

BIDDER acknowledges receipt of the following ADDENDUM:

BID SCHEDULE

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

NOTE: Bids shall include sales tax and all other applicable taxes and fees.

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT COST	TOTAL
1	Mobilization	1	LS		
2	Traffic Control	1	LS		
4	Water Pollution Control	1	LS		
5	Clearing & Grubbing	1	LS		
6	Earthwork	240	CY		
7	Removing Existing Street Name Post	1	EA		
8	Remove Existing Bollards	5	EA		
9	Sawcut and Remove Existing Pavement	950	SF		
10	Existing Curb and Sidewalk Removal	680	SF		
11	Remove Existing Lane Striping	1600	LF		
12	Remove Existing Ladder Crosswalk Striping	1100	SF		
13	Remove Existing Pavement Legend	100	SF		
14	Remove & Plug Existing Drain Inlet	1	LS		
15	Remove Existing Tree	3	EA		
16	Remove Existing Tree Stump	1	LS		
17	Convert Existing Drain Inlet to Manhole	1	LS		
18	Furnish & Install New Type G1 Drain Inlet	1	EA		
19	18" RCP	8	LF		
20	Adjust Existing Utility Covers to Finished Grade	1	EA		
21	Detectable Warning Surface	7	EA		
22	Header Board	20	LF		
23	Aggregate Base Class 2	180	TN		
24	Asphalt Concrete Type B	170	TN		
25	AC Dike	95	LF		
26	Thermoplastic Striping – Detail 21	405	LF		
27	Thermoplastic Striping – Detail 23	448	LF		
28	Thermoplastic Striping – Detail 24	62	LF		
29	Thermoplastic Striping – Detail 27B	88	LF		

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT COST	TOTAL
30	Thermoplastic Striping – Detail 38	138	LF		
31	Thermoplastic Striping – Detail 38A	228	LF		
32	Thermoplastic Striping – Detail 39	290	LF		
33	Thermoplastic Striping – Detail 39A	241	LF		
34	Thermoplastic Striping – 8" White	75	LF		
35	Thermoplastic Striping – 12" White	440	LF		
36	Thermoplastic Striping – 24" White	435	LF		
37	Performed Thermoplastic Paint – Facebook Green	1900	SF		
38	Pavement Legend	163	SF		
39	Water-borne Yellow Paint on AC Dike	95	LF		
40	Furnish & Install New Sign Post	4	EA		
41	Furnish & Install New Sign Panel	5	EA		
42	Relocate Existing Bench and Trash Can	1	LS		
43	Remove & Dispose of Ped Push Button Assembly	4	EA		
44	Remove & Dispose of Ped Head & Mount Equipment	6	EA		
45	Remove & Salvage Signal Head & Mounting Equipment	3	EA		
46	Remove & Salvage Type 16-1-70 Signal Pole & Equip.	1	EA		
47	Remove & Dispose of Existing Pull Box	11	EA		
48	Remove & Dispose of Existing Signal Pole Foundation	1	EA		
49	Conductors & Conduit (Jack/Drill or Pavement Fill)	315	LF		
50	Conductors & Conduit (Dirt Fill)	55	LF		
51	Connect New Conduit to Existing Pull Box	2	EA		
52	6' x 6' Loop Detectors	2	EA		
53	Pole (Type PPBP)	2	EA		
54	Pole (Type 19-3-100-25) – City Furnished/Contractor Installed	1	EA		
55	Pole Foundation (PPBP)	2	EA		
56	Pole Foundation (Type 19-3-100)	1	EA		
57	Pull Box #5	4	EA		
58	Pull Box #6	3	EA		
59	Ped Head Mounts	8	EA		
60	Ped Head (Countdown LED)	6	EA		

ITEM NO.	DESCRIPTION	EST. QTY	UNIT	UNIT COST	TOTAL
61	Pedestrian Push Button & Sign (Type B)	6	EA		
62	12" Signal Head Backplates	6	EA		
63	Signal Head Mounts	6	EA		
64	Signal Heads 12" – 3 sec (LED)	2	EA		
65	Signal Head 12" – 5 sec (LED)	4	EA		
66	Signal Head 12" – 5 sec "Dog House" (LED)	2	EA		
67	Relocate Existing Video Detection Camera and Mounting Equipment	1	EA		
68	Relocate Existing Sign (Mast-arm Mounted)	2	EA		
69	Loop Detector Module	8	EA		
70	General Intersection Wiring and Splicing	1	LS		
71	General Wiring Work in Controller	1	LS		
72	Controller Reprogramming & Equipment Adjustment	1	LS		
SUB TOTAL					

Business name of BIDDER (print)

Date

Authorized signature of BIDDER

Business address (print)

Name of signer (print)

Telephone number

Title of signer (print)

Fax number

Contractor's License Number

License Classification(s)

Contractor's License expiration date

Note: Corporations must, upon request, furnish certification attesting to corporate existence and authority of officers to sign contracts and other documents

NON-COLLUSION AFFIDAVIT

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

This Affidavit to be fully executed by Bidder and submitted with the bid

STATE OF CALIFORNIA)
)ss.
COUNTY OF _____)

* _____, being first
 *[name]
duly sworn, deposes and says that he or she is * _____
*[President, Secretary, Manager, Owner or Representative]
of * _____, the party making the
 *[Name of Company or Corporation or Owner]

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

The undersigned declares under penalty of perjury under the laws of the State of California that the foregoing representations and all other representations made in the undersigned's proposal attached hereto are true and correct.

Signature of: President, Secretary,
Manager, Owner or Representative

BID BOND
TOWN OF ATHERTON

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

KNOW ALL PERSONS BY THESE PRESENTS, that we,

_____ ,
as Bidder, and _____, as
Surety, are held and firmly bound unto the Town of Atherton, in the penal sum of
_____ dollars (\$ _____), lawful money of the United States, which
sum is at least ten percent (10%) of the total amount bid by Bidder to the TOWN for the above
stated project, for the payment of which sum well and truly made, we bind ourselves, our heirs,
executors, administrations, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bound Bidder submits a bid to the TOWN
for the above referenced project (the terms and conditions of the bid are incorporated by
reference); and if said bid is rejected by the TOWN, or if said bid is accepted by the TOWN and
the Bidder executes all Contract Documents and provides all required bonds, insurance and
schedule, in the time and manner specified in the Town of Atherton Standard Specifications, then
this obligation shall become null and void; otherwise, it shall be and remain in full force and effect
in favor of the TOWN.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety
and its bond shall be in no way impaired or affected by any extension of the time within which the
TOWN may accept such Proposal; and said Surety does hereby waive notice of any such
extension.

In the event suit is brought upon this bond by the TOWN and judgment is recovered, the surety
shall pay all reasonable costs incurred by the TOWN, including reasonable attorney's fees to be
fixed by the court.

IN WITNESS WHEREOF, the undersigned represent and warrant that they have the right, power,
legal capacity and authority to enter into and execute this document on behalf of the above
bounded Bidder and Surety, and have set their names, titles and signatures hereon this
_____ day of _____, 201__.

BIDDER

SURETY

By _____

By _____

Address _____

Address _____

Notary acknowledgments of Bidder and Surety must be attached, and Power of Attorney for Surety attached.

CONTRACTOR'S EXPERIENCE AND QUALIFICATION

To be submitted with bid

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT PROJECT NO: 56079

The following statement as to experience and qualifications of the Bidder is submitted in conjunction with the proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the bidder.

The Bidder has been engaged in the contracting business under the present business name for ____ years. The experience of Bidder's Responsible Managing Officer or Responsible Managing Employee in work of a nature similar to that covered in the proposal extends over a period of _____ years.

The Bidder currently holds a valid Contractor's License of the following Class or Classes, _____ issued by the Contractor's License Board under the provision of Chapter 9 of Division 3 of the California Business and Professions Code.

The Bidder, as a Contractor, has never failed to satisfactorily complete a contract awarded to him, except as follows: (Name any and all exceptions and reasons therefore).

The following is a list of plant and equipment owned by the Bidder, and which is available for use on the proposed work as required.

<u>Quantity</u>	<u>Name, Type & Capacity</u>	<u>Condition</u>	<u>Location</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The following are the most recent projects on which the Bidder has performed work of similar nature, size and complexity, and the names, addresses and phone numbers of the contracting agencies. (Name at least four.)

PROJECT 1

Project name: _____

Location: _____, Owner's name: _____

Nature of project: _____

Completion date: _____, Contract time allotted: _____

Total project cost: \$ _____, Completed on time? _____

Nature of Bidder's participation: _____

Value of work performed by bidder's employees:

\$ _____

Name of Owner's representative: _____

Representative's address: _____

_____, Telephone number: _____

PROJECT 2

Project name: _____

Location: _____, Owner's name: _____

Nature of project: _____

Completion date: _____, Contract time allotted: _____

Total project cost: \$ _____, Completed on time? _____

Nature of Bidder's participation: _____

Value of work performed by bidder's employees:

\$ _____

Name of Owner's representative: _____

Representative's address: _____

_____, Telephone number: _____

CONTRACTOR'S EXPERIENCE AND QUALIFICATIONS (page 2 of 3)

PROJECT 3

Project name: _____

Location: _____, Owner's name: _____

Nature of project: _____

Completion date: _____, Contract time allotted: _____

Total project cost: \$ _____, Completed on time? _____

Nature of Bidder's participation: _____

Value of work performed by bidder's employees:

\$ _____

Name of Owner's representative: _____

Representative's address: _____

_____, Telephone number: _____

PROJECT 4

Project name: _____

Location: _____, Owner's name: _____

Nature of project: _____

Completion date: _____, Contract time allotted: _____

Total project cost: \$ _____, Completed on time? _____

Nature of Bidder's participation: _____

Value of work performed by bidder's employees:

\$ _____

Name of Owner's representative: _____

Representative's address: _____

_____, Telephone number: _____

Signed by Bidder _____

CONTRACTOR'S EXPERIENCE AND QUALIFICATIONS (page 3 of 3)

Public Contract Code Section 10285.1 Statement

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

Note: The bidder must place a checkmark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Public Contract Code Section 10162 Questionnaire

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

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

Yes _____ No _____

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

DESIGNATION OF SUBCONTRACTORS

To be submitted with bid

TOWN OF ATHERTON

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

Pursuant to California Public Contract Code, Section 4100 et seq., the Advertisement for Bids and Sections 2.09 and 6.01 of the Town of Atherton Standard Specifications, the following list gives the name, Contractor's license number, business address, and description of work to be performed by each subcontractor that will perform work valued at one-half of one percent or more of the total bid amount if the Bidder is awarded the Contract. Contractors submitting the three lowest bids shall provide, within 48 hours of bid opening, references for each subcontractor named in the form that is attached. **[An inadvertent error in listing the license number shall not be grounds for filing a bid protest or considering the bid nonresponsive if the corrected license number is submitted to the Town of Atherton within 24 hours after the bid opening]**

Subcontractor's Name	Contractor License Number	Location of Business	Item No(s) or Description of work to be Performed
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

Signed by Bidder _____

Attach additional sheets if needed

SUBCONTRACTORS' EXPERIENCE AND QUALIFICATIONS

To be submitted within 48 hours of bid opening by the three apparent lowest bidders.

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT PROJECT NO: 56079

The following statement as to experience of the Bidder's Subcontractors is submitted in conjunction with the proposal, as a part thereof, and the truthfulness and accuracy of the information is guaranteed by the bidder.

Subcontractor's name: _____ Years in Business: _____,
Licenses held: _____, \$ value of largest subcontract _____
Name, address and telephone number of owner's representatives on two recently completed comparable jobs:
(1) _____
(2) _____

Safety record: (Indicate EMR, RIR, & LTIR) _____

Subcontractor's name: _____ Years in Business: _____,
Licenses held: _____, \$ value of largest subcontract _____
Name, address and telephone number of owner's representatives on two recently completed comparable jobs:
(1) _____
(2) _____

Safety record: (Indicate EMR, RIR, & LTIR) _____

Subcontractor's name: _____ Years in Business: _____,
Licenses held: _____, \$ value of largest subcontract _____
Name, address and telephone number of owner's representatives on two recently completed comparable jobs:
(1) _____
(2) _____

Safety record: (Indicate EMR, RIR, & LTIR) _____

ADDENDA

This Proposal is submitted with respect to the changes to the contract included in addenda number/s

(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Engineer's Estimate sheets that were received as part of the addenda.)

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Non-collusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Date: _____



Signature and Title of Bidder

Business Address _____

Place of Business _____

Place of Residence _____

PART III. AGREEMENT FOR CONSTRUCTION SERVICES

SAMPLE

[Contractor's Name]
[and Address]
[]

RE: NOTICE OF AWARD OF CONSTRUCTION CONTRACT

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

Dear **[Contractor's Name]**:

The Atherton City Council awarded the contract for project number xxxxx to **[Contractor's Name]** on **[Date]**.

In accordance with the Bid Documents, the Contractor shall properly execute and deliver to the City Engineer/Public Works all of the Award Documents 1 through 8 listed. Unless documents 1 through 6 are delivered within fifteen (15) working days of this Notice of Award and documents 7 and 8 are delivered within twenty (20) working days of this Notice of Award, the award of contract may be voided by the Town, in which case the Bid Bond submitted by the Contractor will be forfeited to the Town.

1. Construction Contract (signed and notarized)
2. Faithful Performance Bond and Payment Bond
3. Workers' Compensation Insurance Certification
4. Certificate of Liability Insurance and Owner's Endorsement
5. Town Business License
6. W-9 Request for Federal Tax Identification
7. Critical path progress schedule conforming to the provisions of Section 6.03 of the Standard Specifications
8. Recycling Plan conforming to the provisions of Section 16.02 of the Standard Specifications

Please return the two signed copies of the Construction Contract, with the date on page 1 left blank. It will be filled in by the City Manager on the date that the Town executes the Agreement. The contract for this project will not be binding upon the Town until the Construction Contract has been properly executed by both the Contractor and the Town.

When surety bonds are used as security, the surety's Attorney in Fact must attach a current Power of Attorney to the bonds. The signature of the Attorney in Fact shall be notarized. Surety bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California. The faithful performance and payment bonds shall be in a sum not less than required by Section 3.02 of the Standard Specifications, in the forms that are attached. Bonds must be issued by a bond company

admitted by the California Department of Insurance to transact business in the State and having a Best's Credit rating of at least A+. The performance bond will be maintained throughout the one-year guarantee period that follows acceptance, during which time the bond amount will be reduced to ten percent of the final contract price.

Your attention is directed to Section 3.03 of the Standard Specifications regarding insurance form and content. **Certificates of Insurance are not acceptable** in lieu of originals or certified copies of insurance policies or endorsements bearing original signatures of authorized individuals. Please make your insurance representative aware of the specific language required by the specifications.

Should any bond, security, or insurance policy be canceled or become unsatisfactory to the Town, notice will be given to the Contractor to that effect, and the City Engineer may issue a Stop Work Notice to suspend the Contractor's performance until a satisfactory substitute is posted by the Contractor. No further payments will be deemed due or will be made under the Contract until a satisfactory substitute is posted by the Contractor.

In addition to award documents, before starting work, the Contractor shall submit the following to the City Engineer/Public Works:

- A. Designation in writing of an authorized representative who shall have complete authority to act on behalf of the Contractor for this project, including the authority to execute contract change orders, and designation in writing of a person or persons who shall be at the project site and be in control of all work at any time that work is being performed, and who shall receive any communications and correspondence from the Town, on behalf of the Contractor.
- B. A program to control water pollution and erosion during construction of the project, fulfilling the requirements of Section 14.03 of the Standard Specifications or a request for a waiver pursuant to Section 14.04.

Within ten (10) working days after the Contractor has properly executed and delivered all Award Documents and prior to issuing the Notice to Proceed, the City Engineer will schedule a pre-construction meeting with the Contractor to arrange utility coordination, discuss construction methods, and clarify procedures for inspection of work and transmittal of documents. Please contact the City Engineer in order to set the date for the pre-construction meeting, coordinate the proposed construction schedule, and facilitate delivery of executed Award Documents.

Sincerely,

Marty Hanneman, P.E.
City Engineer

TOWN OF ATHERTON

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

Faithful Performance Bond

KNOW ALL MEN BY THESE PRESENTS, THAT WHEREAS, the Town of Atherton has, on the _____ day of _____, 201__, awarded to _____

_____, hereinafter designated as the "Contractor", a contract for the construction of MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT; and

WHEREAS, said Contractor is required under the terms of said construction contract to furnish a bond for the faithful performance of said contract;

NOW, THEREFORE, we, the Contractor, and

_____ as Surety, are held and firmly bound unto the TOWN the penal sum of _____ dollars (\$_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

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

It is acknowledged that the construction contract provides for one-year guarantee period, during which time this bond remains in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall, in any way,

affect its obligations on this Bond, and it does hereby waive notice of any change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications. Said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this __ day of _____, 201__, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

CONTRACTOR

SURETY

By _____

Address:

Address:

Telephone

Telephone

Notary Acknowledgments of Contractor and Surety must be attached.

TOWN OF ATHERTON

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

Labor and Materials Payment Bond

KNOW ALL MEN BY THESE PRESENTS, THAT WHEREAS, the Town of Atherton has, on the _____ day of _____, 201__, awarded to _____, hereinafter designated as the "Contractor", a construction contract for the construction of MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS PROJECT; and

WHEREAS, said Contractor is required to furnish a bond in connection with said contract providing that if said Contractor, or any of his, her or its subcontractors, shall fail to pay for any material, provisions, or other supplies 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, the Surety of this bond will pay the same to the extent hereinafter set forth:

NOW, THEREFORE, we, the Contractor, and _____, as Surety, are held and firmly bound unto the TOWN the penal sum of _____ dollars (\$_____) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his/her/its heirs, executors, administrators, successors or assigns, or its subcontractors, shall fail to pay (1) any of the persons named in Section 3181 of the Civil Code, (2) amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or (3) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the contractor and subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to the work and labor, that the surety will pay for same and also will pay, in case suit is brought upon this bond, a reasonable attorney's fee in such suit, which fee shall be fixed by the Court.

This bond and all its provisions shall inure to the benefit of and all persons named in Section 3181 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

This bond is given to comply with the provisions of Chapter 7, Part 4, Division 3, of the Civil Code. The liability of the Principal and Surety hereunder is governed by the provisions of said Chapter, all acts amendatory thereof, and all other statutes referred to therein.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall, in any way, affect its obligations on this Bond, and it does hereby waive notice of any change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications. Said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this ___ day of _____, 201__, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

CONTRACTOR

SURETY

By _____

Address: _____

Address: _____

Telephone

Telephone

Notary Acknowledgments of Contractor and Surety must be attached.

SAMPLE

CERTIFIED MAIL

[Dated]

[Contractor's]
[Name and]
[Address]

RE: NOTICE TO PROCEED
MIDDLEFIELD ROAD COMPLETE STREETS
INTERSECTION IMPROVEMENTS PROJECT
PROJECT NO: 56079

Dear [Contractor's Name]:

You are hereby notified to start work on the above referenced project in accordance with the Construction Contract dated the **[date on the face of the Agreement]** within ten (10) working days from the date at the top of this letter. [Contractor may not begin work until TOWN has received and approved all bonds and evidence of insurance.](#) The first day of the contract time will be the first day on which work is actually performed or ten (10) working days from the date at the top of this letter, whichever is first.

Time is of the essence in the performance of work under these Contract Documents and all timing requirements shall be strictly adhered to unless otherwise modified by the TOWN, in accordance with the Contract Documents.

You are required by the terms of the Contract Documents to perform diligently and continuously in order to complete all work in every detail to the satisfaction of the TOWN within 45 working days after the first day of construction.

Sincerely,

Marty Hanneman, P.E.
City Engineer

GUARANTEE

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS
PROJECT
PROJECT NO: 56079

Project Description:

Grind and replace approximately 950 square feet of asphalt to a 4-inch depth over 8-inch base for roadway and 4-inch base for sidewalk in various locations at intersection. This work to include all necessary traffic control and will involve performing of traffic signal modifications, providing accessible curb ramps, upgraded pedestrian push buttons, countdown style pedestrian heads, improved pedestrian and bike paths and removing barriers along the pedestrian path per Town of Atherton Standard specifications and special provisions.

Date of Acceptance:

We hereby guarantee that the work we have installed for the Town has been done in accordance with the approved Contract Documents and that the work as installed will fulfill the requirements of the guarantee. We agree to repair or replace any or all of the work, together with any other adjacent damages resulting from our work, that may prove to be defective in its workmanship or material within a period of ONE YEAR from the date of acceptance of the above-named work by Town without any expense whatsoever to the Town, ordinary wear and tear and unusual abuse or neglect excepted.

Within fifteen (15) days after being notified in writing by Town of any defects in the work, we agree to commence and prosecute with due diligence all work necessary to fulfill the terms of this guarantee, and to complete the work within a reasonable period of time (not to exceed twenty (20) days after commencement of the repair work); and in the event of our failure to so comply, we collectively and separately, do hereby authorize said Town to proceed to have such work done at our expense and we will honor and pay the cost and charges therefore upon demand.

DATED: _____

Contractor

BY: _____

Title: _____

PART IV. SPECIAL PROVISIONS

SPECIAL PROVISIONS

TOWN OF ATHERTON

MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS

100 - CONTRACT DOCUMENTS

All work shall be governed by and done in accordance with the following contract documents:

- A. Those documents, numbers 1 through 14, listed in Section 1.01 of the Standard Specifications
- B. Plans entitled MIDDLEFIELD ROAD COMPLETE STREETS INTERSECTION IMPROVEMENTS, consisting of 5 sheets prepared by Hatch Mott MacDonald dated March 2017, these Special Provisions, Technical Specifications, and Addenda, if any.

Any and all work and requirements called for in any one or more of the above listed or referenced documents shall be deemed to be called for in all.

These Special Provisions shall govern over conflicting provisions and requirements of the Standard Specifications and Drawings.

In the event of any conflict, doubt, or questions arising with respect to the true meaning of the above listed documents, reference shall be made to the City Engineer and his decision shall be final.

101 - GENERAL DESCRIPTION OF WORK

The work shall consist of:

Grind and replace approximately 950 square feet of asphalt to a 4-inch depth over 8-inch base for roadway and 4-inch base for sidewalk in various locations at intersection. This work to include all necessary traffic control and will involve performing of traffic signal modifications, providing accessible curb ramps, upgraded pedestrian push buttons, countdown style pedestrian heads, improved pedestrian and bike paths and removing barriers along the pedestrian path per Town of Atherton Standard specifications and special provisions. Coordinate with PG&E for utility overlap and to update existing pull boxes, perform traffic signal modifications, install conduit and conductors, miscellaneous connectors as needed to form a fully functional traffic signal.

The stages to be performed are as followed:

- I. Project Submittals – Including but not limited to Cost Breakdown, Product Submittals, Project schedule, etc.
- II. Order Materials – Proof of ordering materials shall be submitted within three days of receipt of approved submittals from the City.
- III. Coordination with PG&E
- IV. Jobsite preparation – includes public notifications, covering appurtenances, vegetation clearance, removal of pavement markers, signage and thermoplastic pavement markings, guard rail (if necessary and to be replaced) and sweeping.
- V. Traffic control
- VI. Removal of existing asphalt, earth excavation and traffic signal equipment
- VII. Installation of new pavement, pavement marking striping, pedestrian/bicycle path signage, traffic signal equipment, and ADA compliant handicap ramps

The unit price bid for each item shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the bid item. The Type 19-3-100-25 Pole will be city furnished.

102 - BEGINNING OF WORK

The Contractor shall provide Project Submittals within ten (10) work days following the date of the City Engineer's Notice to Proceed. The first day on which on-site labor is performed or ten (10) working days after the date of the Notice to Proceed, whichever is sooner, shall be considered the first day of construction for the purpose of counting working days. Contractor shall start work on site within five (5) working days of receiving the material. Contractor shall not perform any on-site labor until Owner has received and approved Contractor's evidence of insurance and payment and performance bonds, and the required submittals.

Construction shall not begin until all material and equipment (including State and Town Furnished material) is on site.

103 - TIME FOR COMPLETION

The time allowed for completion of the work shall be 45 working days.

104 - LIQUIDATED DAMAGES

The Contractor acknowledges that the actual damages likely to result from breach of Section 103 will be difficult to estimate on the date of this Agreement and would be difficult for Town to prove. The parties intend that Contractor's payment of the Liquidated Damages Amount would serve to compensate Town for any breach by Contractor of its obligations under Section 103, and they do not intend for it to serve as punishment for any such breach by Contractor. Therefore, the parties agree that if the work required under this contract is not completed within the time specified for completion, as adjusted in accordance with the Contract Documents, Liquidated Damages in the amount of \$700.00 per calendar day shall be assessed as set forth in Section 6.06 of the Standard Specifications.

105 – CONSTRUCTION SCHEDULE

The Contractor shall provide the Town of Atherton with a construction schedule. Construction schedule shall include the date of work and task performed. Work not completed as scheduled for any reason, except for Act of Nature or force majeure, shall incur an administrative penalty and the Contractor shall be required. In the event of Act of Nature or Force Majeure, the work shall continue after the event and shall be no earlier than two (2) days from the previous scheduled date to allow for proper re-notification per section 202 of these special provisions.

106 – RECYCLING PLAN

The contractor's attention is directed to section 16.02 of the standard specifications requiring a recycling plan for the disposal of excavated asphalt and base rock.

Existing material is known to have contaminants that may not be recycled; particularly paving fabric from previous overlays. All materials removed from the site shall be recycled or disposed of as part of the contract price. No extra assessments will be paid for disposal fees.

107 – GRINDING OF ASPHALT

Grinding for patches shall be calculated by multiplying the area of the finished patch by the depth of patch called for on the plans or directed by the project manager. No payment will be made for over excavation, unless directed by the project manager. Calculated measurements will be based on the total area of each pavement depth of patch, and will be made to the nearest square foot.

In areas where manholes, valves or survey monuments prevent access by the grinding machine, the asphalt shall be removed by pavement breaker down to either the requested depth or until base material is reached, whichever is greater. This work will be included in the price of the overall contract and shall not be added on as an extra.

108 – TACK COATS

The edges of existing asphalt and/or concrete gutter or utility accesses shall be sprayed with a primed and tack coated in compliance with requirements 32.03 and 32.04 of the Standard Specifications. The cost of these applications shall be included in the prices paid for other items of work, and no extra compensation will be allowed.

109 – ASPHALT CONCRETE (AC)

Asphalt concrete (AC) shall be placed in the thickness shown on the list or as directed by the project manager. AC material for lifts below the surface lift may be 19mm (3/4") or 12.5 mm (1/2") medium, PG 64-16 or equivalent. AC for the surface course shall be 12.5 mm (1/2") medium graded, PG 64-16 or equivalent. Spreading equipment called for in Section 32.07 of the Standard Specifications will not be required. However, the compaction and tolerance requirements of Section 32.10 will be enforced.

AC in patches calling for 4" of asphalt shall be placed in 2 lifts.

Equipment used to compact AC shall be suitable to achieve uniform compaction of at least 95% relative compaction. The surface course shall be compacted with a steel wheel tandem roller weighing 8-10 tons.

Asphalt concrete will be measured and paid for by the square foot of the finished patch area, for the various thicknesses of AC called for, to the nearest whole square foot.

110 – TRAFFIC STRIPING, PAVEMENT MARKINGS AND MARKERS

The installation of traffic stripes and pavement markings shall be same as existing condition and touchup work shall be done to the striping of the immediate fifty (50) feet of intersecting streets adjacent to streets that are to be resurfaced. Stop bars shall be thermoplastic. All other stripes may be painted or thermoplastic. Traffic striping shall conform to the Provisions of Section 84, "Traffic Striping and Pavement Markings" of the Caltrans Standard Specifications.

All yellow, clear and blue pavement markers shall be replaced at their existing locations. Markers shall be included in the price paid for in the AC paving.

Traffic striping will be measured and paid for by the linear foot. Pavement markings shall be paid for by the each pavement marking installed.

201 - JOBSITE PREPARATION

Prior to the installation of pedestrian/bicycle path and intersection work, the Contractor shall post a temporary sign at the site as required by the General notes in the project plans. Contractor shall trim tree branches or shrubs as may be necessary to complete the work.

When removing the pavement markers the Contractor shall remove any adhesive left on pavement caused from the removal of raised pavement markers. Any pavement damage (potholes) caused by removing raised pavement markers shall be filled.

Low planting that overhangs the work area shall be cut back neatly where it is out of the way, before removing existing traffic signal equipment. Branches and limbs of trees and bushes that are likely to be hit or damaged by the construction process shall be cut back in accordance with section 73 of the Atherton Standard Specifications, before installing traffic signal equipment.

The Contractor shall refrain from using diesel fuel, gasoline or solvents of any kind for cleaning tools and equipment in such a manner as to permit spillage of the diesel fuel or solvent on new or existing pavement, curbs and gutters, parkways or other improved areas.

202 - NOTIFICATION

At least **seven (7) days** prior to the beginning of construction, the Contractor shall notify the adjacent affected property owners, residents, businesses and agencies by an approved, written notice detailing the work to be completed, the projects schedule and the hours of work.

The Contractor shall refer to the Caltrans Standards and Town of Atherton Plans and Specifications manual (revised April 2000) to reference all requirements for traffic control, notifications, material specifications, hours of work and any other Town of Atherton specific requirements.

Contractor shall furnish a computer generated schedule for the work, listing the dates on which task will affect traffic. The Contractor shall adhere diligently to said schedule in the prosecution of the work. The Contractor must submit a traffic control plan for the project to the Engineer for approval prior to commencing with the project.

All revisions shall be marked clearly and notes shall be in red and be clear and legible.

203 - TRAFFIC CONTROL

The Contractor shall submit a traffic control plan to the Engineer for approval. The Contractor shall furnish and maintain in good working order all barricades and flashers, and provide flagmen as necessary to protect public and traffic. The Contractor shall maintain business and property access as practicable as possible. The Traffic Control shall conform to Caltrans traffic control requirements and working hours as specified in their encroachment permit for the project area.

The Contractor shall furnish, install, and maintain all barricades and direction signs necessary to accomplish the above traffic restrictions. All safety devices, their maintenance, and use shall conform to the latest requirements of OSHA and shall conform to the applicable provisions of the "Work Area Traffic Control Handbook," California State Traffic Manual of Traffic Controls for Construction and Maintenance Work Zones (1990), and the "Manual on Uniform Traffic Control Devices" (FHWA 1988). It shall be the complete responsibility of the Contractor to protect persons from injury and to avoid property damage. Adequate barricades, construction signs, flashers, and other such safety devices, as required, shall be placed and maintained during the progress of the construction work until the project is completed. Whenever required, flagmen shall be provided to control traffic.

The Contractor shall provide adequate and continuous ingress and egress for vehicles and pedestrian traffic in a manner that will hold congestion and delay of such traffic to a practicable minimum by furnishing, installing, and maintaining all necessary temporary signs, barricades, and other devices and facilities as approved by the Engineer. As the work progresses, the Contractor shall relocate such devices and facilities as necessary to maintain proper routing. Unless otherwise specified, upon conclusion of the need, the Contractor shall remove all temporary traffic routing devices and facilities from the work site. On multi-lane, collector and arterial roadways, the Contractor shall provide a minimum of one through lane in each direction of travel or a minimum of one through lanes on one-way streets. Each traffic lane shall not be less than ten (10) feet wide.

Lane closures are allowed only during 8:30 a.m. and shall cease at 2:00 p.m. during the time that school is in session as approved by the City Engineer. Lane closures are allowed only during 8:30 a.m. and 4:30 p.m. during school vacation / holiday time. Menlo-Atherton High School, Encinal Elementary School and Laurel Elementary School vacation and holiday schedule includes the days of 5/1/17, 5/29/17, and from 6/16/17 to 8/16/17. Any extended hours required by the Contractor shall be approved by the City Engineer. Within the "normal working hours," the Contractor shall place or remove the necessary traffic barricades, move equipment either on or off the job site, perform all installation of pedestrian hybrid

beacons and construction of pedestrian landing area.

All necessary traffic control costs shall be included in the overall bid item price.

204 – MOBILIZATION

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; and for all other work (including the cost of obtaining an encroachment permit from Caltrans, and replacing the guardrail in kind) and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

205 – GUARANTEE

All work performed by the Contractor shall be guaranteed that the work the Contractor have installed for the Town has been done in accordance with the approved Contract Documents and that the work as installed will fulfill the requirements of the guarantee. The Contractor agree to repair or replace any or all of the work, together with any other adjacent damages resulting from their work, that may prove to be defective in its workmanship or material within a period of ONE YEAR from the date of acceptance of the work by Town without any expense whatsoever to the Town, ordinary wear and tear and unusual abuse or neglect excepted.

PART V. TECHNICAL SPECIFICATIONS

PART V. TECHNICAL SPECIFICATIONS

SPECIFICATIONS
and
SPECIAL PROVISIONS
for
Signal and Lighting Improvements
at
Middlefield Road / Oak Grove Avenue
Town of Atherton, San Mateo County, California



Leopoldo Trujillo, P.E., T.E.
Mott MacDonald
1300-B First Street
Gilroy, CA 95020
(408) 848-3122

March 7, 2017

1 SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS

1.01 DESCRIPTION OF WORK

Signals, Lighting and Electrical Systems shall be installed as indicated on the project Plans and shall conform to the provisions in Section 86, "Signals, Lighting and Electrical Systems," of the Caltrans Standard Specifications and these special provisions. All work covered by these special provisions shall conform to the provisions in the 2015 Caltrans Standard Plans and Specifications, hereafter referred to as the "Standard Plans" and "Standard Specifications," and these special provisions.

Traffic signal and lighting work shall be performed at the following location:

Middlefield Road / Oak Grove Avenue
Atherton
San Mateo County, California

Signals, lighting, and electrical systems work for this project may consist of, but is not limited to, installing traffic signal and roadway lighting systems including; the protection of existing utilities and appurtenances; the installation of foundations, pole standards, mast arms, signal display equipment, luminaires, lamps, underground conduits, pull boxes and conductors; the bonding and grounding of circuitry, excavating and backfilling; the installation and restoration of roadway and sidewalk paving and ADA compliant access at crosswalk locations; signing and striping; grade restoration; clearing and grubbing; removal of existing curb, gutter, and pavement; removal of obstructions including trees and tree branches; sawcutting of pavement; storm drain inlet and storm drain line removal and installation; traffic control; and all other work necessary and any other items of work not mentioned above that are required by the Plans and these Special Provisions.

In addition to the above, the work includes but is not limited to, all work shown on the plans, specified herein or in the Standard Plans and Standard Specifications, or required to provide a complete traffic signal and lighting installation as determined by the Engineer.

1.02 REFERENCES, CODES AND STANDARDS

In addition to the regulations and code specified in Section 7, "Legal Relations and Responsibilities to the Public." All work and materials shall be in accordance with the Regulations of the Pacific Gas and Electric Company pertaining to service equipment and installations thereof. The work embraced herein shall also be constructed in conformance with the current edition of the National Electrical Code, and these Special Provisions.

1.03 TRAFFIC CONTROL SYSTEM

The Contractor shall be responsible for the preparation of a construction Traffic Control Plan (TCP). The TCP shall be prepared by a California registered Civil Engineer with experience in the preparation of traffic control plans. Construction work shall not commence until the TCP has been reviewed and approved by the Town Engineer.

Traffic control system shall consist of closing roadway shoulders and narrowing or closing traffic lanes in accordance with the provisions of Section 12, "Temporary Traffic Control," of the Standard Specifications, and these special provisions.

Contractor shall move or place temporary road signs necessary to keep at least one lane of traffic open in each direction during construction.

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

If any component in the traffic control system is damaged, displaced, or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair said component to its original condition or replace said 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 excavation adjacent to the traveled way, shall be removed from the traveled way, shoulder and auxiliary lanes. If the Contractor so elects, said components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right of way. Upon completion of the work requiring lane closure, all components of the traffic control system shall be removed from the site of the work and shall become the property of the Contractor.

At no time shall the roadway be closed to traffic, unless approved the Town. Lane restrictions shall not commence before 8:30 a.m. and shall cease at 2:00 p.m. during the time that school is in session. Lane restrictions shall not commence before 8:30 a.m. and shall cease at 4:30 p.m. during school vacation / holiday time. School vacation and holiday schedule includes the days of 5/1/17, 5/29/17, and from 6/16/17 to 8/16/17. No work that interferes with public traffic shall be done outside these hours except for work required under Sections 7-1.03 "Public Convenience," and Section 7-1.04 "Public Safety," of the Standard Specifications. When work is not actively in progress the full width of the traveled way shall be open for public traffic. Minor deviations from the requirements of this section concerning hours of work may be permitted upon approval by the Town Engineer.

1.04 COST BREAK-DOWN

The Contractor shall determine the quantities required to complete the work shown on the plans. The quantities and values shall be included in the cost break-down submitted to the Engineer for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-down submitted for approval.

The cost break-down shall be submitted to the Engineer for approval within 15 days after the contract has been approved. The cost break-down shall be approved, in writing, by the Engineer before any partial payment for the items of electrical work will be made.

The cost breakdown shall, as a minimum, include the following items:

- foundations - each type
- standards and poles - list by each type
- conduit - list by each size and installation method
- pull boxes - each type
- conductors - each size and type
- signal heads and hardware - each type
- pedestrian signal heads and hardware - each type
- pedestrian push buttons
- loop detectors - each type
- luminaires - each type
- mastarm and/or pole-mounted signs

1.05 SCHEDULING OF WORK

Schedule of work shall conform to the provisions of Sections 86 and 87 of the Standard Specifications and these special provisions. Hours of work shall be as stated in Section 1.06 of these special provisions.

The first order of work shall be to place the order for the traffic signal and lighting equipment. The Contractor shall provide a copy of the product order packet to the Engineer for approval prior to ordering any equipment. The Contractor shall furnish the Engineer with a statement from the vendor that the order for said equipment has been received and accepted by said vendor.

The uppermost layer of new pavement (where applicable) shall not be placed until all underlying conduits and vehicle detector loops have been installed.

Prior to commencement of the traffic signal functional test, all items of work related to traffic signal control shall be completed, and all roadside signs, pavement delineation and pavement markers shall be in place at that location.

1.06 MAINTAINING EXISTING AND TEMPORARY ELECTRICAL SYSTEMS

Traffic signal system shutdowns and hours of work shall be limited to periods between the hours of 8:30 A.M. and 2:00 P.M during the time that school is in session. Signal system shutdowns and hours of work shall be limited to periods between 8:30 a.m. and 4:30 p.m. during school vacation / holiday time. School vacation and holiday schedule includes the days of 5/1/17, 5/29/17, and from 6/16/17 to 8/16/17. Traffic signal system shutdowns shall be limited to periods allowed for lane closures as approved by the Town Engineer.

The contractor shall coordinate directly with the Town's signal maintenance department to make changes to the signal operations while temporary traffic control is in place and to return the traffic signal to normal operation by the end of the workday. The contractor shall notify the Town when making changes to the signal operations and of the schedule when the signal will be returned to normal operation.

1.07 EXCAVATING AND BACKFILLING

Excavating and backfilling shall conform to the provisions in Section 87-1.03E, "Excavating and Backfilling for Electrical Systems," of the Standard Specifications and these Special Provisions.

Excavation shall not be permitted under existing roadway pavement, including public and private streets, except with prior approval of the Engineer. Conduit shall be placed by jacking, drilling, or rock wheel trenching methods in such cases. Excavation will be permitted under existing sidewalk or driveway areas. Backfill material shall be a two-sack concrete-sand slurry. Each area affected by excavation or trenching, or any other construction activities, shall be replaced (in its entirety) to the satisfaction of the Engineer.

1.08 FOUNDATIONS

Foundations shall conform to the provisions of Section 87-1.03E(3), "Concrete Pads, Foundations, and Pedestals," of the Standard Specifications, and these special provisions.

1.09 STANDARDS, POLES, PEDESTALS, AND POSTS

Standards, steel pedestals and posts shall conform to the provisions of Section 87-1.03J, "Standards, Poles, Pedestals, and Posts," of the Standard Specifications and these special provisions. This includes furnishing and installing the new pedestrian push button posts (PPBP), complete in place with foundations and anchor bolts per the Caltrans Standard Plans. The new Type 19-3-100 signal standard will be furnished by the Town of Atherton. The Contractor will be responsible for transporting the signal pole from the Town maintenance yard to the site and

installing it, complete in place with foundation and anchor bolts per the Caltrans Standard Plans. Contractor shall furnish all anchor bolts.

Where the side tenon detail at the end of the signal mast arm is shown, you may substitute the applicable tip tenon detail.

The sign mounting hardware must be installed at the locations shown.

1.10 CONDUIT

Conduit shall conform to the provisions of Section 86-1.02B, "Conduit and Accessories," of the Standard Specifications and these special provisions.

Conduit installed underground must be Type 1 or Type 3.

The conduit in a foundation and between a foundation and the nearest pull box must be Type 1 or Type 3.

If a standard coupling cannot be used for joining Type 1 conduit, use a UL-listed threaded union coupling under section 86-2.05C, a concrete-tight split coupling, or a concrete-tight set screw coupling.

If Type 3 conduit is placed in a trench, not in the pavement or under concrete sidewalk, after the bedding material is placed and the conduit is installed, backfill the trench to not less than 4 inches above the conduit with minor concrete under section 90-2, except the concrete must contain not less than 421 pounds of cementitious material per cubic yard. Backfill the remaining trench to finished grade with backfill material.

After conductors have been installed, the ends of the conduits terminating in pull boxes, service equipment enclosures, and controller cabinets must be sealed with an authorized type of sealing compound.

The final 2 feet of conduit entering a pull box in a reinforced concrete structure may be Type 4.

When rigid non-metallic conduit is placed in a trench (not under pavement), after the bedding material is placed and conduit installed, the trench shall be backfilled with commercial quality concrete, containing not less than 590 pounds of cementitious material per cubic yard, to not less than 4 inches above the conduit before additional backfill material is placed.

All conduit under existing pavement shall be placed by jacking, drilling, or rock wheel trenching, unless approved otherwise by the Engineer. The Contractor shall perform all jacking, trench excavating and backfilling necessary to install all signal and street light system conduits.

Rigid metal conduit to be installed shall not be used as a drilling or jacking rod.

At locations where conduit is to be installed under pavement and existing underground facilities require special precautions, as described in "Obstructions" of these special provisions, conduit shall be placed by trenching as provided below.

Conduit shall be placed under existing pavement in a trench approximately 2 inches wider than the outside diameter of the conduit to be installed. Trench shall not exceed 6 inches in width. At pull boxes the trench may be hand dug to required depth.

1.11 PULL BOXES

Pull boxes shall conform to the provisions of Section 86-1.01C(2), "Pull Boxes," of the Standard Specifications and these special provisions.

Pull boxes shall be of the size shown on the plan, including No. 5 and No. 6 pull boxes. Pull boxes shall be No. 5, unless otherwise noted on the plans.

Where the sump of an existing Pull Box is disturbed by the Contractor's operations, the sump shall be reconstructed and, if the sump was grouted, the old grout shall be removed and new grout placed. Grout shall be placed in the bottom of Pull Boxes and a drain hole provided.

Pull box covers shall have the marking "TRAFFIC SIGNAL".

1.12 CONDUCTORS AND WIRING

Conductors, conductor cables and wiring shall conform to the provisions of Section 86-1.02F, "Conductors and Cables," of the Standard Specifications and these special provisions.

Wrap conductors around the projecting end of conduit in pull boxes as shown. Secure conductors and cables to the projecting end of the conduit in pull boxes.

Straight splices in signal neutral and multiple lighting conductors shall be insulated in conformance with Method "A" or Method "B" as shown on the Standard Plans. Tap splices in signal neutral and multiple lighting conductors shall be Type "C", "S" or "T" as shown on the Standard Plans.

No conductors shall be pulled into conduit except in the presence of an inspector appointed by the Engineer. Any wire pulled without the presence of the inspector shall be removed and replaced with new wire at Contractor's expense.

The Contractor shall provide the Engineer a Certificate of Compliance from the manufacturer for all the conductors and cables furnished for the project.

1.13 BONDING AND GROUNDING

Bonding and grounding shall conform to the provisions of Section 86-1.02F(1)(c)(ii), "Bonding Jumpers and Grounding Conductors," of the Standard Specifications and these special provisions.

1.14 DETECTORS

Vehicle detectors shall conform to the provisions of Section 87-1.03V, "Detectors," of the Standard Specifications and these special provisions.

Output relays shall be used, and shall be normally closed. Sensor units shall be Type 1. Loop wire shall be Type 2. Loop detector lead-in cable (DLC) shall be Type B. No splices are permitted in the DLC. The number of sensor units and lead-in cables required to achieve the specified detection shall be installed. Slots must be filled with asphaltic emulsion sealant.

1.15 SIGNAL FACES AND SIGNAL HEADS

Signal faces, signal heads and auxiliary equipment, as shown on the plans, and the installation thereof, shall conform to the provisions of Sections 86-1.02R, "Signal Heads," of the Standard Specifications and these special provisions.

All RED, AMBER and GREEN signal lamps for traffic signal units shall be furnished and installed by the Contractor. All signal faces shall be Light Emitting Diode (LED) signal modules, as contained on the most current Caltrans Quality Product List (QPL) and approved by the Caltrans materials testing laboratory.

Contractor shall furnish and install all signal heads as shown on the project plans, including 3-section circular signal heads, 3-section left arrow signal heads, 5-section vertical signal heads, and 5-section "dog-house" style signal heads.

The LED signal modules shall have prominent and permanent directional marking(s) that have an "up arrow," for correct indexing and orientation within the signal housing. The manufacturer's name, trademark, serial number and other necessary identification shall be permanently marked on the backside of the LED signal modules. A label shall be placed on the LED signal module certifying to this specification. The LED signal module shall be a single, self-contained device, not requiring on-site assembly for installation into an existing traffic signal housing.

Signal section housings shall be metal. All vehicle signals shall have metal backplates. Screws shall be placed in all backplate mounting screw holes in vehicle signal heads.

All signal faces shall be provided with 12-inch sections.

All mast-arm mounted signal faces shall have metal backplates.

All signal heads shall be die-cast aluminum signal heads only

All signal heads shall be turned away from the direction of traffic and covered up until the entire system is ready for functional test.

1.16 PEDESTRIAN SIGNALS AND PEDESTRIAN SIGNAL FACES

Pedestrian signals shall conform to the applicable provisions of Section 86-1.02S, "Pedestrian Signal Heads," of the Standard Specifications. Pedestrian signal faces shall be Type A, and shall include the count-down mode.

All pedestrian signal faces and signal heads shall be Light Emitting Diode (LED) Signal modules conforming to current Caltrans Specifications and these Special Provisions. All LED units shall be furnished and installed by the contractor.

All "WALKING MAN" symbols shall be Lunar White LED signal modules, and all "HAND" symbols shall be Portland Orange LED signal modules.

Type SP-1-T pedestrian signal mountings shall have an upper and lower mounting bracket attached to the pedestrian signal housing in the same manner as that shown on the plans for Type SP-2-T mounting.

1.17 PEDESTRIAN PUSH BUTTONS

Pedestrian push buttons shall conform to the provisions in Section 86-1.02U, "Push Button Assemblies," of the Standard Specifications and these Special Provisions. The push button shall be Type B per Caltrans Standard Plan ES-5C.

The pedestrian push button shall be Synchronex part number ADA-1 or approved equal. Request for use of an approved equal shall be submitted, in writing, to the Town Engineer prior to ordering and shall have all technical specifications and catalog "cut sheets" attached as an appendix. A list of locations where the requested hardware has been previously installed must accompany the written request as an additional appendix. In addition, a sample of the hardware must be supplied to the Town for inspection and approval.

The pedestrian push button switch shall be a precision snap-acting type, single pole, single throw unit using pressure type terminals, rated at 120 VAX, and 1x10⁶ operations. They shall be UL listed, CSA certified, and meet the requirements of NEMA ICS-1, ICS-2. The switch shall have the following characteristics:

The push button shall be raised from or flush with the housing and shall be a minimum of two (2) inches in diameter in the smallest dimension.

The switching unit shall have a stainless steel, aluminum, or structural plastic operator and shall be mounted within the housing with a stainless steel, non-corrosive, tamperproof fastening device.

The actuator (push button) shall be conical in shape with the cone extending 7/16" to 1/2" above the bezel of the switch housing.

The switch shall have an operating force of 9 to 13 ounces and a minimum release force of 4 ounces. Pretravel shall be 1/64" minimum. Overtravel shall be 7/32" minimum. Differential travel shall be 0.00004 to 0.002 inches.

1.18 LUMINAIRES

Luminaires shall be high pressure sodium luminaires. All luminaires shall be powered by the existing electrical service currently in place. Luminaires shall be the enclosed cutoff type.

All high pressure luminaires with integral ballast shall be furnished and installed by the Contractor.

Ballasts shall be the lag or lead regulator type.

Each Luminaire shall be fused as stated in Section 86-2.09F, "Fused Splice Connectors," of the Standard Specifications. Fuse holder shall be located at the pole hand hole.

1.19 PHOTOELECTRIC CONTROLS

If existing service cabinet is equipped with a photoelectric control for the signal luminaires, then additional luminaire PEC is not necessary for new luminaires. If service cabinet is not equipped with a PEC, then new luminaires shall be equipped with a top-mounted PEC. Contactors shall be the mercury type.

1.20 REMOVING, REINSTALLING OR SALVAGING ELECTRICAL EQUIPMENT

Removing, reinstalling, or salvaging electrical equipment shall conform to the provisions in Section 87-21, "Existing Electrical Systems," of the Standard Specifications and these Special Provisions.

Salvaged electrical materials shall be hauled to a designated area as directed by the Engineer and stockpiled.

The Contractor shall provide the equipment, as necessary, to safely unload and stockpile the material. A minimum of 2 working days notice shall be given prior to delivery.

1.21 WARRANTIES, GUARANTEES AND INSTRUCTION SHEETS

Prior to acceptance of the project, manufacturers' warranties and guaranties furnished for materials used in the work, and instruction sheets and parts lists supplied with materials, shall be delivered by the Contractor to the Engineer.

1.22 PAYMENT

Traffic signal and lighting systems shall be measured and paid for as one complete installed system in operable condition including foundations, poles, mast arms, signals (traffic and pedestrian), luminaries, wiring, detector loops, cabinets, controller and associated equipment, complete in place.

The contract price paid for Traffic Signal improvements shall include full compensation for furnishing all labor, material, tools, equipment and incidentals, traffic control, and for doing all the work of removing and salvaging existing signal equipment and installing signals and lighting complete in place as shown on the plans and as directed by the Engineer, including all activities necessary for a functional operation as determined by the Engineer, and no additional compensation will be allowed therefor.

2 PAVING, STRIPING AND SIGNAGE

2.01 GENERAL

A. Description: Striping and pavement delineation items shall include all traffic striping, painted words, painted symbols, paint removal as required, and removal and installation of reflective pavement markers. Included also is any necessary removal, temporary delineation, layout, traffic control, and signage modifications. It may be necessary to phase the construction of the striping in the interest of public safety. The Contractor shall install striping, where possible, prior to opening roadway to traffic and when necessary for the public's safety or convenience.

B. Materials: Materials shall be in conformance with the Standard Specifications Section 84-2, "Traffic Stripes and Pavement Markings," for traffic stripes and Section 81-3, "Pavement Markers," for pavement markers. Signs shall be in conformance with the Standard Specifications Section 82, "Signs and Markers."

C. Method of Construction: Construction and installation shall be per Section 84-2, "Traffic Stripes and Pavement Markings," Section 81-3, "Pavement Markers," Section 82-2, "Sign Panels," and Section 82-3, "Roadside Signs," of the Standard Specifications. Removal of existing facilities shall be per Section 15, "Existing Facilities," Section 84-9.03B, "Remove Traffic Stripes and Pavement Markings," Section 81-8.03B, "Remove Pavement Markers," and Section 82-9, "Existing Roadside Signs and Markers," of the Standard Specifications.

2.02 ORDER OF WORK

Attention is directed to "Maintaining Traffic" of these special provisions.

A minimum of one lane of traffic shall be kept open in each direction for public traffic at all times during construction. Left turn lanes can be used as through lanes if necessary.

Before lane closure will take place, warning signs for road closure shall be installed at road intersections identified elsewhere in these special provisions, with the specific locations determined by the Engineer. Coordination with the County Traffic Engineer is mandatory at least 72 hours in advance of all road closures.

The installation of temporary railings shall be complete at each required location before existing facilities are disturbed or before excavation or other work is begun which would create a hazard at the location. Temporary railings shall not be removed until such hazards no longer exist and until such removal is approved by the Engineer.

Erosion control measures shall be fully installed at all times.

2.03 PUBLIC SAFETY

The Contractor shall provide for the safety of traffic and the public in accordance with the provisions of Section 7-1.04, "Public Safety," of the Standard Specifications and these special provisions.

Special attention is directed to the following directive in Section 7-1.04, "Public Safety," of the Standard Specifications;

“Whenever the Contractor’s operations create a condition hazardous to traffic or to the public, the Contractor shall, at the Contractor’s expense and without cost to the Town, furnish, erect and maintain those fences, temporary railing (Type K), barricades, lights, signs and other devices and take such other protective measures that are necessary to prevent accidents or damage or injury to the public.”

The Contractor shall install temporary railing (Type K) between any lanes carrying public traffic and any excavation, obstacle, or storage area when the following conditions exist:

- 1) Excavations: Any excavation the near edge of which is 12 feet or less from the edge of the travel lane, except:
 - a) Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - b) Excavations less than 12 inches deep.
 - c) Trenches less than 12 inches wide for irrigation pipe or electrical conduit or excavations less than 12 inches in diameter.
 - d) Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - e) Excavation in side slopes, where the slope is steeper than 4:1.
 - f) Excavation protected by existing barrier or railing.
- 2) Temporarily Unprotected Permanent Obstacles: Whenever the work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with a protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or whenever the Contractor, for its convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.
- 3) Storage Areas: Whenever material or equipment is stored within 12 feet of the lane and such storage is not otherwise prohibited by the special provisions.

The approach end of temporary railing (Type K), installed in accordance with the requirements in this section "Public Safety" and in Section 7-1.04 "Public Safety" of the Standard Specifications shall be offset a minimum of 15 feet from the edge of the traffic lanes or not

more than 1 foot transversely to 10 feet longitudinally with respect to the edge or the traffic lane. If the 15 feet minimum offset cannot be achieved, the temporary railing shall be installed on the 10 feet to 1 foot minimum skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.20, "Type K Temporary Railing," of the Standard Specifications.

Temporary crash cushion modules shall conform to the provisions in Section 12-3.22, "Temporary Crash Cushion Modules," of the Standard Specifications.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas the Contractor shall close the adjacent traffic lane unless otherwise provided in the special provisions:

APPROACH SPEED OF PUBLIC TRAFFIC (POSTED LIMIT, MILES PER HOUR)	WORK AREAS
OVER 45 MPH	WITHIN 6 FEET OF A TRAFFIC LANE BUT NOT ON A TRAFFIC LANE
35 TO 45 MPH	WITHIN 3 FEET OF A TRAFFIC LANE BUT NOT ON A TRAFFIC LANE

The lane closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the Engineer.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

2.04 WATER POLLUTION CONTROL

Water pollution control work shall conform to the provisions in Section 13, "Water Pollution Control," and more specifically Sections 13-2, "Water Pollution Control Program," and 13-3, "Storm Water Pollution Prevention Plan," of the Standard Specifications and these Special Provisions.

The Contractor will be responsible for preparing the adequate WPCP or SWPPP and submitting it to the Town of Atherton for review and approval prior to the implementation of the water pollution control program.

The contract lump sum price paid for bid item "Water Pollution Control" shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, submitting, revising, and amending the WPCP and/or SWPPP; installing, constructing, removing, and disposing of water pollution control practices, including non-storm water management, waste management, and water pollution control practices as stated in the Standard Specifications, and no additional compensation will be made therefor

2.05 CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions of Section 17-2, "Clearing and Grubbing," of the Standard Specifications and these special provisions.

Vegetation shall be cleared and grubbed only within the excavation lines. All existing vegetation outside the areas to be cleared and grubbed shall be protected from injury or damage resulting from the Contractor's operations. Any damage to existing landscaping outside the area to be cleared and grubbed shall be replaced in kind. Any damage to existing irrigation systems shall be repaired at Contractor's expense.

All removed vegetation, trees, stumps and slash shall become the property of the Contractor and shall be removed and disposed of at the Contractor's expense. The cleared areas shall be free of slash and debris and the ground surface regraded to a smooth surface and treated with erosion control measures per these special provisions.

Payment for clearing and grubbing work shall be paid for as a lump sum, and shall include all clearing, grubbing, grading, removal of soil to accommodate the shared use path improvements, and general site management and cleaning work.

2.06 EXISTING FACILITIES

The work performed in connection with various existing highway facilities shall conform to the provisions of Section 15, "Existing Facilities," of the Standard Specifications and these special provisions.

Existing traffic control facilities shall be salvaged, removed or relocated as directed by the Engineer.

2.07 MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.03, "Public Convenience," 7-1.04, "Public Safety," and 12-3.04, "Portable Delineators," of the Standard Specifications, the 2014 California Manual on Uniform Traffic Controls Devices, and these special provisions.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way at any time, including any section closed to public traffic.

The Contractor shall notify local authorities of the intended date to begin work at least 5 days before work is begun. The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make arrangements relative to keeping the working area clear of parked vehicles.

The provisions in this section may be modified or altered if, in the opinion of the Engineer, public traffic will be better served and work expedited. Said modifications or alterations shall not be adopted until approved in writing by the Engineer.

2.08 CONSTRUCTION AREA SIGNS

Construction Area Signs shall be furnished, installed, maintained, and removed when no longer required in accordance with the provisions of Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

2.09 BOLLARDS

Removal of bollards shall include removal of entire bollard, including embedment and portion and foundation (if applicable). The Contractor shall then restore the finish grade to be smooth and flush with the surrounding surface.

New bollards shall be of 4" diameter steel pipe, schedule 40 (0.237 inch minimum thickness). The outer pipe shall be prime painted with yellow reflective paint. Concrete to be poured inside of bollard and concrete to be used for bollard foundation shall conform to the provisions of Section 90-2, "Minor Concrete," of the Standard Specifications, and shall be Class 2, containing not less than 590 lbs of cement per cubic yard.

2.10 SIGNING

Permanent roadside signs shall be removed, salvaged, furnished, and installed by the Contractor, as shown on the project plans. The Contractor shall replace any permanent signs accidentally damaged as a result of the Contractor's activities.

Removal of street name posts shall include removal of entire post, including embedment portion and foundation (if applicable). The Contractor shall then restore the finish grade to be smooth and flush with the surrounding surface.

Roadside Signs and Sign Panels shall be furnished and installed at the locations shown on the plans and in conformance with the provisions in Section 82, "Signs and Markers," of the Standard Specifications and these special provisions.

Sign sheeting shall comply with Sections 82-2.02B, "Aluminum Sheeting," 82-2.02C, "Retroreflective Sheeting," and 82-2.02E, "Single-Sheet Aluminum Panels," of the Standard Specifications. Sign colors and film shall comply with Section 82-2.02D, "Process Colors and Film," of the Standard Specifications.

Signs shall be fabricated and furnished in accordance with details shown on the plans, the Traffic Sign Specifications, and these special provisions.

Traffic Sign Specifications for California sign codes are available for review at:

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm>

Traffic Sign Specifications for signs referenced with Federal MUTCD sign codes can be found in Standard Highway Signs Book, administered by the Federal Highway Administration, which is available for review at:

http://mutcd.fhwa.dot.gov/ser-shs_millennium.htm

Information on cross referencing California sign codes with the Federal MUTCD sign codes is available at:

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/specs.htm>

Signs shall be free from blemishes that may affect the serviceability and detract from the general sign color and appearance when viewing during daytime and nighttime from a distance of 25 feet. The face of each finished sign shall be uniform, flat, smooth, and free of defects, scratches, wrinkles, gel, hard spots, streaks, extrusion marks, and air bubbles. The front, back, and edges of the sign panels shall be free of router chatter marks, burns, sharp edges, loose rivets, delaminated skins, excessive adhesive over spray and aluminum marks.

The Contractor shall assume the costs and responsibilities resulting from the use of patented materials, equipment, devices, and processes for the Contractor's work.

The Contractor shall furnish the Engineer Certificates of Compliance for sign manufacturing in conformance with Section 82-2.01C, "Submittals," of the Standard Specifications.

Sign mounting hardware must be installed at locations shown.

2.11 OBSTRUCTIONS

Attention is directed to Section 5-1.36D "Nonhighway Facilities" and Section 15, "Existing Facilities," of the Standard Specifications and these special provisions.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least 2 business days, but not more than 14 days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure. Regional notification centers include but are not limited to the following:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	1-800-642-2444
	1-800-227-2600
Underground Service Alert-Southern California (USA)	1-800-422-4133
	1-800-227-2600

It is anticipated that some or all of the utility and other non-highway facilities both below and above ground will be rearranged during construction operations.

If such utility or other non-highway facilities are not located on the plans in both alignment and elevation, no work shall be performed in the vicinity of said utility or other non-highway facilities until the owner, or a designated representative, has located the facility by potholing, probing, or other means that will locate and identify the facility.

The Contractor shall cooperate with the affected utility companies to coordinate work with the re-routing of utilities.

2.12 TRAFFIC CONTROL SYSTEM

The traffic control system shall consist of closing traffic lanes in accordance with the provisions of Section 12, "Temporary Traffic Control," of the Standard Specifications, the provisions under "Maintaining Traffic" elsewhere in these special provisions, and these special provisions.

Signs for traffic control system shall conform to the provisions under "Construction Area Signs" elsewhere in these special provisions. Contractor shall move or place temporary road signs necessary to keep at least one lane of traffic open in each direction during construction.

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

If any component in the traffic control system is damaged, displaced, or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair said component to its original condition or replace said 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 excavation adjacent to the traveled way, shall be removed from the traveled way, shoulder and auxiliary lanes. If the Contractor so elects, said components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right of way. Upon completion of the work requiring lane closure, all components of the traffic control system shall be removed from the site of the work and shall become the property of the Contractor.

At no time shall the roadway be closed to traffic, unless approved by the Town. Lane restrictions shall not commence before 9 a.m. and shall cease at 4 p.m. No work that interferes with public traffic shall be done outside these hours except for work required under Sections 7-1.03 "Public Convenience," and Section 7-1.04 "Public Safety," of the Standard Specifications. When work is not actively in progress the full width of the traveled way shall be open for public traffic. Minor deviations from the requirements of this section concerning hours of work may be permitted upon approval by the Town Engineer.

2.13 REMOVE PAVEMENT MARKER

Existing pavement markers, including underlying adhesive, when no longer required for traffic lane delineation as determined by the Engineer, shall be removed and disposed of. The removal of existing pavement markers shall conform to Section 81-8.03B, "Remove Pavement Markers," of the Standard Specifications.

2.14 REMOVE TRAFFIC STRIPE AND PAVEMENT MARKING

Traffic stripe and pavement marking shall be removed at the locations shown on the plans and as directed by the Engineer. The removal of existing traffic stripes and pavement markings shall conform to Section 84-9.03B, "Remove Traffic Stripes and Pavement Markings," of the Standard Specifications.

Attention is directed to Section 13-4, "Job Site Management," of the Standard Specifications for the necessary water pollution control measures.

2.15 REMOVE CONCRETE

Concrete, where shown on the plans to be removed, shall be removed.

The pay quantities of concrete to be removed will be measured by the cubic yard, or by the lineal foot if removing curb / curb & gutter, measured before and during removal operations.

Concrete removed shall be disposed of outside the highway right of way in conformance with the provisions in Section 5-1.20B(4), "Contractor-Property Owner Agreement," of the Standard Specifications.

2.16 TREE REMOVAL

Removal of trees shall be at the locations shown on the plans and as directed by the Engineer. All existing trees shall be protected in place, unless specifically noted on the project plans to be removed or trimmed. The removal of existing trees shall conform to Section 16-1.03C, "Grubbing," of the Standard Specifications. The Contractor shall be responsible for disposal of any tree removal or trimming.

Attention is directed to Section 2.05, "Clearing and Grubbing," of these Special Provisions.

2.17 THERMOPLASTIC AND PAINT TRAFFIC STRIPES AND PAVEMENT MARKINGS

Thermoplastic traffic striping and pavement markings shall be applied on pavements at the locations shown on the Plans, as directed by the Engineer, and as specified in these special provisions. Traffic striping and pavement message markings shall conform to the standards, dimensions and details as specified in the Caltrans Standard Plans, the 2014 California Manual on Uniform Traffic Control Devices (MUTCD), and Section 84-2, "Traffic Stripes And Pavement Markings", of the Standard Specifications.

Thermoplastic traffic stripes and pavement markings shall be installed by the extrusion method only.

Location of traffic stripes and pavement markers shall be as directed by the Engineer. Thermoplastic traffic stripes and pavement markings are to be applied as soon as practical after paving. All new AC dikes shall be painted with two coats of yellow water-borne paint along the top and face of the AC dike.

Thermoplastic traffic stripes will be measured by the lineal foot along the line of the traffic stripes. Thermoplastic pavement markings will be measured by the square foot for the actual area covered, as shown in the Standard Plans.

Preformed green thermoplastic ("facebook green" color) shall be applied on all bike lanes and bike boxes as shown on the plans. Pavement symbols and legends within the preformed green striping shall be white preformed thermoplastic as well. The Contractor shall install all preformed thermoplastic per the manufacturer's instructions.

2.18 AGGREGATE BASE

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

At the option of the Contractor the grading for either the 1-1/2 inch maximum or 3/4 inch maximum aggregate may be used, except that once a grading is selected it shall not be changed without written approval by the Engineer. The R-value requirement specified in Section 26-1.02B, "Class 2 Aggregate Base," will not be waived if the Sand Equivalent is 35 or more.

2.19 ASPHALT CONCRETE

Asphalt concrete shall be Type B and shall conform to the provisions of Section 39, "Asphalt Concrete," of the Standard Specifications and these special provisions. Asphalt concrete shall be produced from commercial quality asphalt and aggregates. Spreading and compacting requirements shall comply with Section 39-2.01C(2), "Spreading, And Compacting Equipment," of the Standard Specifications.

2.20 REMOVE / ABANDON DRAINS AND INLETS

Existing storm drains and inlets, where noted on the plans, shall be removed or abandoned. Where storm drains are shown on the plans to be abandoned, the ends of said storm drains shall be securely closed by a 12 inch thick tight-fitting plug or wall of commercial quality concrete containing not less than 500 lbs of cement per cubic yard. Where inlets are shown on the plans to be abandoned or modified, the Contractor shall salvage the grate, demolish the inlet to 12 inch below finish grade, and fill the void with sand backfill material. If the existing inlet to be removed is in conflict with a proposed improvement, the entire inlet to full depth shall be removed.

The Contractor may salvage and reuse undamaged reinforced concrete pipe, grates, or other materials on the project. Undamaged salvaged materials which are not reused on this job shall become the property of the Town and shall be delivered to the Town maintenance yard as directed by the Town. The Contractor shall notify the Town inspector at least 48 hours prior to delivery to the yard.

Full compensation for removal or abandonment of storm drains and inlets as shown on the plans and as directed by the Engineer, including disposal of debris and delivery of undamaged salvaged materials to the Town's yard shall be considered as included in the contract price paid for each storm drain inlet removal, storm drain inlet modification, and abandon storm drain line, and no separate payment will be made therefor.

2.21 MODIFY EXISTING AND CONSTRUCT NEW DRAINS INLETS

Construction of new drain inlet and modifications to existing drain inlet shall conform to the applicable provisions of Section 51, "Concrete Structures," and Section 75, "Miscellaneous Metal," of the Standard Specifications, and these special provisions.

Concrete for inlet improvements shall conform to the provisions of Section 90-2, "Minor Concrete," of the Standard Specifications, and shall be Class 2, containing not less than 590 lbs of cement per cubic yard.

Precast structures of equal quality and dimensions may be substituted for poured-in-place structures at the Contractor's option. However, if the locations of existing utilities or other conflicts with the storm drain as designed result in the adjustment of flow line grades or other changes which affect the depth or location of the structures, any modification to or replacement of the precast structures shall be done at the Contractor's expense.

The contract unit price paid per new type G1 drain inlet and modifying existing inlet to convert it to a manhole shall include full compensation for furnishing all labor, material, tools, equipment and incidentals and for doing all the work involved in constructing or modifying the inlet complete in place as shown on the project plans, as detailed in the Caltrans Standard Plans, and as directed by the Engineer, including excavation and backfill, disposal of excess excavated material, pipe connections, curb openings, gutter depressions, concrete aprons, reinforcing steel, and frame and grate, and no additional compensation will be allowed therefor.

2.22 REINFORCED CONCRETE PIPE

This work shall consist of furnishing, installing and backfilling reinforced concrete pipe (18" RCP), with all necessary fittings, slope anchors, and coupling systems, as shown on the plans or as directed by the Engineer and as specified in these special provisions.

RCP shall conform to Section 65-2, "Reinforced Concrete Pipe," of the Standard Specifications.

The length of pipe to be paid for will be the horizontal and slope length designated by the Engineer. Pipe placed in excess of the length designated will not be paid for, unless pipes are cut to fit a structure or slope. When pipes are cut to fit a structure or slope, the quantity to be paid for will be the length of the pipe necessary to be placed measured in two-foot increments.

2.23 ADJUST UTILITY COVER

Frames and covers of existing manholes, junction structures, water valves, utility pull boxes, or other facilities shall be adjusted to grade in conformance with the provisions in Section 15-2.04, "Reconstruct," of the Standard Specifications.

The Contractor shall adjust and reconstruct the utility covers to be flush with the surrounding finished grade.

Full compensation for adjusting utility covers as shown on the plans and as directed by the Engineer, including all materials, equipment, and incidentals to perform such work shall be

considered as included in the contract price paid for each utility cover adjustment, and no separate payment will be made therefor.

2.24 HEADER BOARD

Installation of header board shall conform to Section 20-7.02D(5)(a), "Header Board Edging," of the Standard Specifications, and these special provisions.

Header board shall be 2"x8" heart grade redwood, or other suitable wood type included in the Standard Specifications and approved by the Town Engineer.

The contract unit price paid per lineal foot of header board shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals and for doing all the work involved in installing new header board, including all grading, and no additional compensation will be allowed therefor.

2.25 STREET FURNITURE RELOCATION

Existing street furniture, including benches and trash cans, to be relocated shall be removed from the existing locations and installed at the new locations as shown on the project plans. Street furniture shall be installed in a similar condition as encountered on the existing location, and as directed by the Town Engineer.

The contract unit price paid per relocating bench and relocating trash can shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals and for doing all the work involved in the relocation of these items, and no additional compensation will be allowed therefor.

2.26 MISCELLANEOUS CONSTRUCTION

Case A curb ramps shall conform to the details and grades shown on the project plans and shall adhere to the requirements shown on Caltrans Standard Plan A88A. Curb ramp detectable warning surface shall consist of raised truncated domes constructed or installed on curb ramps in conformance with the details shown on the plans and these special provisions. Install detectable warning surface under manufacturer's recommendations.

Prefabricated detectable warning surface shall be in conformance with the requirements established by the Department of General Services, Division of State Architect and be attached in conformance with the manufacturer's recommendations.

The finished surfaces of the detectable warning surface shall be free from blemishes.

END