

City of Calimesa, California



Contract Documents For Construction of

County Line Road Transportation Corridor Improvements Project

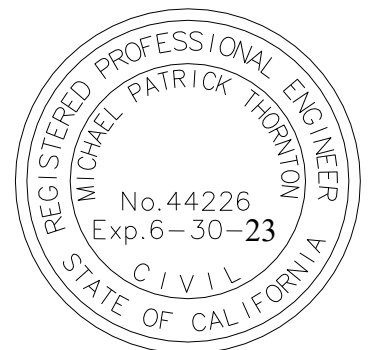
December 2021

Prepared By:

**TKE Engineering, Inc.
2305 Chicago Avenue
Riverside, CA 92507**

for:

The City of Calimesa
Public Works Department
908 Park Ave
Calimesa, CA 92320
(909) 795 9801



Michael Thornton, P.E., City Engineer

Margaret Monson, Director of Public Works

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NOTICE INVITING SEALED BIDS
FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENTS PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA

PUBLIC NOTICE IS HEREBY GIVEN that the City of Calimesa as CITY, invites sealed bids for the above-stated project and will receive such bids in the offices of the City Clerk, 908 Park Avenue, Calimesa, California 92320, up to the hour of **2:00 p.m., Wednesday, January 19, 2022**, at which time they will be publicly opened and read in the Norton Younglove Multipurpose Senior Center.

A pre-bid meeting is scheduled for **Wednesday, January 5, 2022 at 9:00 AM** at the Norton Younglove Multipurpose Center. This meeting is to inform bidders of project requirements and subcontractors of subcontracting and material supply opportunities. **Bidders' attendance at this meeting is non-mandatory.**

All work must be completed within **200 (two hundred)** working days after the date of authorization specified in the Notice to Proceed and to diligently prosecute said work, including corrective items of work, day to day thereafter, except as adjusted by subsequent Contract Change Orders.

Digital copies of the contract documents (plans and specifications) may be obtained from the City of Calimesa's website at www.cityofcalimesa.net or from local plan rooms.

The successful Bidder shall perform, with its own organization, Contract work amounting to at least fifty percent of (50%) of the Contract bid items. However, any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" may be deducted from the Contract items before computing the amount of work required to be performed by the Contractor.

Pursuant to Section 1773 of the Labor Code, the State prevailing wage rates for this contract will be determined by the Director of the California Department of Industrial Relations (DIR) and are online at <http://www.dir.ca.gov/DLSR/PWD> but not printed in the Specifications. In addition, the bidders attention is directed to the provisions of Section 1777.5 (Chapter 1411, Statutes of 1968) and 1777.5 of the Labor Code concerning the employment of apprentices by the Contractor or any such subcontractor under him.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code Section 12990. The CITY hereby affirmatively ensures that minority business enterprises will be afforded full opportunity to submit bids in response to this notice and will not be discriminated against on the basis of race, color, national origin, ancestry, sex, or religion in any consideration leading to the award of contract.

For any conflict of Interest in the procurement of supplies, equipment, construction, and services by sub-recipients, the conflict of interest provisions in 24 CFR 85.36, OMB Circular A-110, and 24 CFR 570.611 shall apply. No employee, officer, or agent of the

sub-recipient shall participate in the selection, award, or administration of a contract if a conflict of interest, real or apparent, would involve.

Bids must be prepared on the approved Proposal forms in conformance with the Instructions to Bidders and submitted in a sealed envelope plainly marked on the outside. The bid must be accompanied by certified or cashier's check, or bidder's bond, made payable to the CITY for an amount no less than 10 percent of the amount bid.

The successful bidder shall be licensed in accordance with provisions of the Business and Professions Code and shall possess a State Contractor's License, Class A, at the time this contract is awarded. The successful Contractor and his subcontractors will be required to possess business licenses from the City of Calimesa and register as required by SB-854 with the Department of Industrial Relations as a Contractor or Subcontractor involved with Public Works Projects.

The CITY reserves the right to reject any or all bids, to waive any irregularity, and to take all bids under advisement for a period of 90 days.

For technical information relating to the details of the proposed project and bidding requirements, please contact Michael Thornton, the City Engineer, at (909) 795-9801, ext 225.

BY ORDER OF THE CITY OF CALIMESA, CALIFORNIA

_____ Date: _____
Darlene Gerdes
City Clerk
City of Calimesa

INSTRUCTIONS TO BIDDERS

AVAILABILITY OF CONTRACT DOCUMENTS

Bids must be submitted to the City on the Bid Forms which are a part of the Bid Package for the Project Contract Documents which may be obtained from the City as indicated in the Notice Inviting Bids.

The City may also make the Contract Documents available for review at one or more plan rooms, as indicated in the Notice Inviting Bids. Please Note: Prospective Bidders who choose to review the Contract Documents at a plan room must contact the City to obtain the required Contract Documents if they decide to submit a Bid for the Project.

EXAMINATION OF CONTRACT DOCUMENTS

Bidders shall be solely responsible for examining the Project Site and the Contract Documents, including any Addenda issued during the Bidding period, and for informing itself with respect to local labor availability, laws and codes, local permit requirements, wage scales, local tax structure, contractors' licensing requirements, availability of required insurance, and other factors that could affect the Work. Bidders are responsible for consulting the standards referenced in the Contract. Failure of Bidder to so examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.

PROPOSAL FORMS

Bids shall be submitted in writing on the Proposal forms provided by the CITY. The use of substitute Bid forms other than clear and correct photocopies of those provided by the City will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable) and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. **USE OF BLACK OR BLUE INK, INDELIBLE PENCIL OR TYPEWRITER IS REQUIRED.** The CITY will not consider any proposal not meeting these requirements and deviations in the Bid form may result in the Bid being deemed non-responsive.

PROPOSAL GUARANTEE

Proposals must be accompanied by a proposal guarantee consisting of a certified or cashier's check or bid bond payable to the CITY in the amount not less than 10 percent of the total amount bid. Any proposal not accompanied by such a guarantee will not be considered. If a bidder to whom a contract is awarded fails or refuses to execute the contract documents or furnish the required insurance policies and bonds as set forth in those documents, the proposal guarantee shall be forfeited to the CITY. The proposal

guarantees of all bidders will be held until the successful bidder has properly executed all contract documents.

DELIVERY OF PROPOSAL

Proposals shall be enclosed in a sealed envelope plainly marked on the outside, "SEALED BID: **COUNTY LINE ROAD TRANSPORTATION CORRIDOR IMPROVEMENT PROJECT** IN THE CITY OF CALIMESA - DO NOT OPEN WITH REGULAR MAIL." Proposals may be mailed or delivered by messenger. However, it is the bidder's responsibility alone to ensure delivery of the proposal to the hands of the CITY'S designated official prior to the bid opening hour stipulated in the Notice Inviting Sealed Bids. Late proposals will not be considered.

WITHDRAWAL OF PROPOSALS

A proposal may be withdrawn by a written request signed by the bidder. Such requests must be delivered to the CITY'S designated official prior to the bid-opening hour stipulated in the Notice Inviting Sealed Bids. Proposals may not be withdrawn after said hour without forfeiture of the proposal guarantee. The withdrawal of the proposal will not prejudice the right of the bidder to submit a new proposal, providing there is time to do so.

IRREGULAR PROPOSALS

Unauthorized conditions, limitations, or provisions attached to a proposal will render it irregular and may cause its rejection. The completed proposal forms shall be without interlineations, alterations or erasures. Alternative proposals will not be considered unless specifically requested. No oral, telegraphic, or telephonic communication requesting a proposal modification or a withdrawal of a submitted proposal will be considered.

TAXES

No mention shall be made in the proposal of Sales Tax, Use Tax, or any other tax, as all amounts bid will be deemed and held to include any such taxes which may be applicable.

DISQUALIFICATION OF BIDDERS

In the event that any bidder acting as a prime contractor has an interest in more than one proposal, all such proposals will be rejected and the bidder will be disqualified. This restriction does not apply to subcontractors or suppliers who may submit quotations to more than one bidder, and while doing so, may also submit a formal proposal as a prime contractor. No proposal will be accepted from a bidder who has not been licensed in accordance with the provisions of the State Business and Professions Code; and who do not possess a State Contractor's License, Class A, or are not registered as required by SB-854 with the Department of Industrial Relations as a Contractor or Subcontractor involved with Public Works Projects at the time of bid submittal.

DISCREPANCIES AND MISUNDERSTANDINGS

Bidders must satisfy themselves by personal examination of the work site, Plans, Specifications and other contract documents, and by any other means as they may believe necessary, as to the actual physical conditions, requirements and difficulties under which the work must be performed. No bidder shall at any time after submission of a proposal make any claim or assertion that there was any misunderstanding or lack of information regarding the nature or amount of work necessary for the satisfactory completion of the job. Any errors, omissions, or discrepancies found in the Plans, Specifications, or other contract documents shall be called to the attention of the CITY and clarified prior to the submission of proposals.

EQUIVALENT MATERIALS

Approval of equipment and materials offered as equivalents to those specified must be obtained in writing from the CITY prior to the opening of bids. Requests for consideration of equivalents must be submitted in writing allowing sufficient time for complete consideration of all specifications, samples, references, tests, and other details to the full satisfaction of the CITY.

LEGAL RESPONSIBILITIES

All proposals must be submitted, filed, made, and executed in accordance with State and Federal laws relating to bids for contracts of this nature whether the same or expressly referred to herein or not. Any bidder submitting a proposal shall by such action thereby agree to each and all of the terms, conditions, provisions, and requirements set forth, contemplated, and referred to in the Plans, Specifications, and other Contract Documents related thereto, and to full compliance with the regulations and the conditions stated within said Plans, Specifications, and related Contract Documents.

Additionally, any bidder submitting a proposal shall, by such action thereby, agree to pay at least the minimum prevailing per diem wages as provided in Section 1773, et seq. for each craft, classification, or type of workman required as set forth by the Director of Industrial Relations of the State of California.

AWARD OF CONTRACT

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the City will award the contract. The award of contract, if made, will be to the lowest responsible bidder as determined solely by the CITY. Additionally, the CITY reserves the right to reject any or all proposals, to waive any irregularity, and to take the bids under advisement for a period of 60 days, all as may be required to provide for the best interests of the CITY. In no event will an award be made until all necessary investigations are made to the responsibility and qualifications of the bidder to whom the award is contemplated. All bids will be compared with the Engineer's Estimate prepared by or under the direction of the City Engineer of the City of Calimesa.

EXECUTION OF CONTRACT

The bidder to whom award is made shall execute a written contract with the City on the form of agreement provided, shall secure all insurance and shall furnish all certificates and bond required by the Specifications within ten calendar days after receipt of the Contract from the City. Failure or refusal to enter into a contract as herein provided or to conform to any of the stipulated requirements in connection therewith shall be just cause for annulment of the award and the forfeiture of the proposal guaranty. If the successful bidder refuses or fails to execute the contract, the City may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the contract, the City may award the contract the third lowest responsible bidder. On the failure or refusal of such second or third lowest bidder to execute the contract, such bidder's guaranties shall be likewise forfeited to the City.

PROPOSAL
FOR
**COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT**
BID NO. 2021-16
IN THE CITY OF CALIMESA

TO THE CITY OF CALIMESA, as CITY

In accordance with CITY'S Notice Inviting Sealed Bids, the undersigned BIDDER hereby proposes to furnish all materials, equipment, tools, labor and incidentals required for the above-stated project as set forth in the Plans, Specifications and Contract Documents related thereto, and to perform all work in the manner and time prescribed therein.

BIDDER declares that this proposal is based upon careful examination of the work site, Plans, Specifications, Instruction to Bidders and all other Contract Documents. If this proposal is accepted for award, BIDDER agrees to enter into a contract with CITY at the unit and/or lump-sum prices set forth in the following Bid Schedule signed by the Bidder or the Bidder's representative. BIDDER understands that failure to enter into a contract in the manner and time prescribed will result in forfeiture to CITY of the guarantee or surety bond accompanying this proposal.

BIDDER understands that a bid is required for the entire work, that the estimated quantities set forth in the Bid Schedule are solely for the purpose of comparing bids and that final compensation under the contract will be based upon the actual quantities of work satisfactorily completed. THE CITY RESERVES THE RIGHT TO INCREASE OR DECREASE THE AMOUNT OF ANY QUANTITY SHOWN AND/OR TO DELETE ANY ITEM FROM THE CONTRACT. It is agreed that the unit and/or lump-sum prices bid include all appurtenant expenses, taxes, royalties and fees. In the case of discrepancies in the amounts bid, unit prices shall govern over extended amounts, and words shall govern over figures.

If awarded the Contract, the undersigned further agrees that in the event of the BIDDER'S default in executing the required contract and filing the necessary bonds and insurance certificates within 10-working days after the date of the CITY'S notice of award of contract to the BIDDER, the proceeds of the security accompanying this bid shall become the property of the CITY and this bid and the acceptance hereof may, at the CITY'S option, be considered null and void.

LOW BID DETERMINATION: The low bid will be determined for the price in words, pursuant to Public Contract Code Section 20103.8(c) as the lowest total of Bid Schedule "A" (Items 1-134) plus total of Bid Schedule "C" (Items 1-104) as the Base Bid. Depending on available funding, the City may elect to award Bid Schedule "B" or Bid Schedules "B" and "D", in that order. If funding permits and the City elects to award additive Bid Schedule "B" or Bid Schedules "B" and "D", the low bid determination would be the lowest total of Bid Schedule "A" (Items 1-134) plus total of Bid Schedule "C" (Items 1-104) as the Base Bid plus additive Bid Schedule "B" (Items 1-4) or plus Bid Schedules "B" (Items 1-4) and "D" (Items 1-3), in that order. A responsible bidder who submits the lowest bid as determined by the above method shall be awarded the contract, if it is awarded, by the City Council of the City of Calimesa.

BID SCHEDULE
FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA

BIDDER: _____
 (Company Name)

Bid Schedule A -

ITEM No.	DESCRIPTION OF CONSTRUCTION ITEMS	QTY	UNIT	UNIT COST	TOTAL
1	MOBILIZATION/ DEMOBILIZATION	1	LS		
2	TRAFFIC CONTROL AND SAFETY	1	LS		
3	STORM WATER POLLUTION PREVENTION PLAN, BEST MANAGEMENT PRACTICE AND NPDES REQUIREMENTS	1	LS		
4	SAWCUT AND REMOVE EXISTING AC BERM OR DIKE AS REQUIRED	5,214	LF		
5	SAWCUT AND REMOVE EXISTING PCC CURB AND/OR GUTTER AS REQUIRED	1,552	LF		
6	SAWCUT AND REMOVE EXISTING AC/PCC SIDEWALK/RAMP OR PCC SLAB OR AC/PCC DRIVE APPROACH AND/OR DRIVEWAY ACCESS OR PCC CROSS GUTTER AND/OR SPANDREL OR REMOVE EXISTING 24" PCC PARKDRAIN AS REQUIRED	52,062	SF		
7	PULVERIZE EXISTING ASPHALT CONCRETE PAVEMENT AS SHOWN	255,653	SF		
8	COLD PLANE EXISTING ASPHALT CONCRETE PAVEMENT 1.5" DEEP MINIMUM, LIMITS PER	80,932	SF		

	PLAN OR CONSTRUCT 10' HEADER CUT OR AS SHOWN ON PLANS (1.5" MIN. THICKNESS) ALONG EXISTING ASPHALT CONCRETE PAVEMENT JOINTS				
9	REMOVE EXISTING CHAIN LINK, WOOD, OR WROUGHT IRON FENCING, INCLUDING GATES (REMOVAL ONLY)	3,380	LF		
10	REMOVE EXISTING TREE OR PALM TREE (FROM 6" TO 24" DIAM.)	52	EA		
11	REMOVE AND RELOCATE EXISTING MAILBOX. DURING CONSTRUCTION USE 5 GALON BUCKET BASE WITH COMPACTED EARTH. SEE STREET IMPROVEMENT SHEET FOR NEW LOCATION	70	EA		
12	REMOVE EXISTING SIGN AND RELOCATE AS REQUIRED PER TRAFFIC SIGNING AND STRIPING SHEETS (REMOVAL ONLY)	32	EA		
13	REMOVE EXISTING LANDSCAPE AND IRRIGATION AS REQUIRED TO CONSTRUCT IMPROVEMENTS AND REPLACE IN-KIND TO LIKE CONDITIONS OR BETTER	17,600	SF		
14	REMOVE EXISTING ROAD GUARD RAIL WITH 4"x8" WOOD SUPPORTS	42	LF		
15	ADJUST EXISTING SEWER MANHOLE OR CLEAN OUT TO GRADE	15	EA		
16	REMOVE, SALVAGE AND RELOCATE EXISTING PCC CAR STOP	8	EA		

17	REMOVE EXISTING CMU BLOCK WALL PER PLAN (H=5' MAX.-REMOVAL ONLY)	139	LF		
18	REMOVE EXISTING PCC OR CMU RETAINING BLOCK WALL (H=3' MAX.-REMOVAL ONLY)	381	LF		
19	REMOVE EXISTING MASONRY OR CMU BLOCK PILASTER AND REPLACE IN KIND TO LIKE CONDITIONS OR BETTER	5	EA		
20	REMOVE EXISTING REAL STATE BUSINESS SIGN AND REPLACE IN KIND TO LIKE CONDITIONS OR BETTER. RELOCATE BEHIND BACK OF WALK	1	EA		
21	ADJUST EXISTING WATER/GAS VALVE TO GRADE	67	EA		
22	REMOVE EXISTING SIGN, SALVAGE AND PROVIDE TO THE CITY FO FUTURE USE	47	EA		
23	REMOVE EXISTING STORM DRAIN STRUCTURE AND CONNECTING PIPING AS NEEDED PER STORM DRAIN PLANS	14	EA		
24	REMOVE EXISTING GROUTED RIP-RAP AS NEEDED TO CONSTRUCT PROPOSED STORM DRAIN IMPROVEMENTS	1,990	SF		
25	REMOVE EXISTING FLOOR DRAIN, INCLUDING PCC CURB AND REPLACE PER STORM DRAIN SHEETS	1	EA		
26	REMOVE EXISTING FLAG POLE AND RELOCATE PER STREET IMPROVEMENT SHEETS	1	EA		
27	REMOVE TOP PORTION OF EXISTING PCC HEADWALL BY SAW	1	EA		

	CUTTING HORIZONTALLY AS CLOSE AS POSSIBLY FROM TOP OF 2-60" RCP PIPES				
28	REMOVE EXISTING 3" STEEL POST. INCLUDING FOOTING	1	EA		
29	REMOVE EXISTING TREE STUMP AS NEEDED TO CONSTRUCT PROPOSED IMPROVEMENTS	2	EA		
30	REMOVE EXISTING DRAINAGE INLET AND CONSTRUCT CORRUGATED STEEL CAP, COAT WELDED, CUT AND ABRADED SURFACES AS SPECIFIED IN SSPCC 210-3.5	3	EA		
31	REMOVE AND RELOCATE BEHIND BACK OF WALK EXISTING CATHODIC BOX OR AV/AR VAULT PER DEPARTMENT OF WATER RESOURCES STANDARD. CONTRACTOR TO COORDINATE RELOCATIONS AND/OR ADJUSTMENTS WITH DEPARTMENT OF WATER RESOURCES	2	EA		
32	ADJUST EXISTING MANHOLE TO GRADE PER DEPARTMENT OF WATER RESOURCES STANDARDS	1	EA		
33	REMOVE, SALVAGE AND RELOCATE EXISTING BUSINESS SIGN (TIRE SHOP). SEE STREET IMPROVEMENT SHEETS FOR NEW LOCATION	1	EA		
34	ADJUST EXISTING ELECTRIC/TELEPHONE OR CABLE TV BOX TO GRADE	3	EA		

35	ADJUST EXISTING ELECTRIC/TELEPHONE OR CABLE TV RISER TO GRADE	2	EA		
36	CONSTRUCT 8" PCC CURB AND GUTTER PER CITY OF YUCAIPA STANDARD 120-1 OR CONSTRUCT TYPE A-8 PCC CURB AND GUTTER PER RIVERSIDE COUNTY STANDARD NO.201	3,536	LF		
37	CONSTRUCT 6" PCC CURB AND GUTTER PER CITY OF YUCAIPA STANDARD 120-1 OR CONSTRUCT TYPE A-6 PCC CURB AND GUTTER PER RIVERSIDE COUNTY STANDARD NO.200	2,007	LF		
38	CONSTRUCT 6" TYPE "A1" PCC CURB PER CALTRANS STD. PLAN A87A	2,552	LF		
39	CONSTRUCT 4" PCC CURB PER DETAIL "F", SEE SHEET 5	792	LF		
40	CONSTRUCT 8" ASPHALT CONCRETE DIKE PER SAN BERNARDINO COUNTY STD. DWG. 117 OR CONSTRUCT 8" ASPHALT CONCRETE DIKE PER RIVERSIDE COUNTY STANDARD NO. 212	684	LF		
41	CONSTRUCT CROSS GUTTER/SPANDREL PER RIVERSIDE COUNTY STANDARD NO. 209 OR CONSTRUCT CROSS GUTTER/SPANDREL PER CITY OF YUCAIPA STANDARD DWG. 122-1	3,398	SF		
42	CONSTRUCT ASPHALT CONCRETE DIKE PER APWA STANDARD PLAN 120-2 WITH ADA RAMP TRANSITION TO JOIN	420	SF		

	EXISTING PAVEMENT AND/OR EXISTING GROUND				
43	CONSTRUCT TYPE "A" OR "B" PCC SIDEWALK PER CITY OF YUCAIPA STANDARD 115-1, WIDTH AS NOTED OR CONSTRUCT PCC SIDEWALK PER RIVERSIDE COUNTY STANDARD NO. 401, WIDTH AS NOTED	56,987	SF		
44	CONSTRUCT 4" PCC CONCRETE WALK-PAD AND/OR STEPS AS NEEDED, WIDTH TO MATCH EXISTING AND LENGTH AS NOTED	270	SF		
45	CONSTRUCT RESIDENTIAL DRIVEWAY PER CITY OF YUCAIPA STANDARD DWG. 109-2 AND PER APWA STANDARD PLAN 110-2, TYPE A, REVISE LAYOUT PER DETAIL "A" OR CONSTRUCT RESIDENTIAL DRIVEWAY PER RIVERSIDE COUNTY STANDARD NO. 213, REVISE LAYOUT PER DRIVEWAY DETAIL "B", SEE SHEET 5	18,902	SF		
46	CONSTRUCT COMMERCIAL DRIVEWAY PER CITY OF YUCAIPA STANDARD DWG. 110-1 AND PER APWA STANDARD PLAN 110-2, TYPE C, REVISE LAYOUT PER DETAIL "D", SEE SHEET 5 OR CONSTRUCT COMMERCIAL DRIVEWAY PER RIVERSIDE COUNTY STANDARD NO. 207A	6,139	SF		
47	CONSTRUCT RESIDENTIAL DRIVEWAY PER CITY OF	2,704	SF		

	YUCAIPA STANDARD DWG. 109-2 AND PER APWA STANDARD PLAN 110-2, TYPE A, REVISE LAYOUT PER DETAIL "A", SEE SHEET 5. MODIFIED WITH 8" THICK CONCRETE FOR COMMERCIAL USE OR CONSTRUCT RESIDENTIAL DRIVEWAY PER RIVERSIDE COUNTY STANDARD NO. 213, REVISE LAYOUT PER DRIVEWAY DETAIL "B", SEE SHEET 5. MODIFIED WITH 8" THICK CONCRETE FOR COMMERCIAL USE				
48	CONSTRUCT 3" ASPHALT CONCRETE PAVEMENT OVER 95% COMPACTED NATIVE, INSTALL 2"X4" REDWOOD HEADERS FOR EDGE SUPPORT OR CONSTRUCT ASPHALT CONCRETE RESIDENTIAL DRIVEWAY PER RIVERSIDE COUNTY STANDARD NO. 206	10,583	SF		
49	CONSTRUCT 12" OF 95% COMPACTED NATIVE SOIL DRIVEWAY ACCESS	1,589	SF		
50	CONSTRUCT CASE "A" CURB RAMP PER CALTRANS STANDARD PLAN A88A AND AS NOTED (SEE SHEET 6 FOR GRADING DETAIL) OR CONSTRUCT CASE "A" CURB RAMP PER RIVERSIDE COUNTY STD. NO. 403 AND AS NOTED (SEE SHEET 6 GRADING DETAIL) OR CONSTRUCT BIKE RAMP PER NOTES ON CALTRANS STANDARD	26,081	SF		

	PLAN A88A, NCHRP 672 EXHIBIT 6-67 AND PER DETAIL "G", SEE SHEET 5				
51	CONSTRUCT 4" TYPE A ISLAND PASSAGEWAY PER CALTRANS STANDARD PLAN A88B, AND PER ROUNDABOUT GRADING DETAIL SHEET	1,600	SF		
52	CONSTRUCT CHAIN-LINK FENCE IN-KIND TO LIKE CONDITIONS OR BETTER	1,262	LF		
53	CONSTRUCT 4 TO 5-FT WIDE SINGLE SWING WALKWAY CHAIN-LINK GATE IN-KIND TO LIKE CONDITIONS OR BETTER	4	AE		
54	CONSTRUCT 12 TO 14-FT WIDE DOUBLE SWING DRIVEWAY CHAIN-LINK GATE IN-KIND TO LIKE CONDITIONS OR BETTER	2	EA		
55	CONSTRUCT 16 TO 20-FT WIDE ROLLING DRIVEWAY CHAIN-LINK GATE IN-KIND TO LIKE CONDITIONS OR BETTER	2	EA		
56	CONSTRUCT WOODEN FENCE IN-KIND TO LIKE CONDITIONS OR BETTER	885	LF		
57	CONSTRUCT 4 TO 5-FT WIDE SINGLE SWING WALKWAY WOODEN GATE IN-KIND TO LIKE CONDITIONS OR BETTER	2	EA		
58	CONSTRUCT WROUGHT IRON FENCE IN-KIND TO LIKE CONDITIONS OR BETTER	82	LF		
59	CONSTRUCT 4 TO 5-FT WIDE SINGLE SWING WALKWAY WROUGHT IRON GATE IN-KIND TO	1	EA		

	LIKE CONDITIONS OR BETTER				
60	CONSTRUCT 12 TO 14-FT WIDE DOUBLE SWING DRIVEWAY WROUGHT IRON GATE IN-KIND TO LIKE CONDITIONS OR BETTER	1	EA		
61	CONSTRUCT 3' HIGH DECORATIVE WROUGHT IRON FENCE BEHIND CURB AS SHOWN	1,048	LF		
62	CONSTRUCT 1.5" MINIMUM OF ASPHALT CONCRETE OVERLAY OVER 3" OF ASPHALT CONCRETE PAVEMENT	250,549	SF		
63	CONSTRUCT 4.5" THICK AGGREGATE BASE (PULVERIZED MATERIAL).	250,549	SF		
64	CONSTRUCT 1.5" THICK MINIMUM DENSE GRADED ASPHALT CONCRETE (DGAC) OVERLAY TYPE C PG 64-10 OR CONSTRUCT 10' HEADER CUT OR AS SHOWN ON PLANS (1.5" MIN. THICKNESS) ALONG EXISTING ASPHALT CONCRETE PAVEMENT JOINTS	80,932	SF		
65	CONSTRUCT 4" OF PCC STAMPED CONCRETE PAVEMENT OVER 12" COMPACTED NATIVE SOIL	4,512	SF		
66	CONSTRUCT 8" OF PCC CONCRETE PAVEMENT OVER 12" COMPACTED NATIVE SOIL	7,692	SF		
67	CONSTRUCT 4" OF PCC CONCRETE PAVEMENT OVER 12" COMPACTED NATIVE SOIL	10,705	SF		
68	CONSTRUCT 24" WIDE PCC CURB OUTLET STRUCTURE PER SAN BERNARDINO COUNTY STD. DWG. 210 OR	2	EA		

	CONSTRUCT 48" UNDER SIDEWALK DRAIN PER RIVERSIDE COUNTY STD. DWG. 309				
69	CONSTRUCT 4" RESIDENTIAL CURB DRAIN PER DETAIL "E" CASE "A" OR CONSTRUCT 4" RESIDENTIAL CURB DRAIN PER DETAIL "E" CASE "B", SEE SHEET 5	21	EA		
70	CONSTRUCT 2-2" SCH. 40 PVC SLEEVES FOR LANDSCAPE AND IRRIGATION	1,584	LF		
71	CONSTRUCT REINFORCED CONCRETE BLOCK WALL PER APWA STANDARD PLAN 601-4, TYPE 3 AND AS NOTED	79	LF		
72	CONSTRUCT SPLIT FACE MASONRY RETAINING WALL PER APWA STANDARD PLAN 618-3, TYPE B AND AS NOTED	80	LF		
73	CONSTRUCT CONCRETE BLOCK SLOUGH WALL PER APWA STANDARD PLAN 622-4 AND AS NOTED	190	LF		
74	INSTALL 2 SACK SLURRY BACKFILL OVER EXISTING 48" STORM DRAIN PIPE PER DETAIL "C", SEE SHEET 5	7	EA		
75	CONSTRUCT 60" RCP STORM DRAIN PIPE, BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	82	LF		
76	CONSTRUCT 8 GAUGE 48" CMP STORM DRAIN PIPE WITH 2-2/3"X1/2" CORRUGATIONS. BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	378	LF		
77	CONSTRUCT 8 GAUGE 57"X38" ARCH CMP	318	LF		

	STORM DRAIN PIPE WITH 2-2/3"X1/2" CORRUGATIONS. BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3				
78	CONSTRUCT 8 GAUGE 17"X13" ARCH CMP STORM DRAIN PIPE WITH 2-2/3"X1/2" CORRUGATIONS. BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	172	LF		
79	CONSTRUCT 36" RCP STORM DRAIN PIPE, BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	17	LF		
80	CONSTRUCT 24" RCP STORM DRAIN PIPE, BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	235	LF		
81	CONSTRUCT 8 GAUGE 24" CMP STORM DRAIN PIPE WITH 2-2/3"X1/2" CORRUGATIONS. BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	112	LF		
82	CONSTRUCT 18" RCP STORM DRAIN PIPE, BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	38	LF		
83	CONSTRUCT 8 GAUGE 18" CMP STORM DRAIN PIPE WITH 2-2/3"X1/2" CORRUGATIONS. BACKFILL TRENCH PER CITY OF YUCAIPA STD. DWG. 106-3	182	LF		
84	CONSTRUCT 48" TO 57"X38" CMP STORM DRAIN PIPE TRANSITION. COAT WELDED, CUT AND ABRADED SURFACES AS SPECIFIED IN SSPWC 210-3.5	4	EA		

85	CONSTRUCT MANHOLE PIPE-TO-PIPE (LARGE SIDE INLET) PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO. 321-2	7	EA		
86	CONSTRUCT 60" CONCRETE COLLAR PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO. 380-4	2	EA		
87	CONSTRUCT 24" OR 18" CONCRETE COLLAR PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO. 380-4	3	EA		
88	CONSTRUCT 25' CURB OPENING CATCH BASIN AND LOCAL DEPRESSION PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3 AND 313-3 CASE E	2	EA		
89	CONSTRUCT 24' CURB OPENING CATCH BASIN AND LOCAL DEPRESSION PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3 AND 313-3 CASE E	1	EA		
90	CONSTRUCT 21' CURB OPENING CATCH BASIN AND LOCAL DEPRESSION PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3 AND 313-3 CASE E	5	EA		

91	CONSTRUCT 19' CURB OPENING CATCH BASIN AND LOCAL DEPRESSION PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3 AND 313-3 CASE E	1	EA		
92	CONSTRUCT 14' CURB OPENING CATCH BASIN AND LOCAL DEPRESSION PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3 AND 313-3 CASE E	2	EA		
93	CONSTRUCT 10' CURB OPENING CATCH BASIN AND LOCAL DEPRESSION PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3 AND 313-3 CASE E	3	EA		
94	CONSTRUCT 7' MODIFIED CURB OPENING CATCH BASIN PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO.300-3, WITH ENTRANCE PROJECTION PER STD. PLAN 314-3 CASE 1 AND PER DETAIL A, SEE SHEET 47	1	EA		
95	CONSTRUCT (2-60" RCP) PCC HEADWALL PER CALTRANS STANDARD PLAN D86B.	1	EA		
96	CONSTRUCT (1-48" OR 2- 48" CMP) PCC HEADWALL PER CALTRANS STANDARD PLAN D86B.	2	EA		

97	CONSTRUCT 4" PVC YARD DRAIN CONNECTION WITH FLEX COUPLING, CUT AND EXTEND AS NEEDED TO CONNECT TO PROPOSED RIP-RAP CHANNEL	1	EA		
98	CONSTRUCT BRICK AND MORTAR BULKHEAD	1	EA		
99	CONSTRUCT PIPE CONNECTION TO EXISTING STORM DRAIN STRUCTURE PER STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STANDARD PLAN NO. 335-2	1	EA		
100	CONSTRUCT PIPE CONNECTION, COAT WELDED, CUT AND ABRADED SURFACES AS SPECIFIED IN SSPCC 210-3.5	5	EA		
101	CONSTRUCT WELDED CONNECTION AND CONNECT EXISTING ABS YARD DRAIN WITH FLEX COUPLING, COAT WELDED , CUT AND ABRADED SURFACES AS SPECIFIED IN SSPWC 210-3.5	1	EA		
102	CONSTRUCT CHAIN-LINK FENCE PER SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT FILE NO. S.P. 162	260	LF		
103	CONSTRUCT 24" THICK GROUTED RIP-RAP 1/2 TON. PER SECTION 72 OF CALTRANS STD. SPECIFICATIONS	1,747	SF		
104	INSTALL LED STREET LIGHT POLE FOOTINGS	41	EA		
105	INSTALL 1-1/2" UNDERGROUND ELECTRICAL CONDUIT FOR STREET LIGHTING	200	LF		

106	INSTALL 3" UNDERGROUND ELECTRICAL CONDUIT FOR STREET LIGHTING	12,120	LF		
107	INSTALL UNDERGROUND ELECTRICAL PULL BOX FOR STREET LIGHTING	41	EA		
108	INSTALL NEW MP SERVICE CABINET, PULLBOX AND CONNECT TO SCE AS SHOWN ON PLANS	4	EA		
109	INSTALL CENTRAL ISLAND LED DECORATIVE LIGHT PER SPECIFICATIONS	13	EA		
110	INSTALL UNDERGROUND ELECTRICAL CONDUIT, PULL BOXES AND CONDUCTOR FOR LANDSCAPE LIGHTING	4	EA		
111	APPLY THERMOPLASTIC, 8" SOLID WHITE CHANNELIZING STRIPE, PER FIG 3A-112 (CA), DETAIL 38	100	LF		
112	APPLY THERMOPLASTIC, 12" SOLID WHITE CROSSWALK LINE	350	350		
113	APPLY THERMOPLASTIC, 6" SOLID WHITE BIKE LANE STRIPE, PER FIG. 3A-112 (CA), DETAIL 39	10,328	LF		
114	APPLY THERMOPLASTIC, TYPE IV (L) ARROW AS SHOWN PER FIG. 3B-24 (CA)	2	EA		
115	APPLY THERMOPLASTIC, 12" SOLID WHITE LIMIT LINE	17	LF		
116	APPLY THERMOPLASTIC, 6" WHITE BIKE LANE INTERSECTION STRIPE,	2,508	LF		

	PER FIG. 3A-112 (CA), DETAIL 39A				
117	APPLY THERMOPLASTIC, PAVEMENT LEGEND, PER FIG. 3B-23 (CA)	10	EA		
118	APPLY THERMOPLASTIC, BICYCLE LANE SYMBOL AND ARROW, PER FIG. 9B-3B (CA)	19	EA		
119	APPLY THERMOPLASTIC, DOUBLE YELLOW STRIPE, PER FIG. 3A-104, DETAIL 22	7,653	LF		
120	APPLY THERMOPLASTIC, 12" SOLID WHITE LINE AS SHOWN	157	LF		
121	APPLY THERMOPLASTIC, STOP LEGEND, PER CA. MUTCD 2014, FIG. 3B-23 (CA)	4	EA		
122	APPLY THERMOPLASTIC, 12" SOLID YELLOW CROSSWALK LINE	237	LF		
123	APPLY THERMOPLASTIC, 4" SOLID YELLOW LEFT EDGE LINE, PER FIG. 3A- 105 (CA), DETAIL 24	2,166	LF		
124	APPLY THERMOPLASTIC, 12" BROKEN WHITE 3-FT. STRIPE WITH 3-FT GAP	400	LF		
125	APPLY THERMOPLASTIC, WHITE RIGHT EDGE LINE STRIPE, PER FIG. 3A-106 (CA), DETAIL 27B	256	LF		
126	SANDBLAST ALL EXISTING CONFLICTING STRIPING	1	LS		
127	FURNISH AND INSTALL STREET NAME SIGN AS NOTED PER CITY OF YUCAIPA STD. DWG. 421-0	9	EA		

128	FURNISH AND INSTALL STREET NAME SIGN AS NOTED PER CITY OF CALIMESA STANDARDS	8	EA		
129	FURNISH AND INSTALL SIGN	154	EA		
130	RELOCATE EXISTING SIGN	22	EA		
131	FURNISH AND INSTALL SIGN ON STREET LIGHT POLE OR POWER POLE	6	EA		
132	APPLY THERMOPLASTIC SHARE LANE SYMBOL AND STRIPPED ARROWS PER CA. MUTCD 2014, FIG. 9C-9 (CA) AND 9C-108 (CA)	10	EA		
133	APPLY THERMOPLASTIC 4" SOLID WHITE LANE STRIPE WITH TYPE G RPM 24' C-C	612	LF		
134	CONSTRUCT 2" GALVANIZED PIPE PEDESTRIAN BARRIER, 6-FT WIDE, TYPE A, PER APWA STANDARD PLAN 606-4, FURNISH AND INSTALL SIGN TOP-CENTER AS NOTED	1	EA		

TOTAL FOR BID SCHEDULE A

(ITEMS 1 THROUGH 134) _____ \$ _____
(WORDS) (FIGURE)

Bid Schedule B -

ITEM No.	DESCRIPTION OF CONSTRUCTION ITEMS	QTY	UNIT	UNIT COST	TOTAL
1	REMOVE AND RELOCATE EXISTING WATER METER BOX BEHIND BACK OF WALK PER WATER COMPANY STANDARDS, CONTRACTOR TO COORDINATE RELOCATIONS AND/OR ADJUSTMENTS WITH SOUTH MESA WATER COMPANY	43	EA	\$	\$
2	REMOVE AND RELOCATE EXISTING 3" MAX. DIAM. BACK FLOW PREVENTER BEHIND BACK OF WALK PER WATER COMPANY STANDARDS, CONTRACTOR TO COORDINATE RELOCATIONS AND/OR ADJUSTMENTS WITH SOUTH MESA WATER COMPANY	3	EA	\$	\$
3	REMOVE AND RELOCATE EXISTING FIRE HYDRANT, AV/AR VALVE OR BLOW-OFF VALVE PER WATER COMPANY STANDARDS, CONTRACTOR TO COORDINATE RELOCATIONS AND/OR ADJUSTMENTS WITH SOUTH MESA WATER DISTRICT	22	EA	\$	\$
4	INSTALL IRRIGATION METER PER WATER COMPANY STANDARDS, CONTRACTOR TO COORDINATE INSTALLATION WITH SOUTH MESA WATER COMPANY	4	EA	\$	\$

TOTAL FOR BID SCHEDULE B

(ITEMS 1 THROUGH 4) _____ \$ _____
 (WORDS) (FIGURE)

Bid Schedule C -

ITEM No.	DESCRIPTION OF CONSTRUCTION ITEMS	QTY	UNIT	UNIT COST	TOTAL
1	MOBILIZATION/DEMOBILIZATION	1	LS	\$	\$
2	TRAFFIC CONTROL AND SAFETY	1	LS	\$	\$
3	STORM WATER POLLUTION PREVENTION PLAN, BEST MANAGEMENT PRACTICE AND NPDES REQUIREMENTS	1	LS	\$	\$
4	PULVERIZE EXISTING ASPHALT CONCRETE PAVEMENT AS SHOWN	80,629	SF	\$	\$
5	REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK	320	SF	\$	\$
6	REMOVE AND DISPOSE OF EXISTING CONCRETE	3,180	SF	\$	\$
7	REMOVE AND DISPOSE OF EXISTING CONCRETE CURB/CURB & GUTTER	334	LF	\$	\$
8	REMOVE AND DISPOSE OF EXISTING AC BERM	1,800	LF	\$	\$
9	REMOVE AND DISPOSE OF EXISTING TREE	13	EA	\$	\$
10	REMOVE AND DISPOSE OF EXISTING CATCH BASIN	2	EA	\$	\$
11	REMOVE AND DISPOSE OF EXISTING 18" RCP	140	LF	\$	\$
12	REMOVE IN KIND EXISTING TRAFFIC SIGNAL POLES AND DELIVER TO CITY STORAGE	8	EA	\$	\$
13	REMOVE EXISTING TRAFFIC SIGNAL CABINET/BOX AND DELIVER TO CITY STORAGE	1	EA	\$	\$
14	REMOVE AND REPLACE MAILBOX W/NEW POST BEHIND CURB. PLACE MAILBOX AND POST IN 5 GAL. BUCKET FILLED W/DIRT DURING CONSTRUCTION.	8	EA	\$	\$
15	REMOVE AND DISPOSE OF INTERFERING PORTIONS OF EXISTING WALL	12	LF	\$	\$

16	REMOVE AND RELOCATE IN KIND INTERFERING PORTIONS OF EX. FENCE TO R/W	563	LF	\$	\$
17	REMOVE EXISTING SIGN	4	EA	\$	\$
18	REMOVE AND RELOCATE EXISTING SIGN	4	EA	\$	\$
19	REMOVE AND DISPOSE OF EXISTING DRAIN PIPE	6	LF	\$	\$
20	SAWCUT EXISTING ASPHALT	564	LF	\$	\$
21	SAWCUT EXISTING CONCRETE PAVEMENT	18	LF	\$	\$
22	REMOVE AND DISPOSE OF EXISTING SAFETY NETTING FENCE	93	LF	\$	\$
23	REMOVE AND DISPOSE METAL POSTS	3	EA	\$	\$
24	COMMUNICATIONS RISER TO BE RELOCATED BY OTHERS. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR RELOCATION	2	EA	\$	\$
25	CONSTRUCT 1.5" MINIMUM OF ASPHALT CONCRETE OVERLAY OVER 3" OF ASPHALT CONCRETE PAVEMENT	85,284	SF	\$	\$
26	CONSTRUCT 4.5" THICK AGGREGATE BASE (PULVERIZED MATERIAL).	85,284	SF	\$	\$
27	CONSTRUCT 4" TYPE A ISLAND PASSAGEWAY PER CALTRANS STANDARD PLAN A88A, AND PER DETAIL SHEET	931	SF	\$	\$
28	CONSTRUCT 8" OF PCC CONCRETE PAVEMENT OVER 12" COMPACTED NATIVE SOIL	2,158	SF	\$	\$
29	GRIND EXISTING PAVEMENT 0.10' MIN. AND CONSTRUCT PAVEMENT OVERLAY 0.10' MIN	2,767	SF	\$	\$
30	CONSTRUCT 4" OF PCC STAMPED CONCRETE PAVEMENT OVER 12" COMPACTED NATIVE SOIL	3,178	SF	\$	\$

31	CONSTRUCT 8" CURB & GUTTER PER SAN BERNARDINO COUNTY STD. NO. 115.	2,492	LF	\$	\$
32	CONSTRUCT 6" CURB & GUTTER PER SAN BERNARDINO COUNTY STD. NO. 116.	102	LF	\$	\$
33	CONSTRUCT 6" CONCRETE CURB ONLY PER SPPWC STANDARD PLAN 120-2 TYPE A1- 6(200).	1,414	LF	\$	\$
34	CONSTRUCT 6" CONCRETE CURB & GUTTER PER SAN BERNARDINO COUNTY STD. NO. 116. (MODIFIED).	98	LF	\$	\$
35	CONSTRUCT 3.5" MOUNTABLE CURB PER DETAIL ON SHEET 12.	295	LF	\$	\$
36	CONSTRUCT 8" AC DIKE PER COUNTY OF SAN BERNARDINO STD. NO. 117.	70	LF	\$	\$
37	CONSTRUCT 4" AC DIKE PER COUNTY OF SAN BERNARDINO STD. NO. 117 (MODIFIED).	75	LF	\$	\$
38	CONSTRUCT 4" PCC SIDEWALK PER CITY OF YUCAIPA STD. DWG. NO. 115-2 TYPE "B" (WIDTH PER PLAN).	12,609	SF	\$	\$
39	CONSTRUCT (MODIFIED) RESIDENTIAL DRIVEWAY APPROACH PER CITY OF YUCAIPA STD. DWG. NO. 109-2 AND DETAILS ON SHEET 12.	1,011	SF	\$	\$
40	CONSTRUCT (MODIFIED) RESIDENTIAL DRIVEWAY APPROACH PER CITY OF YUCAIPA STD. DWG. NO. 109-2 AND DETAILS ON SHEET 12. (3" ASPHALT CONCRETE PAVEMENT OVER 12" COMPACTED SUBGRADE)	981	SF	\$	\$
41	CONSTRUCT (MODIFIED) COMMERCIAL DRIVEWAY APPROACH PER CITY OF YUCAIPA STD. DWG. NO. 110-1	1,084	SF	\$	\$

42	CONSTRUCT CURB RAMP PER SPPWC STD PLAN 111-5 CASE B, TYPE 1 (MODIFIED) AS SHOWN ON PLANS.	9	EA	\$	\$
43	CONSTRUCT BIKE RAMP PER DETAIL ON SHEET 12.	208	SF	\$	\$
44	CONSTRUCT DETECTABLE WARNING SURFACE "TRUNCATED DOMES" PER DETAIL ON SHEET 12.	19	EA	\$	\$
45	ADJUST MANHOLE TO GRADE	11	EA	\$	\$
46	ADJUST GAS VALVE BOX TO GRADE	1	EA	\$	\$
47	ADJUST WATER VALVE TO GRADE	10	EA	\$	\$
48	ADJUST CLEANOUT TO GRADE	1	EA	\$	\$
49	CONSTRUCT 4" PCC OVER 12" COMPACTED SUBGRADE	52	SF	\$	\$
50	CONSTRUCT 3" ASPHALT CONCRETE PAVEMENT OVER 12" COMPACTED SUBGRADE	562	SF	\$	\$
51	CONSTRUCT 3" GRAVEL OVER 12" COMPACTED SUBGRADE	525	SF	\$	\$
52	CONSTRUCT 12" RCP PER CITY OF YUCAIPA STD. PLAN 106-3 (D-LOAD PER PLAN)	79	LF	\$	\$
53	CONSTRUCT 15" RCP PER CITY OF YUCAIPA STD. PLAN 106-3 (D-LOAD PER PLAN)	87	LF	\$	\$
54	CONSTRUCT 24" RCP PER CITY OF YUCAIPA STD. PLAN 106-3 (D-LOAD PER PLAN)	327	LF	\$	\$
55	CONSTRUCT CONCRETE COLLAR PER SPPWC STD. PLAN 380-4	1	EA	\$	\$
56	CONSTRUCT TRANSITION JUNCTION STRUCTURE PER SPPWC STD. PLAN 341-2	1	EA	\$	\$
57	CONSTRUCT CURB OPENING CATCH BASIN WITH GRATING(S) PER SPPWC STD. PLAN 302-3	3	EA	\$	\$

58	CONSTRUCT GRATING CATCH BASIN PER SPPWC STD. PLAN 304-3	1	EA	\$	\$
59	CONSTRUCT LOCAL DEPRESSION PER SPPWC STD. PLAN 313-3	3	EA	\$	\$
60	CONNECT TO EXISTING JUNCTION STRUCTURE PER SPPWC STD. PLAN 335-2	3	EA	\$	\$
61	INSTALL GRATE INLET R- 3501-TB NEENAH FOUNDRY CO. OR APPROVED EQUAL (HEAVY DUTY) SEE DETAIL ON SHEET 14	1	EA	\$	\$
62	PAINT 4" THERMOPLASTIC WHITE LANE LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-102(CA), DETAIL 8	1,068	LF	\$	\$
63	PAINT 4" THERMOPLASTIC SOLID YELLOW LINE - TWO DIRECTION NO PASSING PATTERN PER CA MUTCD LATEST EDITION FIGURE, 3A-104(CA), DETAIL 21	124	LF	\$	\$
64	PAINT 4" THERMOPLASTIC SOLID YELLOW EDGE LINE PER CA MUTCD LATEST EDITION, FIGURE 3A- 105(CA), DETAIL 24	2,015	LF	\$	\$
65	PAINT 4" THERMOPLASTIC WHITE EDGE LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-106(CA), DETAIL 27B	501	LF	\$	\$
66	PAINT 4" THERMOPLASTIC YELLOW TWO- WAY LEFT TURN LANE PER CA MUTCD LATEST EDITION, FIGURE 3A-108(CA), DETAIL 31	970	LF	\$	\$
67	PAINT 8" THERMOPLASTIC WHITE LANE DROP LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-111(CA), DETAIL 37D	52	LF	\$	\$
68	PAINT 4" THERMOPLASTIC WHITE CHANNELIZING LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-112(CA),	140	LF	\$	\$

	DETAIL 38				
69	PAINT 6" THERMOPLASTIC WHITE CHANNELIZING LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-112(CA), DETAIL 38	646	LF	\$	\$
70	PAINT 8" THERMOPLASTIC WHITE CHANNELIZING LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-112(CA), DETAIL 38A	309	LF	\$	\$
71	PAINT 6" THERMOPLASTIC WHITE BIKE LANE LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-112(CA), DETAIL 39	1,506	LF	\$	\$
72	PAINT 6" THERMOPLASTIC WHITE BIKE LANE LINE PER CA MUTCD LATEST EDITION, FIGURE 3A-112(CA), DETAIL 39A	218	LF	\$	\$
73	PAINT 12" THERMOPLASTIC SOLID WHITE CROSSWALK LINE (CONTINENTAL) AT 18" SPACING PER DETAIL ON SHEET 11 AND CA MUTCD LATEST EDITION SECTION 3B.19	9	EA	\$	\$
74	PAINT 12" THERMOPLASTIC SOLID WHITE CROSSWALK LINES (STANDARD) PER CA MUTCD LATEST EDITION SECTION 3B.19	1	EA	\$	\$
75	PAINT 12" THERMOPLASTIC WHITE STOP LINE PER CA MUTCD LATEST EDITION SECTION 3B.16	1	EA	\$	\$
76	PAINT 18" THERMOPLASTIC BROKEN WHITE YIELD LINE, 2.5 FT. LONG WITH 2' GAP PER CA MUTCD LATEST EDITION	8	EA	\$	\$
77	PAINT THERMOPLASTIC WHITE TRIANGLE YIELD LINE PER CA MUTCD LATEST EDITION FIGURE 3B-16	5	EA	\$	\$

78	PAINT "STOP" THERMOPLASTIC WHITE LEGEND PER CA MUTCD LATEST EDITION, FIGURE 3B-23(CA)	1	EA	\$	\$
79	PAINT "YIELD" THERMOPLASTIC WHITE LEGEND PER CA MUTCD LATEST EDITION, FIGURE 3B-23(CA)	8	EA	\$	\$
80	PAINT "ONLY" THERMOPLASTIC WHITE LEGEND PER CA MUTCD LATEST EDITION, FIGURE 3B-23(CA)	1	EA	\$	\$
81	PAINT WORDS, ARROW AND SYMBOL, MARKERS PER CA MUTCD LATEST EDITION, FIGURE 9C-3(CA)	9	EA	\$	\$
82	PAINT THERMOPLASTIC TYPE 1 ARROW PER CA MUTCD LATEST EDITION, FIGURE 3B- 24(CA)	2	EA	\$	\$
83	PAINT THERMOPLASTIC TYPE IV ARROW PER CA MUTCD LATEST EDITION, FIGURE 3B-24(CA)	9	EA	\$	\$
84	PAINT THERMOPLASTIC TYPE VI ARROW PER CA MUTCD LATEST EDITION, FIGURE 3B-24(CA)	3	EA	\$	\$
85	PAINT THERMOPLASTIC TYPE VII ARROW PER CA MUTCD LATEST EDITION, FIGURE 3B-24(CA)	17	EA	\$	\$
86	INSTALL "STOP" SIGN (R1-1) PER CA MUTCD LATEST EDITION, FIGURE 2B-1	1	EA	\$	\$
87	INSTALL "YIELD" SIGN (R1- 2) PER CA MUTCD LATEST EDITION, FIGURE 2B-1	10	EA	\$	\$
88	INSTALL CHEVRON PLAQUE SIGN (R6-4B) PER CA MUTCD LATEST EDITION, FIGURE 2B-20	4	EA	\$	\$

89	INSTALL "PEDESTRIAN" (W11-2) SIGN WITH "ARROW" (W16-7PL) SIGN PER CA MUTCD LATEST EDITION, FIGURE 2C-11 AND 2C-12	16	EA	\$	\$
90	INSTALL "ROUNDBOUT" SIGN (W2-6) WITH "20 MPH" SPEED ADVISORY PLATE (W13-1P) SIGN PER CA MUTCD LATEST EDITION, FIGURE 2C-9	8	EA	\$	\$
91	INSTALL MAPTYPE DIRECTIONAL SIGN WHITE ON GREEN PER CA MUTCD LATEST EDITION	4	EA	\$	\$
92	INSTALL LANE ASSIGNMENT SIGN BLACK ON WHITE PER CA MUTCD LATEST EDITION, FIGURE 2B-5	2	EA	\$	\$
93	INSTALL ILLUMINATED FLEXIBLE BOLLARD (R4-7) KEEP RIGHT SYMBOL (3FT HEIGHT) PER CA MUTCD LATEST EDITION, FIGURE 2B-10	4	EA	\$	\$
94	INSTALL ARROW SHAPED DESTINATION SIGN WHITE ON GREEN W/WHITE CHEVRON ON RT. EDGE MOUNTED 18" ABOVE ROADWAY PER CA MUTCD LATEST EDITION	4	EA	\$	\$
95	INSTALL KEEP LEFT/RIGHT (W12-1) SIGN PER CA MUTCD LATEST EDITION, FIGURE 2C-5	1	EA	\$	\$
96	INSTALL LANE MERGING (W4-2) SIGN PER CA MUTCD LATEST EDITION, FIGURE 2C-8	1	EA	\$	\$
97	INSTALL "BIKE LANE" (R81(CA)) SIGN PER CA MUTCD LATEST EDITION, FIGURE 9B-2	6	EA	\$	\$
98	INSTALL "BEGIN" (R81A(CA)) SIGN PER CA MUTCD LATEST EDITION, FIGURE 9B-2	3	EA	\$	\$

99	INSTALL "END" (R81B(CA)) SIGN PER CA MUTCD LATEST EDITION, FIGURE 9B-2	3	EA	\$	\$
100	INSTALL ONE WAY (R6-1R) SIGN (RIGHT) PER CA MUTCD LATEST EDITION, FIGURE 2B-13	5	EA	\$	\$
101	INSTALL REFLECTIVE PAVEMENT MARKER PER CA MUTCD LATEST EDITION, FIGURE 3A- 112(CA)	23	EA	\$	\$
102	INSTALL TYPE 2 OBJECT MARKER (OM2-1V) PER CA MUTCD LATEST EDITION, FIGURE 2C-13	1	EA	\$	\$
103	SANDBLAST EXISTING PAVEMENT MARKINGS	2	EA	\$	\$
104	REMOVE, REPAIR, AND REPLACE EXISTING TURF LANDSCAPING AND IRRIGATION IN KIND	1	LS	\$	\$

TOTAL FOR BID SCHEDULE C

(ITEMS 1 THROUGH 104) _____ \$ _____
(WORDS) (FIGURE)

Bid Schedule D -

ITEM No.	DESCRIPTION OF CONSTRUCTION ITEMS	QTY	UNIT	UNIT COST	TOTAL
1	REMOVE AND RELOCATE EXISTING WATER METER AND BOX PER WATER COMPANY STANDARDS. CONTRACTOR TO COORDINATE WITH SOUTH MESA WATER COMPANY	7	EA	\$	\$
2	REMOVE AND RELOCATE EXISTING BACKFLOW DEVICE PER WATER COMPANY STANDARDS. CONTRACTOR TO COORDINATE WITH SOUTH MESA WATER COMPANY	1	EA	\$	\$
3	REMOVE AND RELOCATE EXISTING FIRE HYDRANT PER WATER COMPANY STANDARDS. CONTRACTOR TO COORDINATE WITH SOUTH MESA WATER COMPANY	2	EA	\$	\$

TOTAL FOR BID SCHEDULE D

(ITEMS 1 THROUGH 3) _____ \$ _____
 (WORDS) (FIGURE)

TOTAL FOR BID SCHEDULES A & C (ITEMS 1 THRU 134 AND 1 THRU 104)

\$ _____
 (FIGURE)

 (WORDS)

TOTAL FOR BID SCHEDULES A & C PLUS B (ITEMS 1 THRU 134, 1 THRU 104, AND 1 THRU 4)

\$ _____
 (FIGURE)

 (WORDS)

TOTAL FOR BID SCHEDULES A & C PLUS B & D (ITEMS 1 THRU 134, 1 THRU 104, 1 THRU 4, AND 1 THRU 3)

\$ _____
 (FIGURE)

 (WORDS)

ADDENDA ACKNOWLEDGMENT

The undersigned acknowledges receipt of the following ADDENDA and the cost if any, or such revisions have been included in the TOTAL BID of the Bidding Schedule (s).

ADDENDUM NO. _____, DATED _____

ADDENDUM NO. _____, DATED _____

ADDENDUM NO. _____, DATED _____

ADDENDUM NO. _____, DATED _____

Name of Bidder _____

Address _____

State License No. _____ Telephone No. _____

By: _____
Signature

Title

Date the _____ day of _____, _____

REFERENCES

The following are the names, addresses and telephone numbers for three public agencies for which BIDDER has performed similar work within the past 2 years:

1.	Name and Address of Owner			
	Name and telephone number of person familiar with project			
	<table border="0" style="width: 100%;"><tr><td style="width: 33%;">Contract amount</td><td style="width: 33%;">Type of work</td><td style="width: 33%;">Date completed</td></tr></table>	Contract amount	Type of work	Date completed
Contract amount	Type of work	Date completed		
2.	Name and Address of Owner			
	Name and telephone number of person familiar with project			
	<table border="0" style="width: 100%;"><tr><td style="width: 33%;">Contract amount</td><td style="width: 33%;">Type of work</td><td style="width: 33%;">Date completed</td></tr></table>	Contract amount	Type of work	Date completed
Contract amount	Type of work	Date completed		
3.	Name and Address of Owner			
	Name and telephone number of person familiar with project			
	<table border="0" style="width: 100%;"><tr><td style="width: 33%;">Contract amount</td><td style="width: 33%;">Type of work</td><td style="width: 33%;">Date completed</td></tr></table>	Contract amount	Type of work	Date completed
Contract amount	Type of work	Date completed		

The following are the names, addresses, and telephone numbers of all brokers and sureties from whom BIDDER intends to procure insurance and bonds:

BIDDER'S INFORMATION

BIDDER certifies that the following information is true and correct:

Bidder's Name _____

Business Address _____

Telephone _____

State Contractor's License No. and Class _____

Original Date Issued _____ Expiration Date _____

The following are the names, titles, addresses, and telephone numbers of all individuals, firm members, partners, joint venturers, and/or corporate officers having a principal interest in this proposal:

The dates of any voluntary or involuntary bankruptcy judgements against any principal having an interest in this proposal, or any firm, corporation, partnership or joint venture of which any principal having an interest in this proposal was an owner, corporate officer, partner, or joint venturer are as follows:

All current and prior DBA's, alias, and/or fictitious business names for any principal having an interest in this proposal are as follows:

IN WITNESS WHEREOF, BIDDER executes and submits this proposal with the names, title, hands, and seals of all aforementioned principals this ____ day of _____, 20____.

BIDDER

Subscribed and sworn to this ____ day of _____, 20 _____.

NOTARY PUBLIC _____

NON-COLLUSION AFFIDAVIT

FOR
**COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA**

STATE OF CALIFORNIA)
) SS
COUNTY OF)

(NAME), _____
affiant being first duly sworn, deposes and says:

That he or she is the _____ of
(sole owner, partner, other proper title)

_____, the party making the foregoing bid and
(Contracting Firm Name)

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 associations, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid. (Public Contract Code Section 7106)

Bidder's Name: _____

Bidder's Address: _____

Telephone No.: _____

(Signature of Bidder)

(Title)

All signatures must be notarized and securely attached to this form.

**PROPOSAL GUARANTEE
BID BOND**

**FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA**

KNOW ALL MEN BY THESE PRESENTS that _____, as BIDDER, and _____, as SURETY, are held and firmly bound unto the City of Calimesa, as CITY, in the penal sum of _____ Dollars (\$_____), which is 10 percent of the total amount bid by BIDDER to CITY for the above-stated project, for the payment of which sum, BIDDER and SURETY agree to be bound, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, whereas BIDDER is about to submit a bid to CITY for the above-stated project, if said bid is rejected, or if said bid is accepted and a contract is awarded and entered into by BIDDER in the manner and time specified, then this obligation shall be null and void, otherwise it shall remain in full force and effect in favor of CITY.

IN WITNESS WHEREOF the parties hereto have set their names, titles, hands, and seals this day of _____, 20____.

BIDDER* _____

SURETY* _____

Subscribed and sworn to this ____ day of _____, 20____.

NOTARY PUBLIC _____

* Provide BIDDER/SURETY name, address, and telephone number and the name, title, address, and telephone number for authorized representative.

(SEAL AND NOTORIAL ACKNOWLEDGMENT OF SURETY)

BIDDER'S VIOLATION OF LAW/SAFETY QUESTIONNAIRE

In accordance with Government Code Section 14310.5, the Bidder shall complete, under penalty of perjury, the following questionnaire.

QUESTIONNAIRE

Has the Bidder, any officer of the Bidder or any employee of the Bidder who has a proprietary interest in the Proposal Herein 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 space provided.

Note: This questionnaire constitutes a part of the Proposal, and the signature portion of the Proposal shall constitute signature of this questionnaire

**CITY OF CALIMESA
BIDDER INFORMATION SHEET**

FOR
**COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA**

Bid Opening Date: **January 19, 2022**

Project Title: **COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT**

UDBE Goal for Contract (if any): **None**

The following information is requested for all contractors who provide a bid, proposal, or quote, or who are contacted by the proposed prime contractor. If you are the apparent low bidder (or the second or third low bidder), the information should be submitted within four business days of the bid opening date. *Information provided will be held in confidence.*

Firm Name: _____

Address: _____

Contractor's License Number and Class: _____

Telephone: _____ Facsimile: _____

Years in Business: _____ Is the firm currently certified as a DBE? Yes No

→ If yes, indicate certification status: Black American Asian-Pacific Islander
 Native American Woman
 Hispanic American Sub-continent Asian American

and DBE Certification No.: _____

Contract items or description of work: _____

Dollar Amount of items bid on (this contract): _____

Gross Annual Receipts (last year):*

- Less than \$1 million
- \$1million - \$5 million
- \$5 million - \$10 million
- \$10 million-\$15 million
- Over \$15 million

(Please duplicate this form and provide information on all bidders.)

THE CITY OF CALIMESA THANKS YOU FOR YOUR ASSISTANCE.

**This information is requested pursuant to Federal law.*

**CITY OF CALIMESA
CONTRACT AGREEMENT**

**FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA**

This Contract Agreement is made and entered into for the above-stated project this _____ day of _____, 20____, BY AND BETWEEN the City of Calimesa, as CITY, and _____, as CONTRACTOR, Inc., as known herein as CONTRACTOR.

WITNESSETH that CITY and CONTRACTOR have mutually agreed as follows:

ARTICLE I

The contract documents for the aforesaid project shall consist of the Notice Inviting Sealed Bids, Instructions to Bidders, Proposal, General Specifications, Standard Specifications, Special Provisions, Plans, and all referenced specifications, details, standard drawings, and appendices; together with this Contract Agreement and all required bonds, insurance certificates, permits, notices, and affidavits; and also including any and all addenda or supplemental agreements clarifying, or extending the work contemplated as may be required to ensure its completion in an acceptable manner. All of the provisions of said contract documents are made a part hereof as though fully set forth herein.

ARTICLE II

For and in consideration of the payments and agreements to be made and performed by CITY, CONTRACTOR agrees to furnish all materials and perform all work required for the above-stated project, and to fulfill all other obligations as set forth in the aforesaid contract documents.

ARTICLE III

CONTRACTOR agrees to receive and accept the prices set forth in the Proposal as full compensation for furnishing all materials, performing all work, and fulfilling all obligations hereunder. Said compensation shall cover all expenses, losses, damages, and consequences arising out of the nature of the work during its progress or prior to its acceptance, including those for well and faithfully completing the work and the whole thereof in the manner and time specified in the aforesaid contract documents; and also including those arising from actions of the elements, unforeseen difficulties or obstructions encountered in the prosecution of the work, suspension or discontinuance of the work, and all other unknowns or risks of any description connected with the work.

ARTICLE IV

CITY hereby promises and agrees to employ, and does hereby employ, CONTRACTOR to provide the materials, do the work and fulfill the obligations according to the terms and conditions

herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner, and upon the conditions set forth in the contract documents.

ARTICLE V

CONTRACTOR acknowledges the provisions of the California State Labor Code requiring every employer to be insured against liability for worker's compensation, or to undertake self-insurance in accordance with the provisions of that Code and certifies compliance with such provisions. Contractor further acknowledges the provisions of the California State Labor Code requiring every employer to pay at least the minimum prevailing rate of per diem wages for each craft classification or type of workman needed to execute this contract as determined by the Director of Labor Relations of the State of California.

ARTICLE VI

CONTRACTOR agrees to indemnify, defend, and hold harmless CITY and all of its officers and agents from any claims, demand or causes of action, including related expenses, attorney's fees, and costs, based on, arising out of, or in any way related to the work undertaken by CONTRACTOR hereunder.

ARTICLE VII

CONTRACTOR affirms that the signatures, titles, and seals set forth hereinafter in execution of this Contract Agreement represent all individuals, firm members, partners, joint venturers, and/or corporate officers having principal interest herein.

IN WITNESS WHEREOF the parties hereto for themselves, their heirs, executors, administrators, successors, and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Contract Agreement to be executed in triplicate by setting hereunto their names, titles, hands, and seals this _____ day of _____, 20__.

CONTRACTOR: _____

(Title)
Contractor's License No. _____ Class _____
CITY Business License No. _____
Federal Tax Identification No. _____

Subscribed and sworn to this ____ day of _____, 20__ .

NOTARY PUBLIC _____

CITY: _____, Date: _____
Mayor of the City of Calimesa

Attested _____, Date: _____
City Clerk of the City of Calimesa

Approved as to form _____, Date: _____
City Attorney of the City of Calimesa

FAITHFUL PERFORMANCE BOND
FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA

KNOW ALL MEN BY THESE PRESENTS that _____, as CONTRACTOR and _____, as SURETY, are held and firmly bound unto the City of Calimesa, as CITY, in the penal sum of _____ Dollars (\$ _____), which is 100 percent of the total contract amount for the above-stated project, for the payment of which sum, CONTRACTOR and SURETY agree to be bound, jointly and severally, and firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, whereas CONTRACTOR has been awarded and is about to enter into the annexed Contract Agreement with CITY for the above-stated project, if CONTRACTOR faithfully performs and fulfills all obligations under the contract documents in the manner and time specified therein, then this obligation shall be null and void, otherwise it shall remain in full force and effect in favor of CITY; provided that any alterations in the obligations or time for completion made pursuant to the terms of the contract documents shall not in any way release either CONTRACTOR or SURETY, and notice of such alterations is hereby waived by SURETY.

IN WITNESS WHEREOF the parties hereto have set their names, titles, hands, and seals this ____ day of _____, 20____.

CONTRACTOR* _____

SURETY* _____

Subscribed and sworn to this ____ day of _____, 20_____.

NOTARY PUBLIC _____

* Provide CONTRACTOR/SURETY name, address, and telephone number and the name, title, address, and telephone number of authorized representative.

MATERIAL AND LABOR BOND

**FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA**

KNOW ALL MEN BY THESE PRESENTS that _____, as CONTRACTOR, and _____, as SURETY, are held firmly bound unto the City of Calimesa, as CITY, in the penal sum of _____ Dollars (\$_____), which is 100 percent of the total contract amount for the above-stated project, for payment of which sum, CONTRACTOR and SURETY agree to be bound, jointly and severally, and firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH that, whereas CONTRACTOR has been awarded and is about to enter into the annexed Contract Agreement with CITY for the above-stated project, if CONTRACTOR or any subcontractor fails to pay for any labor or material of any kind used in the performance of the work to be done under said contract, or fails to submit amounts due under the California State Unemployment Insurance Act with respect to said labor, SURETY will pay for the same in an amount not exceeding the sum set forth above, which amount shall inure to the benefit of all persons entitled to file claims under the California State Code of Civil Procedures; provided that any alterations in the work to be done, materials to be furnished, or time for completion made pursuant to the terms of the contract documents shall not in any way release either CONTRACTOR or SURETY, and notice of said alterations is hereby waived by SURETY.

IN WITNESS WHEREOF the parties have set their names, titles, hands, and seals this day of _____, 20__.

CONTRACTOR* _____

SURETY* _____

Subscribed and sworn to this ___ day of _____, 20__.

NOTARY PUBLIC _____

* Provide CONTRACTOR/SURETY name, address, and telephone number and the name, title, address, and telephone number for authorized representative.

COMPENSATION INSURANCE CERTIFICATE

Pursuant to Section 1861 of the State Labor Code, each Contractor to whom a public works contract has been awarded shall sign the following certificate and shall submit same to the City of Calimesa prior to performing any work on this contract:

I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I shall comply with such provisions before commencing the performance of the work of this contract.

Contractor

By _____

Title

Date

GENERAL PROVISIONS

FOR
**COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA**

A. SCOPE OF WORK

The work to be done will consist of furnishing all materials, equipment, tools, labor, and incidentals as required by the Plans, Specifications, and contract documents. The general items of work may include clearing, grubbing, grading, removal and construction of asphalt concrete pavement, cross gutters, asphalt concrete pavement, asphalt concrete overlays, slurry seals, and striping improvements as required to construct the required improvements and all items not mentioned but indicated in the Plans, Specifications, and the Special Provisions within the Contract Documents.

B. LOCATION OF WORK

The general locations and limits of the work are as follows: Within the City of Calimesa, California, along, within, the public right-of-way of Calimesa Boulevard, from Sandalwood Drive to County Line Road; along, within, the public right-of-way of County Line Road, from the eastbound Interstate 10 on/off ramps to Calimesa Boulevard; and along, within, the public right-of-way of Avenue L at approximately 80-feet east of Calimesa Boulevard, 3rd Street, 2nd Street, and California Street.

C. TIME FOR COMPLETION

The Contractor shall complete all work in every detail within 30 (thirty) working days after the date in the Notice to Proceed with the Work.

D. NOTIFICATION

The Contractor shall notify the engineering staff at the City of Calimesa and the owners of all utilities and substructures not less than 48 hours prior to starting construction. The following list of names and telephone numbers is intended for the convenience of the Contractor and is not guaranteed to be complete or correct:

CITY OF CALIMESA – CITY ENGINEER (909) 795-9801
Attention: Mr. Michael Thornton

CITY OF CALIMESA – PUBLIC WORKS DIRECTOR (909) 795-9801
Attention: Ms. Margaret Monson

SOUTHERN CALIFORNIA EDISON (909) 307-6779

Attention: Mr. Christine Girod

THE GAS COMPANY (909) 335-7772
Attention: Mr. Devery Jennings

VERIZON (909) 748-6663
Attention: Mr. Bret Plasky

TIME WARNER (909) 975-3349
Attention: Mr. Stuart King

YUCAIPA VALLEY WATER DISTRICT (909) 797-5118
Attention: Mr. Ray Jure

SOUTH MESA WATER COMPANY (909) 795-2401
Attention: Mr. Dave Armstrong

UNDERGROUND SERVICE ALERT (800) 227-2600

E. EMERGENCY INFORMATION

The names, addresses, and telephone numbers of the Contractor and subcontractors, or their representatives, shall be filed with the Engineer and the County Sheriff's Department or the City Police Department prior to beginning work.

F. STANDARD SPECIFICATIONS

The project provisions applicable to this contract shall be those set forth in California Building Code (CBC), California Mechanical Code (CMC), California Plumbing Code (CPC), and 2007 California Electrical Code (CEC) & City Ordinance, the 2005 California Energy Standards and the Standard Specifications for Public Works Construction, 2012 edition, including all supplements, published by Building News, Inc., 1612 South Clementine Street, Anaheim, California 92802, hereinafter referred to as "Standard Specifications." The Standard Specifications are referred to and by this reference are made a part hereof as though set forth at length. The Contractor is required to comply with the Standard Specifications in addition to the conditions set forth in these General Provisions and Special Provisions.

The Standard Specifications set forth above will control the general provisions, construction materials, and construction methods for this contract, except as amended by the Plans, Special Provisions, or other Contract Documents. The following Special Provisions are supplementary and in addition to the provisions of the Standard Specifications unless otherwise noted and the section numbers of the Special Provisions coincide with those of the said Standard Specifications. Only those sections requiring elaborations, amendments, specifying of options, or additions are called out.

G. LEGAL RELATIONS AND RESPONSIBILITY TO THE CITY

1 – Laws to be Observed

The Contractor shall keep himself or herself fully informed on all existing and pending State and national laws and all municipal ordinances and regulations of the City, which in any manner affect those employed in the work, or the material used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having jurisdiction or authority over the same. The Contractor shall particularly observe all ordinances of the City in relations to the obstruction of streets or conduct of the work, keeping open passageways and protecting the same where they are exposed or dangerous to traffic.

2 - Social Security Requirements

The Contractor shall furnish to the City satisfactory evidence that he and all subcontractors working for him are complying with all requirements of the Federal and State Social Security legislation. The Contractor, at any time on request, shall satisfy the City that the Social Security and Withholding taxes are being properly reported and paid.

3 – Prevailing Wages, Federal Wages, Davis Bacon

This is a federally-assisted construction project. Federal Labor Standards Provisions, including prevailing wage requirements of the Davis-Bacon and Related Acts will be enforced. In the event of a conflict between Federal and State wages rates, the higher of the two will prevail.

The contractor's duty to pay state prevailing wages can be found under Labor Code Section 1775 and 1777.7 outline the penalties for failure to pay prevailing wages and employ apprentices including forfeitures and debarment.

Conflict of Interest: In the procurement of construction, the conflict of interest provisions in (State LCA – 24CFR 85.36 and Non-Profit Organizations – 24 CFR 84.4), OMB Circular A-110, and 24 CFR 570.611, respectively, shall apply. No employee, officer or agent of the sub-recipient shall participate in selection, or in the award or administration of a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.

Apprenticeship Program: Attention is directed to Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Administrative code section 200 et seq. to ensure compliance and complete understanding of the law regarding apprentices.

In accordance with the provisions of Section 1770 et seq., of the Labor Code, the Director of the Department of Industrial Relations of the State of California has

ascertained the general Federal wages, Davis-Bacon applicable to the work to be done under contract for public improvement. The Contractor will be required to pay to all those employed on the project sums not less than the sums set forth in the documents entitled "General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773, 1773.1 and 1776."

4 - Penalties

The Contractor shall comply with the provisions of California Labor Code Sections 1774 and 1775 concerning the payment of prevailing rates of wages to workers and the penalties for failure to pay prevailing wages. The Contractor shall, as a penalty to the Agency, forfeit not more than fifty dollars (\$50) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of Industrial Relations for the work or craft in which the worker is employed for any public work done under the contract by Contractor or by any subcontractor.

5 - Working Hours

The Contractor shall forfeit, as penalty to the City, the sum of twenty-five (\$25.00) dollars for each worker employed in the execution of the contract by Contractor or by any subcontractor under him for each calendar day during which such worker is required or permitted to work more than forty (40) hours in any one calendar week, in violation of the provisions of Article 3, Chapter 1, Part 7, Division 1 of the Labor Code (Section 1810 et. seq.)

6 - Apprentices

Apprenticeship Program: Attention is directed to Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Administrative code section 200 et seq. to ensure compliance and complete understanding of the law regarding apprentices.

Attention is directed to the provisions of Sections 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under Contractor. It shall be Contractor's responsibility to ensure that all persons shall comply with the requirements of said sections in the employment of apprentices.

Information relative to apprenticeship standards and administration of the apprenticeship program may be obtained from the Department of Industrial Relations, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

7 - Registration of Contractors

Only a Contractor or Subcontractor licensed in accordance with the provisions of Chapter 9, Division 3, of the Business and Professions Code and as required by SB-854 with the Department of Industrial Relations shall be permitted to enter into a contract with the City for any public improvements.

8 - Permits and Licenses

The Contractor shall procure all permits and licenses, (including a Calimesa business license), pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the work.

9 - Patents

The Contractor shall assume all responsibility arising from the use of any patented, or allegedly patented materials, equipment, devices or processes used on or incorporated in the work, and shall defend, indemnify, and hold harmless the City, and each of its officers, agents, and employees from and against any and all liabilities, demands, claims, damages, losses, costs, and expenses, of whatsoever kind or nature, arising from such use.

10 - Indemnity

The Contractor agrees to indemnify and hold harmless the City and others and to waive subrogation as set forth in the Indemnification and Hold Harmless Agreement and Waiver of Subrogation and Contribution executed concurrently herewith, a copy of which is attached hereto and incorporated herein by this reference.

11 - Notice

The address given in the Contractor's proposal is the place to which all notices to the Contractor shall be mailed or delivered. The mailing to or delivering at the above named place of any notice shall be deemed sufficient service thereof upon the Contractor, and the date of that service shall be the date of such mailing or delivery. Such address may be changed at any time by written notice signed by the Contractor and delivered to the Director of Public Works.

12 - Contractor's Responsibility for Work

Until the final acceptance of the work by the City, by written action of the Director of Public Works or his authorized representative, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part of the work by the action of the elements or any other cause.

The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except for such injuries or

damages arising from the sole negligence of willful misconduct of the City, its officers, agents or employees. In the case of suspension of work from any cause whatever, the Contractor shall be responsible for all materials and the protection of work already completed and shall properly store and protect them if necessary and shall provide suitable drainage and erect temporary structures where necessary.

13 - Maintenance and Guarantee

(a) The Contractor hereby guarantees that the entire work constructed by Contractor under the contract will meet fully all requirements as to quality of workmanship and materials. The Contractor hereby agrees to make at Contractor's own expense any repairs or replacements made necessary by defects in materials or workmanship that become evident within one (1) year after the date of the City's acceptance of the entire project, which is when the City Council directs staff to file a Notice of Completion, and to restore to full compliance with the requirements of these specifications, including any test requirements set forth herein for any part of the project or work constructed hereunder, which during said one (1) year period is found to be deficient with respect to any provisions of the specifications. The Contractor shall make all repairs and replacements promptly upon receipt of written orders for the same from the Director of Public Works. The Contractor and Contractor's sureties shall be liable to the City for the cost thereof.

(b) The guarantees and agreements set forth in subsection (a) shall be secured by a surety bond which shall be delivered by the Contractor to the City before the City's acceptance of the project. Said bond shall be in the form approved by the City Attorney and executed by a surety company or companies admitted in the State of California and satisfactory to the City, in the amount of 100 percent of the contract. Said bond shall remain in force for a period of one (1) year after the date that the City accepts the project. Alternatively, the Contractor may provide for the Faithful Performance Bond furnished under the contract to remain in force and effect for said amount until the expiration of said one (1) year period. If the Contractor wishes to pursue the option of extending the Faithful Performance Bond for an additional one (1) year period in lieu of a separate surety bond, the Contractor shall provide written evidence from the surety of such Faithful Performance Bond extension before the City's acceptance of the project. Delivery of the one-year surety bond or proof of Faithful Performance Bond extension shall be a condition precedent to the City Council's approval of the Notice of Completion.

14 - Cooperation

The Contractor is hereby notified that additional work within the work site may be scheduled during the course of this contract.

The Contractor shall cooperate with these and other projects in accordance with Sections 5-6 and 7-7 of the Standard Specifications.

Compensation for compliance shall be included in the various items of work, and no additional compensation shall be allowed therefor.

H. PROSECUTION AND PROGRESS OF THE WORK

1 - Work Schedule

Prior to the Notice to Proceed, the Contractor shall submit a work schedule to the Director of Public Works or his authorized representative for approval. Said schedule must show the dates of the expected start and completion of the various items of the contract work. The final schedule will be used as a controlling document throughout the construction period.

2 - Subletting and Assignment

The Contractor shall give Contractor's personal attention to the fulfillment of the contract and shall keep the work under Contractor's control. The Contractor shall not assign, transfer nor sublet any part of the work without the written consent of the City by the Director of Public Works or his authorized representative and of the surety of the Contractor's bond, and such consent of Surety, together with a copy of the subcontract, shall be filed with the Director of Public Works. No assignment, transfer or subletting, even though consented to, shall relieve the Contractor of Contractor's liabilities under the contract. Subcontractors shall not be recognized as such, and all persons engaged in the project will be considered as employees of the Contractor, their work being subject to the provisions of the contract and the specifications. Should any subcontractor fail to perform the work undertaken by him to the satisfaction of the Director of Public Works or his authorized representative, said subcontractor shall be removed immediately from the project upon request by the Director of Public Works or his authorized representative, shall not again be employed on the work, and the Contractor shall be held liable for the deficient work.

The Contractor shall submit to the City a list with the names, addresses and telephone numbers of all subcontractors who will work under Contractor.

3 - Character of Workers

The Contractor shall employ none but competent foremen, laborers and mechanics. Any overseer, superintendent, laborer or other person employed on the work by the Contractor who is intemperate, incompetent, troublesome or otherwise undesirable, or who fails or refuses to perform the work in the manner specified herein, shall be removed from jobsite immediately and such person shall not again be employed on the work.

4 - Agents or Foreman

In the absence of the Contractor from the site of the project, even if such is only of a temporary duration, Contractor must provide and leave at the site a competent and reliable English-speaking agent or foreman in charge. All notices, communications, orders or instructions given, sent to, or served upon, such agent or foreman by the Director of Public Works or his authorized representative shall be considered as having been served upon the Contractor.

5 - Temporary Stoppage of Construction Activities

The Director of Public Works or his authorized representative shall have the authority to suspend the contract work, wholly or in part, for such a period of time as the Director may deem necessary, due to unsuitable weather, or to such other conditions as the Director considers unfavorable for the proper prosecution of the work, or for such time as the Director may deem necessary due to failure on the part of the Contractor or Contractor's workers to carry out orders or to perform any of the requirements of the contract. The Contractor shall immediately comply with such an order from the Director of Public Works or his authorized representative and shall not resume operations until so ordered in writing.

6 - Time of Completion and Liquidated Damages

If all the contract work is not completed in all parts and requirements within the time specified in the contract documents, the City shall have the right to grant or deny an extension of time for completion, as may seem best to serve the interest of the City. The Contractor shall not be assessed with liquidated damages during any delay in the completion of the work caused by acts of God or of the Public Enemy, acts of the State, fire not due to acts of contractors, of subcontractors, floods, epidemics, quarantine, restrictions, strikes, freight embargo or unusually severe weather, delays of subcontractors due to such causes, or work suspensions directed by the Director of Public Works or his authorized representative provided that the Contractor shall, within ten (10) days from the beginning of such delay, notify the City, in writing, of the cause of the delay. The City will ascertain the facts and the extent of the delay, if any, and the finding thereon shall be final and conclusive. If the City deems it appropriate to assess the contractor liquidated damages, such damages shall be in the amount specified in this bid documents.

7 - Suspension of Contract

If at any time, in the opinion of the Director of Public Works or his authorized representative, the Contractor fails to supply an adequate working force, manufactured articles, or material of proper quality, or has failed in any other respect to prosecute the work with the diligence and force specified and intended in any by the terms of the contract, notice thereof in writing will be served upon Contractor, and should Contractor neglect or refuse to provide means for a

satisfactory compliance with the contract within the time specified in said notice and as directed by the Director of Public Works or his authorized representative, the Director of Public Works or his authorized representative shall have the power to suspend the operation of the contract and discontinue all work or any part thereof, subject to review by the City Council. Thereupon the Contractor shall discontinue such work, or such part thereof as the City may designate, and the City may thereupon, by contract or otherwise, as it may determine, complete the work or such part thereof, and charge the entire expense of so completing the work or any part thereof to the Contractor, and for such completion the City itself or its Contractors may take possession of and use, or cause to be used in the completion of the work, or any part thereof, any such materials, implements and tools of every description as may be found at the place of such work. All expenses charged under this paragraph shall be deducted and paid for by the City out of any moneys then due or to become due the Contractor under the contract, or any part thereof, and in such accounting the City shall not be held to obtain the lowest figure for the work for completing the contract, or any part thereof, or for ensuring its proper completion, but all sums paid therefor shall be charged to the Contractor. In case the expenses so charged are less than sum which would have been payable under the contract, if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such expense shall exceed the amount payable under the contract, then the Contractor shall pay the amount of the excess to the City, upon completion of the work, without further demand being made therefor. In the determination of the question as to whether or not there has been any such noncompliance with the contract as to warrant the suspension or annulment thereof, the decision of the City Council shall be binding on all parties to the contract.

I. MEASUREMENT AND PAYMENT

1 - Measurement and Payment

Measure of the quantities of work and payments therefore shall be in accordance with Section 9 of the Standard Specifications. In accordance with Subsection 9-3.2 of the Standard Specifications, the monthly payment date shall be the last calendar day of each month. A measurement of work performed and a progress estimate of the value thereof based on the contract and of the monthly payment shall be prepared by the Contractor and submitted to the Director of Public Works or his authorized representative before the tenth day of the following month for verification and payment consideration.

2 - Final Invoice and Payment

Whenever in the opinion of the Director of Public Works or his authorized representative, the Contractor shall have completely performed the contract; the Director of Public Works shall notify the City Clerk that the contract has been completed in its entirety. The Contractor shall then submit to the Director of Public Works or his authorized representative for approval, a written statement of the final

quantities of contract items for inclusion in the final invoice. Upon receipt of such statement, the Director of Public Works or his authorized representative shall check the quantities included therein and shall authorize the Contractor to submit an invoice which in the Director of Public Works or his authorized representative' opinion shall be just and fair, covering the amount and value of the total amount of work done by the Contractor, less 5 percent (5 percent) of the total work done. After receipt of a one-year warranty bond in accordance with the requirements herein, the Director of Public Works shall then request that the City accept the work and that the City Clerk be authorized to file, on behalf of the City in the office of the Riverside County Recorder, a Notice of Completion of the work herein agreed to be done by the Contractor.

On the expiration of thirty-five (35) days after the date of recording the Notice of Completion, the City shall pay to the Contractor the amount remaining after deducting from the amount of value stated in the invoice all prior payments to the Contractor and all amounts to be kept and retained under the provisions of the contract, and shall release the Faithful Performance Bond and Labor and Material Bond.

The Contractor may, at Contractor's sole cost and expense, substitute securities equivalent to any monies withheld by the Owner as provided in California Public Contract Code Section 22300. No such substitution shall be accepted until all documents related to such substitution are reviewed and found acceptable by the Owner's attorney.

3 - Extra Work

Extra work, when ordered in writing by the Director of Public Works or his authorized representative and accepted by the Contractor, shall be paid for underwritten work order in accordance with the terms therein provided. Payment for extra work will be made at the unit price or lump sum previously agreed upon between the Contractor and the Director of Public Works or his authorized representative. All extra work shall be adjusted daily upon report sheets prepared for the Director of Public Works or his authorized representative, furnished by the Contractor, and signed by both parties, and said daily report shall be considered thereafter the true records of extra work done.

The first sentence of Subsection 3-3.2.2.2 Basis for Establishing Costs, (a) Labor, of the Standard Specifications, is hereby deleted and replaced with the following:

The costs of labor will be the actual cost of wages of workers performing the extra work at the time the extra work is done, plus the applicable labor surcharge as set forth in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates," which is in effect on the date upon which the work is accomplished, as well as assessments or benefits required by lawful collective bargaining agreements.

4 - Unpaid Claims

If upon or before the completion of the work herein agreed to be performed or at any time prior to the expiration of the period within which claims of lien may be filed for record as prescribed by the Code of Civil Procedure of the State of California, any person or persons claiming to have performed any labor or furnished any materials, supplies or services towards the performance of completion of this contract or if they have agreed to do so, shall file with the City a verified statement of such claim, or if any person shall bring against the City or any of its agents any action to enforce such claim, the City shall until the discharge thereof, withhold from the moneys that are under its control, as much as shall be sufficient to satisfy and discharge the amount in such notice or under such action claimed to be due, together with the cost thereof; provided, that if the City shall in its discretion permit the Contractor to file such additional bond as is authorized by the Code of Civil Procedure in a penal sum equal to one and one-quarter times the amount of said claim, said money shall not thereafter be withheld on account of such claim.

5 – Acceptance

The parties agree that no certificate given shall be conclusive evidence of the faithful performance of the contract, either in whole or in part, and that no payment shall be construed to be in acceptance of any defective work or improper materials. Further, the certificate or final payment shall not terminate the Contractor's obligations under the warranty here in above. The Contractor agrees that payment of the amount due under the contract and the adjustments and payments due for any work done in accordance with any alterations of the same, shall release the City, the City Council and its officers and employees from any and all claims or liability on account of work performed under the contract or any alteration thereof.

J. CONTROL OF WORK

1 - Authority of the Director of Public Works

The Director of Public Works or his authorized representative shall decide any and all questions that may arise as to the quality and acceptability of materials furnished and work performed as to the manner of performance and rate of progress of the work, and any and all questions which may arise as to the interpretation of the plans and specifications. The Director of Public Works or his authorized representative shall likewise decide any and all questions as to the acceptable fulfillment of the contract on the part of the Contractor, and all questions as to claims and compensations.

The decision of the Director of Public Works or his authorized representative shall be final, and he shall have relative authority to enforce and make effective such decisions and actions necessary as the Contractor fails to carry out promptly.

For the purposes of routine and normal supervision and coordination of work, the Director of Public Works or his authorized representative is the City's authorized representative for all work within the scope of this agreement.

2 - Conformity with Plans and Allowable Variation

Finished surfaces shall in all cases conform to the lines, grades, cross-sections and dimensions shown on the plans. Minor deviations from approved plans, whenever required by the exigencies of construction, shall be determined in all cases by the Director of Public Works or his authorized representative and authorized in writing. All such deviations shall be recorded on "as-built" plans and submitted to the Director of Public Works or his authorized representative upon project completion.

3 - Progress of the Work

The Contractor's working days shall begin on the date stated in the Notice to Proceed which will be issued following the scheduling conference. The Contractor shall diligently prosecute the work to completion before the expiration of the time limit appearing in the specifications.

4 - Samples

The Contractor shall furnish all products and materials required to complete the work. All materials and products must be of the specified quality and fully equal to samples, when samples are required. Whenever required, the Contractor shall submit to the Director of Public Works or his authorized representative for test, and free of charge, samples of any one of the materials or products proposed to be used in the work. Said samples shall be delivered by the Contractor to the place within the City designated by the Director of Public Works or his authorized representative. Rejected materials must be immediately removed from the work by the Contractor and shall not again be brought back to the site.

5 - Trade Names and Alternatives

For convenience in designation on the plans or in the specifications, certain equipment or articles or materials to be incorporated in the work may be designated under a trade name of manufacturer and the catalog information. The use of an alternative equipment or an article or equipment which is of equal quality and of the required characteristics for the purpose intended will be permitted, subject to the approval of the Director of Public Works or his authorized representative, in accordance with the following required by Section 3400 of the Public Contract Code of the State of California:

The burden of proof as to the comparative quality and suitability of alternative equipment or articles or materials shall be upon the Contractor, and Contractor shall furnish, at Contractor's own expense, all information necessary or related thereto as required by the Director of Public Works or his authorized representative. The Director of Public Works or his authorized representative shall be the sole judge as to the comparative quality and suitability of alternative equipment or articles or materials and the Director's decision shall be final. All requests for substitution shall be submitted, together with all documentation necessary for the Director to determine equality, within 20 days following the award of the contract.

6 - Protection of Work

The Contractor shall continuously maintain adequate protection of all Contractor's work from damage, and the City will not be held responsible for the care or protection of any material, equipment or parts of work, except as expressly provided for in the specifications.

7 - Conflict of Terms

The notice to bidders, proposal, plans, specifications and General Provisions are essential parts of the contract for a given project. These documents, together with the necessary bonds and bidder's guarantee, constitute the contract as defined herein, and a requirement included in one document shall be as binding as though included in all, as they are intended to be cooperative and to provide a description of the work to be done. Should there be any conflict or discrepancy between terms used, then the specifications shall govern over plans, and change orders and supplemental agreements shall govern over any other contract document.

8 - Interpretation of Plans and Specifications

Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained on the plans or in the specifications, the Contractor shall request the Director of Public Works or his authorized representative for such further explanation as may be necessary, and shall conform to such explanation or interpretation as part of the contract, so far as may

be consistent with the intent of the original specifications. In the event or doubt of questions relative to the true meaning of the specifications, reference shall be made to the City Council, whose decision thereon shall be final.

9 - Increases and Decreases of the Work to be Done

The City reserves the right to increase or decrease the quantity of any item or portion of the work described on the plans, the specifications or the proposal form or to omit portions of the work so described, as may be deemed necessary or expedient by the Director of Public Works or his authorized representative and the Contractor shall agree not to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any kind of work to be done.

10 - Alterations of the Work to be Done

By mutual consent of the parties signatory to the contract, alterations, modifications or deviations from the type of work may be described on the plans, specifications or on the proposal form may be made without in any way making the contract void. The price to be paid by the City to the Contractor for such altered or modified work shall be agreed upon in writing, endorsed upon the original contract and signed by the proper parties to said contract.

Whenever, during the progress of the work, such changes or modifications are deemed necessary by the Director of Public Works or his authorized representative and agreed upon, as aforesaid, said deviations shall be considered and treated as though originally contracted for, and shall be subject to all the terms, conditions and provisions of the original contract.

11 - Extra Work

New and unforeseen work will be classed as extra work only when said work is not covered and cannot be paid for under any of the various items or combination of items for which a bid price appears on the proposal form. The Contractor shall not do any extra work except upon written order from the Director of Public Works or his authorized representative. Compensation for such extra work shall be previously agreed upon in writing between the Contractor and the Director of Public Works or his authorized representative.

12 - Public Utilities

(a) All of the existing utility facilities except those to be relocated as shown on the plans will remain in place and the contractor will be required to work around said facilities. In case it should be necessary to remove the property of a public utility or franchise, such owner will, upon proper application by the Contractor, be notified by the Director of Public Works or his authorized representative to move such property within a reasonable time, and the Contractor shall not interfere with said

property until after the expiration of the time specified. The right is reserved to the owners of public utilities or franchises to enter upon the project site for the purpose of making repairs or changes in their property which may be necessary as a result of the work. The Contractor shall also schedule and allow adequate time for those relocations or modifications necessary for the project by the respective utility owners. Employees and agents of the City shall likewise have the privilege of entering upon the street for the purpose of making any necessary repairs or replacements.

(b) The Contractor shall employ and use only qualified persons, as hereinafter defined, to work in proximity to Southern California Edison secondary, primary and transition facilities. The term "qualified person" shall mean one, who by reason of experience or instruction, is familiar with the operation to be performed and the hazards involved, as more specifically defined in Section 2700 of Title 8 of the California Administrative Code. The Contractor shall take such steps as are necessary to assure compliance by any subcontractors.

13 - Procedure In Case Of Damage to Public Property

Any portions of curb, gutter, sidewalk or any other City improvement damaged by the Contractor during the course of construction shall be replaced by the Contractor at Contractor's own cost, free of charges to the City. The cost of additional replacement of curb, gutter or sidewalk in excess of the estimated quantities shown in the proposal form and specifications, and found necessary during the process of construction, (but not due to damage resulting from carelessness on the part of the Contractor during Contractor's operation), shall be paid to the Contractor at the unit prices submitted in his bid.

14 - Removal of Interfering Obstructions

The Contractor shall remove and dispose of all debris, abandoned structures, tree roots and obstructions of any character met during the process of excavation, it is understood that the cost of said removals are made a part of the unit price bid by the Contractor under the item for excavation or removal of existing work.

15 - Quality of Material

Materials shall be new, and of specified kind and quality, and fully equal to samples when samples are required. When the quality or kind of material or articles shown required under the contract is not particularly specified, the Contractor shall estimate that the City will require articles and materials representing the best of their class or kind or at least equal to the class or quality of similar articles or materials when specified. Materials shall be furnished in such quantities and kinds and at such times as to ensure uninterrupted progress for the work. They shall be stored properly and protected as required. The Contractor shall be entirely responsible for damage or loss by weather or any other cause.

16 - Removal of Defective or Unauthorized Work

It is the intent of the specifications that only first-class work, materials and workmanship will be acceptable. All work which is defective in its construction or deficient in any of the requirements of the specifications 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 shown on the plans or established by the Director of Public Works or his authorized representative, or any extra work done without written authority will be considered as unauthorized and will not be paid for. Upon failure on the part of the Contractor to comply forthwith with any order of the Director of Public Works or his authorized representative made under the provisions of this paragraph, the Director of Public Works or his authorized representative shall have authority to cause defective work to be remedied or removed and replaced, and unauthorized work to be removed, and to deduct the costs thereof from any moneys due or to become due the Contractor. If the work is found to be in compliance with these specifications, the Director of Public Works or his authorized representative will furnish the Contractor with a certificate to that effect.

17 - Supervision

All manufactured products, materials and appliances used and installed and all details of the work shall at all times be subject to the supervision, test and approval of the Director of Public Works or his authorized representatives. The Director of Public Works or his authorized representatives shall have access to the work at all times during construction, and shall be furnished with every reasonable facility for securing full knowledge with regard to the progress, workmanship and character of the materials used or employed in the work.

Whenever the Contractor varies the period during which work is carried on each day, he shall give adequate notice to the Director of Public Works or his authorized representative so that proper inspection may be provided. Any work done in the absence of the Director of Public Works or his authorized representative will be subject to rejection. The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good, and unsuitable materials may be rejected, notwithstanding the fact that such defective work and unsuitable materials have previously been accepted or estimated for payment.

The Contractor shall prosecute work on any State highway or with any railroad right-of-way only in the presence of an inspector representing the State Division of Highways or the railroad company, and any work done in the absence of such inspectors will be subject to rejection. The Contractor shall make the appropriate notification according to the instructions given on the State Encroachment Permit or railroad permit for all inspections, and shall post all bonds and certificates required by the permit. The permit shall be acquired by the Contractor at the Contractor's expense. The Contractor shall pay for all testing and inspections required by a State Encroachment Permit or railroad permit.

18 - Soil Compaction Testing

Any soil compaction testing and certification shall be certified by a Geotechnical Engineer and provided and paid for by the City. Any costs borne due to failed compaction tests will be the responsibility of the Contractor.

19 - Preservation of Property

Existing improvements in areas adjoining the property whereon demolition and removal is being performed shall be protected from injury or damage resulting from operations of the Contractor and the Contractor shall be responsible for such damage. In like manner any building, structure, tree, shrub, or other item designated for preservation on the property where demolition and removal is being performed shall be similarly protected and preserved.

20 - Dust Control

The Contractor shall provide such dust laying equipment and methods as may be required to protect adjacent property from annoyance or damage from dust caused by his operations, and failure to control such dust shall be cause for the Director of Public Works or his authorized representative to stop the work until said dust is controlled, and the Contractor shall have no recourse to collect from the City for any loss of time or expense sustained by him due to such suspension of work.

The contractor shall clean all areas affected by his/her work in a manner which is acceptable by the Director of the Public Work or his/her designee. If the City is not satisfied with the cleaning work, the city may urgently hire another cleaning crew to clean the area and back charge the contractor for all cost incurred to the City including City staff time.

21 - Selected Materials

Existing materials excavated within the project limits that meet the specifications for trench backfill, topsoil, or other selected materials may be used to fulfill all or a portion of the requirements for such materials. No additional compensation will be allowed for excavation, stockpiling, overhaul, or placing selected materials encountered in the excavation.

22 - Surplus Materials

The Contractor shall furnish written consent from the owner of the property where it is intended to dispose of the surplus material. Surplus excavation shall become the property of the Contractor.

23 – Clean Up

During all phases of construction, the Contractor shall maintain a clean work site; the Contractor shall be responsible for the removal and disposal of all concrete, asphalt, tree roots, and any other debris resulting from the work performed on a daily basis. Full compensation for clean up shall be considered as included in the prices paid for the various contract items.

24 - Equipment Requirements

The Contractor shall provide a lead car with a "Wide Load" warning sign to lead the movement of any equipment exceeding 7 feet in maximum horizontal dimension over any street to the location of the scheduled work site. Equipment will be subject to a fine of one hundred dollars for each violation as determined by the Director of Public Works or his authorized representative. Any other violations shall be subject to the Vehicle Code of the State of California. Full compensation for the cost of furnishing the lead vehicles and adhering to the requirements of this section shall be considered as included in the prices for the various contract items of work, and no additional compensation will be allowed therefor.

25 - Protection of Work and Public

The Contractor shall take all necessary measures to protect work and prevent accidents during any and all phases of the work. The Contractor shall repair all damaged parts of the project as a result of vandalism (i.e., vehicle tracks, footprints, writing, etc.) and will respond to alleged damage to private property including City owned facilities and/or vehicles within twenty-four (24) hours of notification. If deemed necessary by the City, the Contractor shall repair the defective area in accordance with these Special Provisions.

26 - Sprinkler Systems

Any sprinkler system damaged during the Contract shall be repaired by the Contractor at no additional cost within 24 hours of notification. All damaged sprinkler and irrigation parts shall be replaced in-kind. If repair is not completed within said limit, the City shall have the authority to complete such work and deduct cost plus 20 percent administration thereof from any moneys due or to become due to the Contractor. Furthermore, a penalty of \$500 per day shall be applied for each day beyond the 24-hour period that the damaged irrigation system has not been repaired to function properly (as determined by the City's inspector).

27 - Contractor's Superintendent and Project Manager

The Contractor shall designate in writing and keep on the work at all times during its process a competent, full-time, technically qualified superintendent, who shall not be replaced without written notice to the Director of Public Works or his authorized representative except under extraordinary circumstances. The Contractor's superintendent shall be present at the site of the work at all times while work is in progress. The Superintendent's sole duties shall be to supervise a full work crew and coordinate activities pertaining any work performed by the Contractor or its subcontractors including, but not limited to slurry sealing and striping and marking, including traffic control and public notifications. Failure to observe this requirement shall be considered as suspension of the work by the Contractor until such time as such superintendent is again present at the site. The Director of Public Works or his authorized representative shall have the right, at any time, to direct a change in the Contractor's superintendent, if the performance is unsatisfactory, as determined by the Director of Public Works or his authorized representative, in its sole discretion.

The Contractor shall designate in writing and keep on the work at all times during its process a competent, full-time, technically qualified project manager, who shall not be replaced without written notice to the Director of Public Works or his authorized representative except under extraordinary circumstances. The Contractor's project manager shall be responsible for overall administration and coordination of the work including, but not limited to processing of schedules, discussion of change orders and extra work and coordination and distribution of the Daily Reports. The Director of Public Works or his authorized representative shall have the right, at any time, to direct a change in the Contractor's project manager, if the performance is unsatisfactory, as determined by the Director of Public Works or his authorized representative, in its sole discretion.

The Contractor's superintendent shall have a working multi frequency two-way radio with adequate range for City-wide communication on him/her at all times during the course of the project. The Contractor shall provide to the City's Construction Observers, a small portable working, multi frequency two-way radio compatible for communication with that of the Contractor's Superintendent's communication device and a charger. The Contractor shall also provide to each of the City's Construction Observers a portable cellular telephone, two cell telephone batteries and charger and pay for service for the duration of the project. The Contractor shall only choose a carrier that has adequate coverage in the area. All telephone calls will only be project related. Failure to observe this requirement shall be considered as suspension of the work by the Contractor until such time as said radio communication is re-established. The cost for furnishing radios and phones shall be considered as included in the bid price paid for the various contract items of work, no additional compensation will be made therefor. Said radios and cellular telephones will be returned to the Contractor after the completion of the project. The City will endeavor to safeguard the Contractor's

communication devices but assumes no responsibility or liability for any possible damage to the cellular telephones or radios.

28 - Contractor's Daily Reports

The Contractor shall complete consecutively numbered legible daily reports indicating the number of people working, their names, a narrative description of work performed, the individual locations of the work, serviceable major equipment in use, serviceable major equipment idled, serviceable major equipment down for repairs, sub-contractors working at site, weather conditions, temperature, start time, finish time, and the date. The Contractor's Superintendent shall sign each report. The daily report shall be completed on forms prepared by the Contractor and acceptable to the Director of Public Works or his authorized representative. The City will provide a sample format for the daily report at the preconstruction conference. The Contractor shall distribute copies to the Construction Observers and the Director of Public Works or his authorized representative at either the conclusion of each work day or prior to the start of work the next day. No progress payments will be processed or made to the Contractor unless all daily reports are completed to the date of submittal of application for payment.

29 - Request for Working Days

The Contractor shall notify the Director of Public Works or his authorized representative separately in writing within 7 calendar days after the occurrence of a delay, when the Contractor believes that it is entitled to an additional working day per any day the Contractor is prevented from working at the beginning of the workday, for cause defined in Section 6-6.1 of the Standard Specifications, or any day the Contractor is prevented from working during the first 5 hours with at least 60 percent of the normal work force for cause as defined in Section 6-6.1 of the Standard Specifications. The Contractor's failure to give written notice in the time period specified above shall constitute a waiver of all claims for an additional work day, whether direct or consequential in nature and that day will be counted as a working day. Upon receipt of the Contractor's written request, the Director of Public Works or his authorized representative will then make a determination of whether the day or days the Contractor is requesting shall be counted as working days.

30 - Defective Materials

All materials not conforming to the requirements of these Specifications shall be considered as defective and all such materials shall be removed immediately from the site of the work unless otherwise permitted by the Director of Public Works or his authorized representative. Upon failure on the part of the Contractor to comply with any order by the Director of Public Works or his authorized representative made under the provisions of this article, the Director of Public Works or his authorized representative shall have the authority to remove and replace defective material and to deduct the cost of removal and replacement from any moneys due or to become due to the Contractor.

31 - Sound and Vibration Control Requirements

The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances. No internal combustion engine shall operate on the project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including, but not limited to truck, transit mixers or transit equipment that may or may not be owned by the Contractor.

32 - Air Pollution Control

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate the contents, fully complying with the applicable material requirements.

33 - Final Cleaning Up

Upon completion of the project and before making application to the Director of Public Works or his authorized representative for acceptance of the work, the Contractor shall clean all the streets and ground occupied by Contractor in connection with the project, of all rubbish, debris, excess material, temporary structures and equipment, leaving the entire site of the work in a neat and presentable condition.

34 - Contractor's Request for Final Inspection

When the Contractor believes all the contract work is complete in all parts and requirements, the Contractor will notify the Director of Public Works or his authorized representative in writing through a certificate of completion form which will be provided to the Contractor at the preconstruction conference.

After the City receives the Contractor's certificate of completion, the Director of Public Works or his authorized representative will review the Contractor's work for substantial performance with the Contract Documents. If the Director of Public Works or his authorized representative deems the work substantially performed, the Public Works Director will prepare a list of any minor remaining items of work to be completed. The Contractor shall complete all work on the list to the satisfaction of the Director of Public Works or his authorized representative within 30 calendar days after the date of the list or the Contractor waives any and all claims to all monies withheld by the City under the Contract to cover the value of all such uncompleted or uncorrected items, including any additional engineering,

administration, or inspection costs. If the work was not substantially performed, working days will continue to accrue against the Contractor.

35 - Resolution of Public Works Claims

This Contract is subject to the provisions of Article 1.5 (commencing at Section 20104) of Division 2, Part 3 of the California Public Contract Code regarding the resolution of public works claims of less than \$375,000. Article 1.5 mandates certain procedures for the filing of claims and supporting documentation by the Contractor, for the response to such claims by the contracting public agency, for a mandatory meet and confer conference upon the request of the Contractor, for mandatory judicial arbitration upon the failure to resolve the dispute through mediation. This Contract hereby incorporates the provisions of Article 1.5 as through fully set forth herein.

36 – Trenches and Excavations

In accordance with Public Contract Code Section 7104, whenever the digging of trenches or other excavations extend deeper than 4 feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the City in writing of any: 1) Material that the Contractor believed may be material that is hazardous waste, as defined in Health and Safety Code Section 25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; 2) Subsurface or latent physical conditions at the site differing from those indicated; or 3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract. The City shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work, the City shall issue a change order under the procedures described in the Contract. In the unlikely event that a dispute arises between the City and the Contractor regarding whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties. Where applicable, Contractor shall comply with the trench or excavation permit requirement found in Labor Code Section 6500 and the excavation safety requirements found in Labor Code Section 6705.

SPECIAL PROVISIONS

FOR
**COUNTY LINE ROAD TRANSPORTATION CORRIDOR
IMPROVEMENT PROJECT**
BID NO. 2021-16
IN THE CITY OF CALIMESA

PART 1
GENERAL PROVISIONS

SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS and SYMBOLS

1-2 DEFINITIONS

CITY:	City of Calimesa
Board:	City Council of the City of Calimesa
Caltrans:	State of California, Department of Transportation
County:	County of Riverside
Engineer:	The City Engineer of the City of Calimesa or his authorized representative
Federal:	United States of America
Contractor:	The word Contractor is supplemented by adding thereto the following:

The term Contractor means the Contractor as defined herein or his authorized representative.

SECTION 2 - SCOPE AND CONTROL OF THE WORK

2-1 AWARD AND EXECUTION OF CONTRACT

Within 10-working days after the date of the CITY'S notice of award, the Contractor shall execute and return the following contract documents to the CITY:

Contract Agreement

Faithful Performance Bond

Material and Labor Bond

Public Liability and Property Damage Insurance Certificate

Worker's Compensation Insurance Certificate

Failure to comply with the above requirements will result in annulment of the award and forfeiture of the Proposal Guarantee.

The Contract Agreement shall not be considered binding upon the CITY until executed by the authorized CITY officials.

A corporation to which an award is made may be required, before the Contract Agreement is executed by the CITY, to furnish evidence of its corporate existence, of its right to enter into contracts in the State of California, and that the officers signing the contract and bonds for the corporation have the authority to do so.

2-3 SUBCONTRACTS

Subsection 2-3.2-Additional Responsibility

The Contractor shall perform or provide, with its own organization, contract labor, materials, and equipment amounting to at least 50 percent of the Contract Price. The contract labor performed or provided by the Contractor shall amount to at least 25 percent of the total contract labor for the Contract. Contract labor shall exclude superintendence. Any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the Contract Price before computing the amount of contract labor, materials, and equipment required to be performed or provided by the Contractor with its own organization. Where an entire item is subcontracted, the value of contract labor, materials, and equipment subcontracted will be based on the Contract Unit or Lump-Sum Price. When a portion of an item is subcontracted, the value of contract labor, materials, and equipment subcontracted will be based on the estimated percentage of the Contract Unit or Lump-Sum Price, determined from information submitted by the Contractor, subject to approval by the Engineer.

Prior to award of the contract, the otherwise qualifying low bidder shall submit a list of all subcontractors intended to perform work on the project. This list shall include the name and location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work

or improvement according to detailed drawings contained in the Plans and Specifications, in an amount in excess of one-half of 1 percent of the prime contractors total bid. The prime contractor shall provide a description by bid item number or otherwise fully designate the portion of work to be performed by each subcontractor.

2-4 CONTRACT BONDS

The Faithful Performance Bond shall remain in force until the date of recordation of the Notice of Completion. The Material and Labor Bond shall remain in force until 35 days after the date of recordation of the Notice of Completion.

The Contractor shall provide the following supplemental information for each bond as required herein:

- a. Surety company name providing the contractor's bond.
- b. Name of the contractor's surety sales agent.
- c. The business address of the surety company and the agent.
- d. The business telephone number of the surety company and agent.

2-5 PLANS AND SPECIFICATIONS

2-5.1 General. The Contractor shall maintain a control set of Plans and Specifications on the project site at all times. All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on this control set to show the as-built conditions. Upon completion of all work, the Contractor shall return the control set to the City Engineer. Final payment will not be made until this requirement is met.

Section 2 is amended by adding thereto the following new Subsection 2-5.4 Examination of Contract Documents:

2-5.4 Examination of Contract Documents. The bidder shall examine carefully the entire site of the work, including but not restricted to the conditions and encumbrances related thereto, the Plans and Specifications, and the proposal and contract forms therefore. The submission of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of the work to be performed, the quantities of material to be furnished and as to the requirements of the proposal, Plans, Specifications, and the Contract.

2-9 SURVEYING

2-9.3 Survey Service. Subsection 2-9.4, Survey Service is amended by

adding thereto the following:

The line and grades for construction will be parallel to and offset from the position of the work. From the established lines and grades, the Contractor shall extend the necessary lines and grades for construction of the work and shall be responsible for the correctness of same. The City's Surveyor will establish all necessary initial control lines. The City Surveyor will also perform the "first" time staking. In the event that the control lines and/or the stakes are destroyed, lost, or otherwise tampered with, the Contractor shall be responsible for any re-setting of the control lines or the stakes at his/her expense without additional pay or additional days added to the time allotted for the completion of the work

SECTION 3 - CHANGES IN WORK

3-3 EXTRA WORK

3-3.2 Payment.

3-3.2.1 General. Payment for extra work by cost plus a differential for labor, materials and equipment shall be considered payment under force account basis. The labor, materials and equipment provided shall be subject to the approval of the Engineer and compensation will be determined as provided herein.

3-3.2.2 Basis of Establishing Costs.

Subsection 3-3.2.2(a) is hereby deleted and replaced with the following:

3-3.2.2.(a) Labor.

The Contractor will be paid the cost of labor for the workmen (including foremen when authorized by the Engineer), used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor or other forces will be the sum of the following:

3-3.2.2.(a).1 Actual Wages. The actual wages paid shall include any employer payments to or on behalf of the workmen for health and welfare, pension, vacation and similar purposes.

3-3.2.2.(a).2 Labor Surcharge. To the actual wages, as defined in Section 3-3.2.2.(a).1, will be added a labor surcharge set forth in the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates," which is in effect on the date upon which the work is accomplished and which

is a part of the contract. Said labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 3-3.2.2.(a).1 and subsistence and travel allowance as specified in Section 3-3.2.2.(a).3.

3-3.2.2.(a).3 Subsistence and Travel Allowance. The actual subsistence and travel allowance paid to such workmen.

Subsection 3-3.2.2(c) is hereby deleted and replaced with the following:

3-3.2.2(c) Equipment Rental.

The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Department of Transportation Publication entitled "Labor Surcharge and Equipment Rental Rates," which is in effect on the date upon which the work is accomplished and which is a part of the contract, regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, a suitable rental rate for such equipment will be established by the Engineer. The Contractor may furnish any cost data which might assist the Engineer in the establishment of such rental rate.

The rental rates paid as provided above shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Operators of rented equipment will be paid for as provided in Section 3-3.2.2(a), "Labor."

All equipment shall, in the opinion of the Engineer, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools not listed in said publication and having a replacement value of \$200 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore.

Rental time will not be allowed when equipment is inoperative due to breakdowns.

3-3.2.2(c).1 Equipment on the Work. The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed, and in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.

The following shall be used in computing the rental time of equipment on the work:

1. When hourly rates are listed, less than 30 minutes of operation shall be considered to be 2 hour of operation.
2. When daily rates are listed, less than 4 hours of operation shall be considered to be 2 days of operation.

3-3.2.2(c).2 Equipment not on the Work. For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates," which is in effect on the date upon which the work is accomplished and which is a part of the contract, or determined as provided in Section 3-3.2.2(c) and for the cost of transporting the equipment to the location of the work and its return to its original location, all in accordance with the following provisions:

1. The original location of the equipment to be hauled to the location of the work shall be agreed to by the Engineer in advance.

2. The CITY will pay the costs of loading and unloading such equipment.
3. The cost of transporting equipment in low-bed trailers shall not exceed the hourly rates charged by local established haulers.
4. The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.
5. The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and legal holidays unless the equipment is used to perform the extra work on such days, and shall terminate at the end of the day on which the Engineer directs the Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

Equipment Usage and Hourly Rate Table

<u>Hours Equipment Is in Operation</u>	<u>Hours to Be Paid</u>
0.0	4.00
0.5	4.25
1.0	4.50
1.5	4.75
2.0	5.00
2.5	5.25
3.0	5.50
3.5	5.75
4.0	6.00
4.5	6.25
5.0	6.50
5.5	6.75
6.0	7.00
6.5	7.25
7.0	7.50
7.5	7.75
8.0	8.00
Over 8 hours in Operation	

The hours to be paid for equipment which is operated less than 8 hours due to breakdowns shall not exceed 8 less the number of hours the equipment is inoperative due to breakdowns.

When hourly rates are listed, less than 30 minutes of operation shall be considered to be 2 hour of operation.

When daily rates are listed, payment for 2 days will be made if the equipment is not used. If the equipment is used, payment will be made for 1 day.

The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than 1 day.

6. Should the Contractor desire the return of the equipment to a location other than its original location, the CITY will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.
7. Payment for transporting, loading and unloading equipment, as provided above, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force-account basis.

When extra work, other than work specifically designated as extra work in the Plans and Specifications, is to be paid for on a force-account basis and the Engineer determines that such extra work requires the Contractor to move on to the work equipment which could not reasonably have been expected to be needed in the performance of the contract, the Engineer may authorize payment for the use of such equipment at equipment rental rates in excess of those listed as applicable for the use of such equipment subject to the following additional conditions:

1. The Engineer shall specifically approve the necessity for the use of particular equipment on such work.
2. The Contractor shall establish, to the satisfaction of the Engineer, that such equipment cannot be obtained from his normal equipment source or sources and those of his subcontractors.
3. The Contractor shall establish to the satisfaction of the Engineer that the proposed equipment rental rate for such equipment from his proposed source is reasonable and appropriate for the expected period of use.
4. The Engineer shall approve the equipment source and the equipment rental rate to be paid by the CITY before the Contractor begins work involving the use of said equipment.

3-3.2.2(c).3 Owner-Operated Equipment. When owner-operated equipment is used to perform extra work to be paid for on a force account basis, the Contractor will be paid for the equipment and operator, as follows:

Payment for the equipment will be made in accordance with the provisions in Section 3-3.2.2(c), "Equipment Rental."

Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by the Contractor to other workmen operating similar equipment already on the project or, in the absence of such other workmen, at the rates for such labor established by collective bargaining agreements for the type of workman and location of the work, whether or not the owner-operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein, in accordance with the provisions in Section 3-3.2.2(a), "Labor."

To the direct cost of equipment rental and labor, computed as provided herein, will be added the markups for the equipment rental and labor as provided in Section 3-3.2.3(a), "Work by Contractor."

3-3.2.3 Mark-up.

The text of Subsection 3-3.2.3 is hereby deleted and replaced with the following:

- (a) Work by Contractor. The following percentages shall be added to the Contractor's costs and shall constitute the mark-up for all overhead and profits, which shall be deemed to include all items of expense not specifically designated as cost or equipment rental in Sections 3-3.2.2(a) and 3-3.2.2(b), "Materials," and 3-3.2.2(c), "Equipment Rental."

Labor	20
Materials	15
Equipment Rental	15
Other Items and Expenditures	15

To the sum of the costs and mark-ups provided for in this subsection, 1 percent shall be added as compensation for bonding.

- (b) Work by Subcontractor. When all or any part of the extra work is performed by a subcontractor, the mark-up established in Subsection 3-3.2.3(a) shall be applied to the subcontractor's actual cost of such work, to which a mark-up of 10 percent on the first \$2,000 of the subcontracted portion of the extra work and a mark-up of 5 percent on work added in excess of \$2,000 of the subcontracted portion of the extra work may be added by the Contractor.

3-6 NOTICE TO SURETIES

Section 3, Changes in Work, is amended by adding thereto the following new Subsection 3-6:

The Contractor shall notify his sureties and the carriers of the insurance furnished and maintained by him of any changes affecting the general scope of the work or change in the contract price, or time, or a combination thereof, and the amount of the applicable bonds and the coverage of the insurance shall be adjusted accordingly. The Contractor shall furnish proof of such adjustments to the City Engineer of Calimesa.

SECTION 4 - CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP

4-1.1 General. The Contractor and all subcontractors, suppliers, and vendors, shall guarantee that the entire work will meet all requirements of this contract as to the quality of materials, equipment, and workmanship. The Contractor, at no cost to the CITY, shall make any repairs or replacements made necessary by defects in materials, equipment, or workmanship that become evident within 1 year after the date of recordation of the Notice of Completion. Within this 1-year period, the Contractor shall also restore to full compliance with requirements of this contract any portion of the work which is found to not meet those requirements. The Contractor shall hold the CITY harmless from claims of any kind arising from damages due to said defects or noncompliance. The Contractor shall make all repairs, replacements, and restorations within 30 days after the date of the Engineer's written notice.

4-1.4 Test of Materials. Except as elsewhere specified, the CITY will bear the cost of testing material and/or workmanship which meet or exceed the requirements indicated in the Standard Specifications and the Special Provisions. The cost of all other tests, including the retesting of material or workmanship that fails to pass the first test, shall be borne by the Contractor.

4-1.5 Certification. A Certificate of Compliance shall be furnished prior to the use of any materials for which these Specifications or the special provisions require that such a certificate be furnished. In addition, when so authorized in these Specifications or in the special provisions, the Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the specifications. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the lot so certified shall be clearly identified in the certificate.

4-1.6 Trade Names or Equals. Approval of equipment and materials offered as equivalents to those specified must be obtained prior to the opening of bids as set forth in the Instructions to Bidders.

SECTION 5 UTILITIES

5-1 LOCATION

The location and existence of any underground utility or substructure was obtained

from a search of available records. No guarantee is made or implied that the information is complete or accurate. It shall be the Contractor's responsibility alone to determine the exact location of underground utilities or substructures of every nature and to protect them from damage. The Contractor shall excavate and expose all high-risk underground facilities.

The Contractor shall notify the owners of all utilities and substructures as set forth in the General Specifications.

5-4 RELOCATION

The second sentence of the last paragraph of Subsection 5-4 of the Standard Specifications is hereby deleted and replaced with the following:

When not otherwise required by the Plans and Specifications and when directed by the Engineer, the Contractor shall arrange for the relocation of service connections, as necessary, between the meter and property line, or between the meter and limits of construction.

Where existing utilities are found to interfere with the proposed construction, the following actions shall be taken by the Contractor:

Contractor shall coordinate, stage, and schedule his work to allow sufficient time and space for relocation by the owner of utility features as shown and required.

Contractor shall notify utility pole owners one week in advance of the availability of cleared right-of-way and provide space and time for relocation of poles by the utility owner.

Contractor shall contact Yucaipa Valley Water District and South Mesa Water Company prior to relocation of their facilities to coordinate inspection of work.

Contractor's attention is directed to the requirements of Section 5-6, "Cooperation" of the Standard Specification regarding utility relocations referenced on the Plans.

5-5 DELAYS

The second paragraph of Subsection 5-5 is hereby deleted and replaced with the following two paragraphs:

The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted and completed in accordance with Subsection 5-1. The Contractor shall ascertain further detailed information to coordinate his work to this effect.

All notification of utility companies shall be by the Engineer based on Contractor's request as submitted to the Engineer at least 24 hours in advance of the needed work. Any costs for delay of the Contractor of utility companies in this regard shall be assigned to the Contractor, if these costs are a result of the Contractor's request

being untimely in any respect, except for the utility company not responding at their agreed time.

SECTION 6 - PROSECUTION, PROGRESS, AND ACCEPTANCE OF THE WORK

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK

The Contractor's proposed construction schedule shall be submitted to the Engineer within 10-working days after the date of the CITY'S execution of the Contract Agreement. The schedule shall be supported by written statements from each supplier of materials or equipment indicating that all orders have been placed and acknowledged, and setting forth the dates that each item will be delivered.

Contractor shall schedule that portion of work fronting and adjacent to Calimesa Elementary School during the schools summer schedule to minimize impacts to students attending school.

Prior to issuing the Notice to Proceed with the Work, the Engineer will schedule a preconstruction meeting with the Contractor to review the proposed construction schedule and delivery dates, arrange utility coordination, discuss construction methods, and clarify inspection procedures.

The Contractor shall submit progress reports to the Engineer by the 10th day of each month. The report shall include an updated Construction Schedule. Any deviations from the original schedule shall be explained. Progress payments will be withheld pending receipt of any outstanding reports.

6-6 DELAYS AND EXTENSIONS OF TIME

6-6.4 Written Notice and Report. The first sentence of Subsection 6-6.4 is hereby deleted and replaced with the following:

If the Contractor desires payment for a delay as specified in Subsection 6-6.3 of the Standard Specifications, it shall notify the Engineer in writing within 3 days of beginning of the delay. If the Contractor desires an extension of time as specified in Subsection 6-6.2 of the Standards Specifications, it shall notify the Engineer in writing within 3 days of beginning of the delay. Such notice shall specify the nature of the delay, the cause, and the conditions which set the beginning time for the delay.

6-7 TIME OF COMPLETION

6-7.1 General. The time for completion shall be as noted in the General Specifications.

6-7.2 Working Day. The Contractor's activities shall be confined to the hours between 7:00 a.m. and 3:30 p.m., Monday through Friday, excluding holidays. Deviation from these hours will not be permitted without the prior

consent of the Engineer, except in emergencies involving immediate hazard to persons or property. In the event of either a requested or emergency deviation, inspection service fees will be charged against the Contractor. The service fees will be calculated at overtime rates, including benefits, overhead, and travel time. The service fees will be deducted from any amounts due the Contractor.

6-9 LIQUIDATED DAMAGES

The liquidated damages value is hereby amended to be six hundred dollars (\$600) per day.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-1 CONTRACTOR'S EQUIPMENT AND FACILITIES

A noise level limit of 86 dbA at a distance of 50 feet shall apply to all construction equipment on or related to the job whether owned by the Contractor or not. The use of excessively loud warning signals shall be avoided, except in those cases required for the protection of personnel.

7-2 LABOR

7-2.2 Laws. The Contractor, and all subcontractors, suppliers and vendors, shall comply with all CITY, State and Federal orders regarding affirmative action to ensure equal employment opportunities and fair employment practices. Failure to file any report due under said orders will result in suspension of periodic progress payments.

The Contractor shall ensure unlimited access to the job site for all equal employment opportunity compliance officers.

7-3 LIABILITY INSURANCE

The first four paragraphs of Section 7-3 are amended to read as follows:

The Contractor shall furnish the CITY a policy or certificate of liability insurance in which the CITY and all of its officers, consultants and agents, including **(engineer)**, are named insured or are named as an additional insured with the Contractor. Notwithstanding any inconsistent statements in the policy or any subsequent endorsement attached thereto, the CITY and all of its officers, consultants and agents, including **(engineer)**, shall be the insured or named as an additional insured covering the Work, whether liability is attributable to the Contractor or the CITY or its officers, consultants or agents, including **(engineer)**. The policy shall insure CITY and all of its officers, consultants and agents, including **(engineer)**, while acting within the scope of their duties of the Work, against all claims arising

out of or in connection with the Work, except as provided for in Subsection 6-10.

The Contractor may file insurance acceptable to the CITY covering more than one project. The coverage shall provide the following minimum limits:

<u>Insurance Coverage Requirements</u>	<u>Limit Requirements</u>
Comprehensive General Liability	\$1,000,000
Product/Completed Operations Hazard	\$1,000,000
Comprehensive Automobile Liability	\$1,000,000
Contractual General Liability	\$1,000,000

A combined single-limit policy with aggregate limits in the amount of \$2,000,000 will be considered equivalent to the required minimum limits.

Except as provided for in Subsection 6-10, the Contractor shall save, keep, and hold harmless the CITY and all of its officers, consultants, and agents, including **(engineer)**, from all damages, costs or expenses in law or equity that may at any time arise or be set up because of damages to property, or of personal injury received by reason of or in the course of performing work, which may be caused by any willful or negligent act or omission by the Contractor, any of the contractor's employees, or any Subcontractor. The CITY and all of its officers, consultants, and agents, including **(engineer)**, will not be liable for any accident, loss, or damage to the Work prior to the completion or acceptance, except as provided for in Subsection 6.10.

7-5 PERMITS

The text of Subsections 7-5 of the Standard Specifications is hereby deleted and replaced with the following:

Prior to the start of any work, the Contractor shall take out the applicable CITY permits and make arrangements for CITY inspections. The CITY will issue the permits at no charge to the Contractor. The Contractor and all subcontractors shall each obtain a CITY business license, and shall be licensed in accordance with State Business and Professions Code. The Contractor shall also obtain any and all other permits, licenses, inspections, certificates, or authorizations required by any governing body or entity.

The Contractor shall pay all cost incurred by the permit and license requirements.

7-8 PROJECT SITE MAINTENANCE

7-8.1.1 CLEANUP AND DUST CONTROL. The generation of dust shall be controlled as required by the Air Quality Management District. Grading activities shall cease during periods of high winds (greater than 30 MPH).

Trucks hauling soil, dirt, sand or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the Engineer.

7-8.4 SANITATION. [Add the following:] Where construction requires removal of a portion of sewer in use, Contractor shall construct and maintain a reliable bypass system. Thirty days in advance of bypass requirement, Contractor shall submit a plan of his proposed method and equipment to be used for the bypass, including maintenance/emergency contact, and backup equipment provision. Contractor shall not proceed with the bypass operation until his plan is reviewed and approved by the owner of the sewer.

7-8.6 WATER POLLUTION CONTROL.

7-8.6.1 STORM DRAIN SYSTEM PROTECTION. The City is required by the State of California, NPDES General Stormwater Permit to eliminate and/or reduce the amount of objectionable material entering the City's storm drain system to the maximum extent practicable (MEP). The storm drain system consists of underground pipes as well as improved and natural drainage courses. As such, the Contractor shall be thoroughly familiar with the San Bernardino County Flood Control District Best Management Practices (BMP) for construction activity. These practices and other measures shall be used to ensure that no objectionable materials including but not limited to excess excavation and backfill materials, oils, grease, street marking paints, sawcutting residue, and/or AC grindings enter the City's improved or unimproved drainage system.

INSPECTIONS AND REPORTING. The Contractor shall regularly inspect the construction site for BMP compliance to ensure proper implementation and functioning. The Contractor shall identify corrective actions and time frames to address any damaged BMPs or reinstate any BMPs that have been discontinued.

At a minimum, the Contractor shall inspect the construction site as follows:

1. Prior to a forecast storm;
2. After any precipitation which causes runoff capable of carrying sediment from the construction site;
3. At 24-hour intervals during extended precipitation events; and
4. At regular weekly intervals.

PAYMENT. The bid contract prices of the various items of work shall be considered to include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for installing, maintaining,

removing and disposing of BMPs as required. This contract does not include a separate pay item for complying with water pollution control requirements.

7-8.7.1 DRAINAGE CONTROL. Special attention is directed to possible flood hazards, and/or nuisance water such as irrigation and other runoff. The Contractor shall be responsible for all injuries or damages to any portion of the work and/or any private or public property occasioned by these causes and shall make good such injuries or damages at no cost to the City prior to the completion and acceptance of the work.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

The second paragraph of Subsection 7-9 of the Standard Specifications is hereby deleted and replaced with the following:

The Contractor shall relocate, repair, replace, or reestablish all existing improvements within the project limits which are not designated for removal (e.g., curbs, sidewalks, driveways, fences, walls, sprinkler systems, signs, utility installations, pavements, structures, etc.) which are damaged or removed as a result of his operations or as required by the Plans and Specifications.

Where existing traffic striping, pavement markings, and curb markings are damaged or their reflectivity reduced by the Contractor's operations, such striping or markings shall also be considered as existing improvements and the Contractor shall repaint or replace such improvements.

Relocations, repairs, replacements, or reestablishments shall be at least equal to the existing improvements and shall match such improvements in finish and dimensions unless otherwise specified.

The last paragraph of Subsection 7-9 of the Standard Specifications is hereby deleted and replaced with the following:

All costs to the Contractor for protecting, removing, restoring, relocating, repairing, replacing, or reestablishing existing improvements shall be included in the bid.

7-10 PUBLIC CONVENIENCE AND SAFETY

7-10.1 Traffic and Access. Subsection 7-10.1 of the Standard Specifications is amended by adding thereto the following:

The Contractor shall notify the occupants of all affected properties at least 48 hours prior to any temporary obstruction of access. Vehicular access to property line shall be maintained, except as required for construction for a reasonable period of time. No overnight closure of any driveway will be

allowed, except as permitted by the Engineer.

At least one 12-foot wide traffic lane shall be provided for each direction of travel on all streets at all times, except as permitted by the Engineer. The traffic lanes shall be maintained on pavement, and shall remain unobstructed.

Clearances from traffic lanes shall be 5 feet to the edge of any excavation and 2 feet to the face of any curb, pole, barricade, delineator, or other vertical obstruction.

One 4-foot wide paved pedestrian walkway shall be maintained in the parkway area on each side of all streets. The clearance from the pedestrian walkway to any traffic lane shall be 5 feet.

Open trenches cut parallel to the centerline of Third Street, awaiting either pipe segments or backfill, shall not exceed thirty feet in length. These trenches shall be securely "plated" at the end of each work day.

Trenches cut at approximately right angles to the centerline of Third Street shall be securely "plated" at the end of each work day.

All unfinished pipe segments shall be securely capped to prevent access by vermin, pets, and/or children.

7-10.3 Street Closures, Detours, Barricades. Subsection 7-10.3 of the Standard Specifications is amended by adding thereto the following:

Street closures will not be allowed, except as specifically permitted by the Engineer.

The Contractor shall prepare any traffic control or detour plans that may be required as directed by the Engineer.

Lane transitions shall conform to the Caltrans Traffic Manual, Section 5-08.4, "Transition Area."

Temporary traffic channelization shall be accomplished with barricades or delineators. Temporary striping will not be allowed unless specifically permitted by the Engineer. The Contractor shall prepare any plans that may be required for temporary striping to the satisfaction of the Engineer. In no event will temporary striping be allowed on finished pavement surfaces.

The Contractor shall schedule an employee to police the temporary delineators and barricades within the travel way during weekday,

nonworking hours and over Saturdays, Sundays, and holidays. Any corrective work required to be done by CITY forces shall be back charged to the Contractor based on the actual costs, plus CITY overhead. The entire City costs for work done by City forces shall be withheld from the final payment to the Contractor.

7-10.5 Protection of the Public. Subsection 7-10.5 is hereby added to Section 7 of the Standard Specifications as follows:

It is part of the service required of the Contractor to make whatever provisions are necessary to protect the public. The Contractor shall use foresight and shall take such steps and precautions as his operations warrant to protect the public from danger, loss of life or loss of property, which would result from interruption or contamination of public water supply, interruption of other public service, or from the failure of partly completed work or partially removed facilities. Unusual conditions may arise on the work which will require that immediate and unusual provisions be made to protect the public from danger or loss, or damage to life and property, due directly or indirectly to prosecution of work under this contract.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the public safety, protection of utilities and protection of adjacent structures or property, which may be damaged by the Contractor's operations and when, in the opinion of the Engineer, immediate action shall be considered necessary in order to protect the public or property due to the Contractor's operations under this contract, the Engineer will order the Contractor to provide a remedy for the unsafe condition. If the Contractor fails to act on the situation within a reasonable time period, the Engineer may provide suitable protection to said interests by causing such work to be done and material to be furnished as, in the opinion of the Engineer, may seem reasonable and necessary.

The cost and expense of said labor and material, together with the cost and expense of such repairs as are deemed necessary, shall be borne by the Contractor. All expenses incurred by the CITY for emergency repairs will be deducted from the progress payments and the final payment due to the Contractor. However, if the CITY does not take such remedial measures, the Contractor is not relieved of the full responsibility for public safety.

SECTION 8 - FACILITIES FOR CITY PERSONNEL

No field offices for CITY personnel shall be required; however, the CITY personnel shall have the right to enter upon the project at all times and shall be admitted to the offices of the Contractor if so provided by the Contractor for his own personnel.

SECTION 9 - MEASUREMENT AND PAYMENT

9-3 PAYMENT

9-3.2 Partial and Final Payment. The text of Subsection 9-3.2 of the Standard Specifications is hereby deleted and replaced with the following:

The closure date for the purpose of making partial progress payments will be the last day of each month. The Contractor shall prepare the approximate measurement of the work performed through the closure date and submit it to the CITY for approval by the 10th day of the following month.

When the work is complete, the Engineer will determine the final quantities of the work performed and prepare the final progress payment report.

Payments are commonly authorized and made within 30 days following the 10th day of the month submitted. However, payments will be withheld pending receipt of any outstanding reports required by the contract documents. In addition, the final progress payment will not be released until the Contractor returns the control set of Plans and Specifications showing the as-built conditions.

A full 10-percent retention will be deducted from all progress payments. The final retention will be authorized for final payment 35 days after the date of recordation of the Notice of Completion.

The Contractor, however, may receive interest on the retained amount, or receive the retained amount itself so long as the securities equivalent to the retained amounts are substituted with escrow holder approved by the CITY.

At the request and expense of the Contractor, retained amounts or securities equivalent to the retained amounts may be deposited with the State Treasurer or a State or Federally chartered bank approved by the CITY as the escrow agent, who shall return such monies or securities to the Contractor upon satisfactory completion of the contract.

Securities eligible for investment shall include those listed in Section 16430 of the State Government Code or bank or savings and loan certificates of deposit and/or interest bearing demand deposit accounts.

Any escrow agreement entered into shall be substantially similar to the form "Escrow Agreement for Security Deposits" in lieu of retention as contained in Section 4590 of Chapter 13 of Division 5 Title 1 of the California Government Code.

9-3.2.2 Alternative Dispute Resolution. After submittal of the proposed final estimate to the Contractor, a meeting shall be held promptly between Contractor and CITY, attended by the individuals with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of claims arising under or related to performance of the contract.

If, within 30 days after such meeting, the parties have not succeeded in negotiating a resolution of the claims, they will jointly appoint a mutually acceptable neutral person not affiliated with either of the parties (the "neutral"). If they have been unable to agree upon such appointment within 40 days from the initial meeting, the parties shall seek assistance in finding a mutually acceptable neutral. **If the parties are unable to agree on a neutral, either party may request that the presiding judge of the Superior Court which would have jurisdiction of the matter if a suit were filed, to appoint the neutral.** The fees of the neutral shall be shared equally by the parties.

In consultation with the neutral, the parties will select or devise an alternative dispute resolution procedure ("ADR") by which they will attempt to resolve the dispute, and, if the parties are unable to agree on such matters within 20 days after the initial consultation with neutral, the procedure, time, and place for the ADR to be held will be decided by the neutral. Unless circumstances require otherwise, the ADR shall be held not later than 60 days after selection of the neutral.

The parties agree to participate in good faith in the ADR to its conclusion as designated by the neutral. If the parties are not successful in resolving the dispute through the ADR, then the parties may agree to submit the matter to binding arbitration, or a private adjudicator, or either party may seek an adjudicated resolution through the appropriate court.

9-3.3 Delivered Materials. Materials and equipment delivered but not incorporated into the work will not be included in the estimate for progress partial payment.

The following subsection is hereby added to Section 9 of the Standard Specifications:

9-3.5 Final Pay Quantities. When the estimated quantities for a specific portion of the work are designed in the bid schedule by the letter (F) as final payment quantities, said estimated quantities shall be the final quantities for which payment for such specific portion of the work will be made unless the dimensions of said portions of the work shown on the plans are revised by

the Engineer. If such dimensions are revised and such revisions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the changes in the dimensions. The estimated quantities for such specified portion of the work shall be considered as approximate only, and no guarantee is made that the quantities which can be determined by computations is made based on the details and dimensions shown on the plans will equal the estimated quantities. No allowance will be made in the event that the quantities based on computations do not equal the estimated quantities.

SPECIAL PROVISIONS

PART 2

CONSTRUCTION MATERIALS

SECTION 200 - ROCK MATERIALS

200-1 ROCK PRODUCTS

200-1.3 Gravel. Pea gravel for irrigation valve box drainage shall have 100 percent passing the 9.5mm (3/8-inch) sieve and less than 5 percent passing the 2.36mm (No. 8) sieve. 200-1.7 Stone. Add:

200-1.7.1 General. Stone for landscape boulders:

200-1.7.2 Natural Stone. Boulders shall have no more than one fractured face, and shall be clean and free from deleterious impurities. Sizes and type shall be as specified on the drawings. Provide a 2-cubic foot sample of natural stone proposed for incorporation in the work within 35 days of award of contract.

Cobblestones for cobblestone paving shall be as specified on the drawings.

200-2 UNTREATED BASE MATERIALS

200-2.1 General. Material for use in this project shall be Crushed Aggregate Base.

200-2.2 Crushed Aggregate Base.

200-2.2.3 Quality Requirements. The minimum R-value requirement will not be waived.

SECTION 201 - CONCRETE, MORTAR, AND RELATED MATERIALS

201-1 PORTLAND CEMENT CONCRETE

201-1.1.1 General. The same brand, type, and source of cement and aggregate shall be used for all portland cement concrete.

201-1.1.2 Concrete Specified by Class.

Concrete for Stamped and Colored Concrete shall be Class 330-E-23 (560-E-3250) with 100 mm (4-inch) maximum slump.

Concrete for Irrigation Controller Cabinet, Electric Meter Pedestal, PVC fence post footing, monument sign footing and Backflow Preventer shall be Class 330-C-23 (560-C-3250) with a 100 mm (4-inch) maximum slump.

Fly ash shall not be used.

201-1.2 Materials.

201-1.2.4 Admixtures.

Method "A"

Color Hardener. Colored hardener for stamped concrete shall be equal to Lithochrome dry shake colored hardener by L. M. Scofield Company, Bomanite Corporation or equal. Color, antiquing release agents, and sealer shall be as shown in the table below:

Antiquing Agent (2 colors)	Bomanite Corporation – City Select
Clear Sealer:	Bomanite Corporation "Aqua Seal"

Method "B"

Colored concrete shall be equal to "Chromix" admixture for color-conditioned concrete by L. M. Scofield Company, Bomanite Corporation or equal. Color shall be as shown in the table below:

Color:	L. M. Scofield Company – City select
---------------	--------------------------------------

Refer to Section 201-4.1.1 Color Curing Compound, in these Special Provisions.

Prior to start of colored and stamped concrete work, Contractor shall submit three-color samples to the Engineer for approval, together with three copies of the manufacturer's printed instructions, bulletins, and specifications.

201-3 EXPANSION JOINT FILLER AND JOINT SEALANTS

201-3.1 General. Contractor shall submit materials to Engineer for approval.

201-3.4 Sealant shall be Type "A" with Polyethylene foam filler. Submit two samples to the Engineer for approval.

201-4 CONCRETE CURING MATERIALS

201-4.1.1 General. Concrete curing compound shall be Type 1-D.

Color curing compound for colored and stamped concrete shall be the same color and manufacturer as the color hardener.

SECTION 202 - MASONRY MATERIALS

Add new Section 202-3, Special Materials:

202-3.1 Concrete block shall be as specified on drawings.

Contractor shall deliver one sample block of each color and type specified to the Engineer for final approval prior to start of sign installation.

202-3.1 Cement Plaster Stucco.

- (a) Cement: Portland cement plaster, ASTM C-150
- (b) Lime: ASTM C-106, Type S
- (c) Aggregate: Sand ASTM C-144
Gradation:
 - (1) Brown coat: U.S. Standard

<u>Sieve</u>	<u>Maximum</u> Percent retained by Weight (+ or - 2%)	<u>Maximum</u> Percent retained by Weight (+ or - 2%)
No. 4 (4.75 mm)	---	0
No. 8 (2.36 mm)	0	10
No. 16 (1.18 mm)	10	40
No. 30 (600 um)	30	65
No. 50 (300 um)	70	90
No. 100 (150 um)	95	100

- (2) Finish coat:
Same as base coat gradation, and all sand to pass No. 8 (2.36 mm) sieve.
- (d) Water: Potable and free from impurities that are harmful to plaster.

- (e) Finish Coat: Factory-prepared integrally colored stucco finish as manufactured by Highland or La Habra. All instructions and specifications noted on manufactures product shall be construed as part of this specifications.

SECTION 203 - BITUMINOUS MATERIALS

203-5 EMULSION-AGGREGATE SLURRY

203-5.2 Materials. [Amend as follows:]

- (2) Admixtures, such as Portland cement or aluminum sulfate may be mixed into the slurry material to adjust the curing time such that the applied slurry can support vehicular traffic within 60 minutes.
- (5) Use of slag shall not be permitted.
- (6) Deliveries of aggregate and emulsion shall not be made without the engineer present. Emulsion is not to be transferred to an on-site storage tanker without the sieve test performed by the City.

203-5.4 Mix Design. [Amend the first paragraph to include the following:]

The Contractor shall submit a mix design for approval within five (5) working days after a "Notice to Submit Mix Design" is issued. If the Contractor changes sources of aggregate, sand, and/or oil, a new mix design shall be resubmitted. The cost of initial testing of the mix design will be borne by the City. The cost of all retests and testing for change of source for mix design will be borne by the Contractor, and the amount due to the City for said retesting will be deducted from the Contractor's progress payments.

The Contractor shall allow ten (10) days prior to the start of work for calibration and testing at a location to be designated by the Engineer. The City's testing materials consultant will obtain field samples at the time of calibration for Extraction Test (ASTM D 2172), Consistency Test, Wet Track Abrasion Test (ASTM D 3910) and a verification of the 60-minute set time previously specified. When the City's testing laboratory has determined that the field samples meet the requirements stipulated in these specifications, the Engineer will notify the Contractor to start work. In the event that the product does not meet specification, another testing and calibration date shall be set ten (10) days prior to the start of work for a complete retest of the product at the expense of the Contractor.

203-6 ASPHALT CONCRETE

Where dense graded asphalt is being constructed in two layers or more, the asphalt concrete pavement for the base course shall be B-PG 6410. When dense graded asphalt is being constructed in a single layer and for a finishing course or asphalt concrete overlay, the asphalt concrete pavement shall be C2-PG 6410.

203-6.4 Asphalt Concrete Mixtures

203-6.4.1 General. Acceptance as used in this Subsection 203-6.4 shall mean acceptance of material after spreading only. Acceptance of material in production shall be subject to all quality requirements based on sampling and testing as specified.

SECTION 209 - ELECTRICAL COMPONENTS

Add new Section 209-3 LANDSCAPE ELECTRICAL SYSTEMS

209-3 LANDSCAPE ELECTRICAL SYSTEMS.

209-3.1 General. All materials and equipment shall be new and bear the label of or be listed by the Underwriter's Laboratories or the National Fire Protection Association, where applicable. All material shall be the standard products of manufacturer, regularly engaged in the production of such material, and shall be the latest improved design. All material of the same type or of one system shall be supplied by the same manufacturer.

In no case shall conduits, wires, etc., be smaller in size or less in number than that shown on Plans or called for in these Specifications, even though codes may accept otherwise.

209-3.2 Proposed Substitutions and "Or Equal." Refer to the STANDARD SPECIFICATIONS, Section 4-1.6.

Equipment and wiring shown on the plans is for materials as specified. Should equipment of other manufacturers be approved for use, the Contractor shall make all changes in other equipment, conduit, wiring, or location of equipment that may be required due to design or space allotment, as approved by the Engineer, without charge to the Agency.

It is the Contractor's responsibility to show that all products proposed for substitution are equal to the specified item by submitting sufficient information to permit a comparative check. The term "equal" shall mean that the product or materials offered shall have equivalent or more value to the Agency based on the value of the item set forth in the specifications or on the Plans, and then only after the Contractor's written submittal has been

approved in writing. If, after installation, substituted equipment is found to be not equal to that specified, that equipment shall be replaced with approved item(s) at no cost to the Agency.

209-3.3 Inspection. At the time of electrical inspections, the Contractor shall make available a complete set of working drawings showing progress to date and detail variations from the plans. All variations must have prior approval of the Engineer.

209-3.3.1 Materials and Workmanship. Materials and workmanship, unless indicated or specified otherwise, shall be in strict conformity with the standards of the latest editions including revisions of the Electrical Code of the County, National Electric Code (1990) of the National Board of Fire Underwriters, CAL/OSHA, Electrical Safety Orders, and the Standards of the National Electrical Manufacturers Association. Nothing in these Plans or Specifications shall be construed to permit work below the standards of these ordinances and those of OSHA. After acceptance of the contract, all work found which does not conform or comply with the applicable code shall be brought into conformance at no cost to the Agency.

209-3.4 Referenced Specification. Reference in this Specification to the STANDARD SPECIFICATIONS (STD. SPECS) shall mean the appropriate section of the STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, APWA/ AGC, 2006 EDITION and all supplements thereto, as published by Building News, Inc., Los Angeles, California.

209-3.5 Materials.

- (a) Meter Pedestals. Shall be as called out on drawings.
- (b) Conductors. All conductors shall be copper, type "THWN" below grade and type "THHN/THWN" for exposed conditions and above grade.
- (c) Conduit. Exposed conduit shall be hot dipped galvanized rigid steel conduit. All ells shall be factory made rigid galvanized steel conduit. No PVC ells shall be used unless noted on drawings. All ells 45 degrees and larger shall be sweep bends. All rigid steel conduit exposed to earth 12-inches above finished grade shall be wrapped with 20 mil PVC tape, Scotch tape No. 40 green or equal. PVC conduit shall be U.L. listed "Schedule 40" with properly cemented fittings. All underground shall be PVC Schedule 40. PVC conduit shall contain a green grounding conductor. All stub ups into switchboards shall be green grounding conductor. All stub ups into switchboards shall be rigid galvanized steel conduit with ground

bushings properly grounded. All PVC stub outs shall be equipped with non-cemented approved PVC pipe caps.

- (d) Bushings, Locknuts, and Conduit Fittings. Boxes, bushings, locknuts, and similar devices shall be galvanized cast steel or cast iron, malleable iron, or galvanized steel. Aluminum die cast or pot metal fittings or boxes are not approved. Conduit fiber-lined bushings are required to be used with locknuts at cabinets, switchboards, housing, and pull boxes, etc. All conduit with cable shall be sealed at each end. Grounding bushings shall be provided on underground rigid conduits.
- (e) Pull Boxes. Precast pull boxes by Brooks Concrete Products or Quickset are approved. Covers shall be cast iron and bolted down with tamperproof screws. See drawings for size or size by code.
- (f) Wire and Cable. Branch circuit wire shall be copper type THW-75 degrees or THHN/THWN in conduit and poles, as manufactured by General Electric, Paronite, General Circle, Cirro, or Anaconda, 600v. Ground wire shall be green TW or THW. Wires shall be color coded for each leg. Neutral shall be white THW or THWN. Identify cable by circuit number in each pull box by W.P. Tag. No. 6 and larger cable shall be type THW-75 degrees stranded copper. Approved manufacturers: General Electric, Paronite, Okonite, Anaconda, General. Cable underground shall be color-coded by phase. Stranded wire shall be used in poles from pull boxes to fixtures. Provide manufactured cable grips in poles to support cables.
- (g) Switches and Receptacles - Leviton Specification Grade or equal.
- (h) Circuit Breakers. All circuit breakers shall conform to Federal Specifications W-C-375, Class 2b or 2c for 120/240 volt and shall be provided with a device for locking circuit breakers in "OFF" position.
- (i) Contactors and Relays. Contactor shall be designed for 600 volts AC mechanically held and be rated for tungsten, mercury arc, or other reactive lighting loads and shall be equal to Square D - Type M, Class 8903 in NEMA 1 housing. Relays. Shall be 120V AC coil, 10 amp contacts housed in NEMA 1 housing. Relays shall be equal to Square D - Type M, Class 8903.

209-3.6 Submittals, Shop Drawings, and Record Drawings

209-3.6.1 Material List. Three copies of a complete materials list with brochures showing all equipment indexed with job title, date, etc., shall be submitted to the Engineer within 10 days after award of

Contract. Submitting a catalog number and manufacturer's name, and stating that the material or item to be furnished will meet the specifications will not be acceptable.

List the following items by make and number in the submittal: Underground conduit, rigid galvanized steel conduit, cable, wire, pull boxes, main switchboard, poles, fixtures, lamps, control equipment, panels, outlets, boxes, etc.

209-3.6.3 Distribution and Control Section. Submit 3 sets of shop drawings for approval.

209-3.6.4 Record Drawings. Record drawings shall be prepared by the Contractor and maintained in the field. All changes in the work shall be recorded daily, accurately, on a set of blue line prints.

The location of all underground conduits and stub-outs shall also be shown, fully dimensioned to two points of architectural reference such as buildings, walks, walls, curbs, paving, monuments, etc., record junction and pull boxes not shown on the drawings.

Upon completion of each portion of the work, immediately transfer all such record information to the prints. All changes and dimensions shall be recorded legibly with a red-point pen to the satisfaction of the Engineer. Data shall be recorded daily and shall be subject to inspection at all times.

Failure to provide record drawings shall be cause to reschedule inspections and withhold approval of progress payment requests.

Upon completion of the work and final inspection, the record information shall be delivered to the Engineer. The Engineer's approval of record drawings is a condition of approval of final payment.

SECTION 210 - PAINT AND PROTECTIVE COATINGS

210-1 PAINT

Add new section as follows:

210-6 ANTI-GRAFFITI COATINGS

210-6.1.1 General Requirements. Anti-graffiti coating system shall be from one manufacturer. All materials shall be delivered to the site of work in new, unopened, airtight containers, and shall be

appropriately identified with manufacturer's name, date of manufacture, type of material, and lot or batch number.

210-6.1.2 Coatings for Anti-Graffiti. All vertical surfaces such as, but not limited to, i.e., existing block wall, newly stucco walls, meter/irrigation controller enclosures and backflow prevention enclosures.

210-6.1.3 Anti-Graffiti Coating System. The coating system shall be as manufactured by:

Rainguard International Products Company

1079 Culpepper Drive
Conyers, GA 30094
Telephone: (800) 272-4647
Fax: (770) 860-9617
Website: www.rainguard.com

Distributor: Dunn Edwards Paint Corporation

210-6.1.4 Products.

- a. For porous surfaces. Rainguard Micro-Seal Concentrated Clear Water Repellant with Micro-Lok. This is a solvent free, 100 percent active solid, oligomeric Alkylalkoxysiloxane repellent, requiring no dilution and ready to use. This hydrophobic berries shall displace water, yet remain highly vapor permeable and allow moisture to escape. It shall not be affected by weathering, UV light or wind-driven rain.

Warranty Period: Five (5) to 10 years.

- b. "VandlGuardFive" non-sacrificial Anti-Graffiti Coating is a chemically resistant one part, water-based, cross-linked copolymer emulsion that dries to a clear colorless film. It shall have a 5-year warranty and be used in conjunction with VandlGuard" Finish Coat.
- c. "VandlGuard" Finish Coat Anti-Graffiti Barrier is a water-base emulsion that dries to a clear and non-yellowing matte finish. It is V.O.C. compliant, non-flammable, and is to be used as a final coat over "VandlGuardFive" graffiti protection system.
- d. "Vandl-Clean Super" is a citrus-based Delimonere concentrated cleaner and degreaser, all-purpose, environmentally safe and ready to use.

210-6.1.5 Submittals. Submit five copies of manufacturer's data to the Engineer in accordance with Section 2-5.3 Submittals of the SSPWC.

SECTION 212 - LANDSCAPE AND IRRIGATION MATERIALS

212-1 LANDSCAPE MATERIALS

212-1.1 Topsoil.

Topsoil shall be Class A or C.

All Class A topsoil shall be tested for agricultural suitability. The test results from samples taken at the source shall be delivered to the Engineer at least 10-working days prior to anticipated delivery date to the site. Should the proposed source material be unsatisfactory, the Contractor shall locate a suitable material, and shall pay all additional costs for testing.

Class C topsoil shall be tested for agricultural suitability. Two tests at two different locations shall be performed. Exact locations of tests shall be field verified and approved by Engineer.

212-1.2 Soils Fertilizing and Conditioning Materials

212-1.2.3 Commercial Fertilizer.

Commercial fertilizer shall be 12-12-12 NPK.

Planting tablets shall be tightly compressed, long-lasting, slow-release fertilizer tablets weighing 21 grams, with a potential acidity of not more than 5 percent by weight and having an analysis of 20-10-5.

212-1.2.4 Organic Soil Amendment.

Organic soil amendment shall be Type 1.

212-1.2.5 Mulch.

Mulch shall be Type 5 graded fir Nitrolized wood chips, 1 inch to 3 inch in length by 3/8 inch to 5/8 inch in diameter.

212-1.2.6 Add New Section 212-1.2.6 Soil Conditioner:

212-1.2.6 Soil Conditioners.

Iron Sulfate. Iron sulfate shall be ferric sulfate or ferrous sulfate in pelleted or granular form, containing not less than 18.5 percent iron expressed as metallic iron and shall be registered as an agricultural mineral with the State Department of Agriculture in compliance with Article 2, "Fertilizing Materials," Section 1030 of the Agricultural Code.

212-1.4 Plants.

212-1.4.1 General. Add:

Varieties shall be as shown on the drawings.

All quantities shall be verified by an actual count on the drawings.

Plants, including trees, shrubs, and ground covers, shall have been grown in nurseries inspected by the State Department of Agriculture.

Inspection and approval of plants is required. Engineer may reject entire lot of plants represented by defective samples. Plants not approved are to be removed from site immediately and replaced with suitable plants. All plants will be inspected on site of work prior to installation.

212-1.4.2 Trees. Add:

- (a) Contractor Furnished Trees: All trees shall be selected by the Contractor and inspected by the Engineer. All trees of 24-inch (600-mm) box size or larger shall be inspected at the nursery. Inspections at no cost to the Contractor will be limited to three nurseries, all within a 50-mile (80-Km) radius of the site of work. Additional inspections and inspections out of the area will be charged to the Contractor at the Engineer's standard billing rate in effect at the date of bid, plus mileage costs, and will be deducted from payments due to the Contractor.
- (b) All trees of 24-inch (600-mm) size or larger shall be guaranteed for 1 year. Guarantee period shall start on the date the Contractor is relieved of landscape maintenance responsibility.
- (c) Specimen palm trees shall be measured from the ground line to the base of the heartleaf (ANSI 1990 Standard). (Dead frond stubs shall be removed to create a "diamond" pattern with a 2-inch (50-mm) maximum protuberance from the trunk.)

212-1.5 Headers, Stakes and Ties.

212-1.5.3 Tree Stakes. Stakes shall be round, 10-feet (3-m) long, conically pointed at one end, minimum 2-inch (50-mm) diameter. Stake material shall be Lodgepole pine, pressure treated with wood preservative.

212-1.5.4 Tree Ties. Tree ties shall be V.I.T. rubber cinch ties, or fabricated item approved by the Engineer. Wire devices shall not be used.

Add new Section 212-1.7 Landscape Materials.

212-1.7.3 Root Control Barrier. (Refer to Section 308-3.2) Root control barrier shall be 24-inches (600-mm) wide by 0.080-inches (2-mm) thick high impact polyethylene or polypropylene sheeting with reinforced double top edge, manufactured for root barrier purposes. Sheeting shall have integrally molded root deflector ribbing and integrally molded joiner strips.

212-1.7.4 Samples. Within 10 calendar days of award of contract, submit one 24-inch by 24-inch (600-mm x 600-mm) sample of each item with joining strip or seam and two copies of manufacturer's technical data for approval.

212-2 IRRIGATION SYSTEM MATERIALS

General. Within 15 days after award of contract, submit for review 3 copies of a complete materials list, including manufacturer's name and number, covering all material required under this contract, together with 3 copies of descriptive literature on all items listed. Commence no irrigation system construction prior to receipt of Engineer's determination.

Item Description	Item Description
Shut-off gate and ball valves (S.O.V.)	Rain sensor and wire
Irrigation controller	S.O.V. valve box, lid and sleeve/extension
Backflow preventer	Irrigation controller enclosure
Plastic pipe, pipe fittings, swivel joints	Backflow enclosure
Metal pipe, fittings	Primer and solvent for plastic pipe
Main filter and element	Pipe anchors

Item Description	Item Description
Remote control valves (R.C.V.)	Main filter valve box and lid
Identification wire and tape	R.C.V. valve box and lid
Quick coupling valves (Q.C.V)	Wire and connectors
Irrigation heads, bodies, and nozzles	Q.C.V. valve box and lid
Irrigation control wire and connectors	Control wire conduit and pull boxes
Hose swivels	Valve operating wrenches
Quick couplers	Radio transmitter/receiver (handheld)

212-2.1 Pipe and Fittings. Plastic pipe ¾-inch (20-mm) through 1½-inches (40mm) shall be PVC 1120, Schedule 40 solvent welded pipe.

Plastic pipe 2-inches (50-mm) and over shall be PVC 1120, Class 315 solvent welded pipe.

All pipe sleeving shall be PVC 1120, Schedule 40 solvent welded pipe.

Swing joints shall be as detailed on the drawings. Swing joints and all fittings shall be same pipe size as sprinkler body inlet. Pressure pipe risers and fittings shall be PVC Schedule 80.

Risers and fittings for backflow prevention device shall be red brass, standard weight.

212-2.1.3 Plastic Pipe and Fittings. All plastic pipe shall be new normal impact rigid polyvinyl chloride (PVC) 1220 or 1120 pipe extruded from 100 percent virgin materials. All pipe O.D. sizing shall be done in conformance with AWWA iron pipe sizing (I.P.S.). All pipes shall be National Sanitation Foundation approved.

Pipe shall be homogenous throughout, free from visible cracks, holes, blisters, dents, wrinkles, die and heat marks, and foreign materials.

Continuously and permanently mark pipe with manufacturer's name or trademark, kind and size pipe, material, manufacturer's lot number, schedule, or Class and NSF seal of approval.

The physical specifications of the Society of Plastic Industries for each type of pipe used shall be deemed and construed as a part of this Specification.

Pipe dating shall be done in conjunction with records held by the manufacturer for 2 years, covering quality control tests, raw material batch numbers, and any other information required by the manufacturer.

Nominal pipe sizes in I.P.S. and Metric shall be as shown in the table below:

Iron Pipe Size (I.P.S.)	Metric Standard Diameter Nominal (D.N.)
1/2"	15 mm
3/4"	20 mm
1"	25 mm
1 1/4"	32 mm
1 1/2"	40 mm
2"	50 mm
2 1/2"	65 mm
3"	75 mm
4"	100 mm
6"	150 mm

Solvent weld fittings shall be PVC manufacture, heavy wall and of the IPS solvent welded types, Schedule 40. Fittings containing threads shall be Schedule 80.

Primer and solvent cement shall be of the type and make approved by the pipe manufacturer for use on its pipe. Unless noted otherwise by manufacturer, primer shall meet ASTM F-656, and cement shall meet ASTM D-2564.

212-2.2 Valves and Valve Boxes.

212-2.2.2 Shut-Off Valves (S.O.V.) Shut-off valves shall be as specified on the drawings.

212-2.2.4 Remote Control Valves. Remote control valves shall be as specified on the drawings.

212-2.2.6 Quick Coupling Valves and Assemblies. Quick coupling valves shall be as specified on the drawings.

212-2.2.7 Valve Boxes.

1. Gate valves. A round concrete box (10" diameter) and locking cast iron cover shall be installed over each main shutoff valve in the system.
2. Remote control valves. Provide rectangular concrete box (10" x 16") with locking cast iron lid over remote control valves.

212-2.3 Backflow Preventer Assembly. Backflow prevention device shall be of the size and type as indicated on the drawings.

212-2.3.1 Pressure Regulator and Wye Strainer Equipment.

Wye filter and pressure regulator shall be a brass construction valve, as manufactured by Wilkins, Model #500YSBR. The unit size shall be the same size as the related backflow preventer device. The filter element shall be 100 mesh Monel.

Locate Wye strainer and pressure regulator in separate valve box, downstream from backflow preventer.

212-2.4 Irrigation Heads. Irrigation heads shall be the type(s) called out on the drawings.

212-3 ELECTRICAL MATERIALS

212-3.1 General. All wiring and pull box details shall conform to drawing details, these Specifications and as follows:

- (a) National Electrical Code.
- (b) Local Codes and Ordinances.
- (c) Recommendations as printed by the respective supplier.
- (d) All wiring shall be continuous, soldered and encapsulated in epoxy-filled Rainbird "Snap-Tite" containers or 3M "Scotchlok" containers, at connections to remote control valves.

It shall be the Contractor's responsibility to call out any conflict between the above-listed recommendations.

212-3.2 Conduit and Conductors.

212-3.2.1 Conduit. The first paragraph of Subsection 212-3.2.1 of the Standard Specifications is hereby deleted and replaced with the following:

Conduit shall be PVC 1120, Schedule 40 solvent welded pipe.

Conduit shall be a minimum size as shown in the table below:

Conduit Size	Maximum Number of Wires (#14 AWG)
15 mm (1/2")	2
20 mm (3/4")	4
25 mm (1")	6
32 mm (1 1/4")	10
40 mm (1 1/2")	14
50 mm (2")	25

212-3.2.2 Conductors. The second paragraph of Subsection 212-3.2.2 of the Standard Specifications is hereby deleted and replaced with the following:

LOW VOLTAGE CONDUCTORS

Pilot lines and common wire connecting remote control valves to automatic controller shall be direct burial, U.F. type with approved 4/64-inch thick waterproof coating, 600 volt, 75 degrees centigrade, copper single-strand wire, U.L. approved.

All "pilot" wires shall be black color. All "common" wires shall be white color.

212-3.3 Controller Units. Automatic controller shall be constructed to operate 24-volt electric normally closed type remote control valves.

Controller shall operate the number of valves shown on the drawings at one valve per station.

Controller shall be as specified on drawings.

212-3.4 Supplemental Irrigation Control Systems.

Supplemental irrigation control systems include rain shut-off device and radio transmitter/receiver hand-held unit.

212-4 ENCLOSURES

212-4.1 General. Materials for enclosures shall conform to Section 206 and fabrication shall conform to Section 304 of the Standard Specifications.

212-4.2 Controller Enclosures. Controller enclosures shall be as specified on the drawings.

Enclosure shall be a double sided cabinet, one side manufactured with a meter box and test blocks, so as to receive an electric meter and appurtenances, the other side shall be made so as to receive an irrigation controller and appurtenances as shown on the drawings. Controller enclosure shall be approved by the serving utility, in this case Southern California Edison.

212-4.3 Backflow Device Enclosure. Enclosure shall be as specified on the drawings.

Enclosure shall have sufficient space to house the specific backflow device complete with test gauges.

SPECIAL PROVISIONS
PART 3
CONSTRUCTION METHODS

SECTION 300 - EARTHWORK

300-1 CLEARING AND GRUBBING

300-1.1 General.

The last paragraph of Subsection 300-1.1 is hereby deleted and replaced with the following:

Tree branches which hang within 4.1-m (13.5-feet) above finished roadway grade or within 2.7-m (9-feet) above finished sidewalk or parkway grade shall be removed to the branch collar in accordance with the current pruning standards of the International Society of Arboriculture (ISA). The Contractor shall remove additional tree branches, under the direction of the Engineer, in such a manner that the tree will present a balanced appearance. No paint or tree sealant shall be applied to the resulting scars. All pruning shall be done under the supervision of an ISA Certified Arborist in the City's employ.

The following is hereby added to Subsection 300-1.1:

Removal of turf and trees, and such other items not mentioned that are required by the Plans and Specifications, are part of this work in this section.

All obstructions within project limits shall be removed to a minimum of 12-inches below subgrade.

Soil backfill for holes caused by the removal of trees and shrubs shall be filled with Class A soils and recompactd in 6-inch layers to the density of 90-percent relative compaction.

Tree removal shall include grinding stumps and associated roots to the diameter of the trunk at existing grade and to 3-foot depth below existing grade. Grindings shall be removed from this 3-foot hole. The hole shall then be filled with soil and compacted to 90-percent relative compaction.

All equipment and facilities shown on the Plans to be salvaged, removed and stockpiled, adjusted, and/or relocated shall be measured, marked, and identified in the field.

Contractor shall note the locations, dimensions, and configurations of all existing equipment to be salvaged, and shall clearly mark or tag all

equipment to be reused in the field prior to removal to facilitate reassembly; Contractor shall notify Engineer of any damaged or non-salvageable materials **prior** to commencing any removal or grading operations. Materials found to be damaged after the work commences shall be assumed to be the responsibility of the Contractor. Contractor will not be paid for the replacement or repair of facilities or equipment believed by the Engineer to be damaged after the work commences.

Contractor shall replace designated, unusable existing facilities and equipment, in kind, at the direction of the Engineer.

The application of herbicide to kill turf and weeds, shall be per manufacturers' recommendations, including roots; and the removal and disposal of soil and turf offsite, and such other items not mentioned that are required by the Plans and Specifications, are part of the work in this section.

All the root pruning required to place or replace walks, curbs, curbs and gutters, or other permanent facilities shall be limited to the minimum amount necessary to set forms.

All roots two (2) inches and larger shall be cut with sharp tool such as axe or chainsaw. No roots shall be broken off by trenching or other heavy equipment.

No root shall be removed within five (5) diameters of the tree trunk measured at 1.5-m (4-feet, 9-inches) above grade without the express written permission of the AGENCY. Any such root removed without the AGENCY's written permission may create a hazardous condition for which the Contractor shall be liable.

Should the Contractor create a hazardous condition in the sole judgment of the Engineer, the Contractor shall remove the tree and replace it with a specimen of the same species and value at the Contractor's expense.

All significant root pruning (3-inch diameter and larger) shall be performed under the direct supervision of an ISA Certified Arborist in the City's employ.

300-1.3 Removal and Disposal of Material

300-1.3.2 Requirements. The text of Subsection 300-1.3.2(a) and (b) of the Standard Specifications is hereby deleted.

300-2 UNCLASSIFIED EXCAVATION

300-2.1 General. Unclassified. Unclassified excavation shall consist of all excavation, including roadways, bituminous pavement, and concrete pavement, curb, walk, gutters, cross gutters, driveways, and access ramps.

300-2.1.1 Requirements. Subsection 300-2.1.1 is hereby added to Section 300 of the Standard Specifications as follows:

1. Bituminous Pavement. Bituminous pavement shall be removed to neatly sawed edges. Saw cuts shall be to a minimum depth of 3-inches (76-mm). Where only the surface of existing bituminous pavement is to be removed, the method of removal shall be approved by the Engineer, and a minimum laying depth of 1-inch (25-mm) of new pavement material shall be provided at the join line. Where bituminous pavement adjoins a trench, the edges adjacent to the trench shall be saw cut to neat straight lines before resurfacing to ensure that all areas to be resurfaced are accessible to the rollers used to compact the subgrade or paving materials.

Bituminous pavement on curb and gutter, sidewalk or drive approaches shall be removed by heating with a torch to soften the pavement without creating smoke. Softening shall be performed until the bituminous material can be easily scraped away down to the underlying PCC surface. The blade used for scraping shall be maintained straight along its edge and clean. Bituminous material shall be scraped in this manner until it is completely removed.

2. Concrete Curb, Walk, Gutter, Cross Gutters, Driveways, and Access Ramps. Concrete shall be removed to neatly sawed edges with saw cuts made to a minimum depth of 1½-inches (38-mm). Concrete sidewalk, or driveway to be removed shall be neatly sawed in straight lines either parallel to the curb or at right angles to the alignment of the sidewalk. No section to be replaced shall be smaller than 30-inches (750-mm) in either length or width. If the saw cut in sidewalk, access ramp, or driveway would fall within 30-inches (750-mm) of a construction joint, expansion joint, or edge, the concrete shall be removed to the joint or edge, except that where the saw cut would fall within 12-inches (300-mm) of a score mark, the saw cut shall be made in and along the score mark. Curb and gutter shall be sawed to a depth of 1½-inches (38-mm) on a neat line at right angles to the curb face.

300-2.7 Selected Material. The text of Subsection 300-2.7 of the Standard Specifications is hereby deleted and replaced with the following:

Selected materials encountered in the excavations within the project limits that meet the specifications for Class C topsoil shall be used as shown on the Plans, in the Specifications, or as directed by the Engineer. Topsoil excavated may be considered only for the purpose of backfilling areas to be planted.

300-2.9 Payment.

The first sentence of Subsection 300-2.9 of the Standard Specifications is hereby deleted and replaced with the following:

Payment for unclassified excavation performed as part of the work for "Clearing, Grubbing, & Removals" bid item, including removal of extra AC thickness shall be paid for as part of the work for that item, and no additional compensation will be allowed.

300-4 UNCLASSIFIED FILL

300-4.1 General. Add the following:

The site shall be graded to the limit lines and elevations shown on the drawings with such allowances as may be required for the construction of walks, and other site improvements. Tolerance for rough grading is 1/10th of a foot (30-mm), plus or minus at paved areas. At other areas, appearance shall be the governing factor.

Finish grades shall slope to drain without water pockets or irregularities and shall conform to the intent of all plans and sections, after thorough settlement, and compaction of the soil. Finished grades shall meet all existing or established controls of sidewalks, curbs, and walls and shall be of uniform slope and grade between points of fixed elevations or elevation controls from such point to established grades. Tolerance for finish grading is ¼-inch (6-mm), plus or minus.

300-4.1 General. Delete the second and third paragraphs and replace with the following:

Rocks, broken concrete, or other solid materials which are larger than 25-mm (1-inch) in greatest dimension shall not be placed in fill areas that are to be planted.

Clods or hard lumps of earth 25-mm (1-inch) or more in greatest dimension shall be broken up before compacting the material in fill areas to be planted. Fill material containing large rocks, boulders, or hard lumps (such as

hardpan or cemented gravel which cannot be broken readily) over 300-mm (12-inches) in greatest dimension shall not be incorporated in the fill. Such materials shall be removed from the site.

Selected material from the site that meets the requirements for Class C topsoil may be used in landscaped areas in the upper 300-mm (12-inches) of fill. (Ref: Sec. 300-2.7)

Make-up fill material in landscaped areas shall be Class A topsoil for the upper 300-mm (12-inches) of fill. (Ref: Sec 308-2)

300-4.9 Measurement and Payment. The text of Subsection 300-4.9 of the Standard Specifications is hereby deleted and replaced with the following:

Full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in unclassified fill construction shall be included in the contract unit price for "Roadway and Parkway Excavation/Earthwork" and no separate payment shall be made therefore; in addition, the unclassified fill shall include all costs for grading, shaping, compacting, spreading, consolidating, placing selected site materials, furnishing, and all other work that is required under this subsection.

Payment for subgrade preparation required for colored and stamped concrete shall be considered included in those items of work, and no separate payment will be made therefor.

SECTION 301 - TREATED SOILS, SUBGRADE PREPARATION, AND PLACEMENT OF BASE MATERIALS

301-1 SUBGRADE PREPARATION

301-1.3 Relative Compaction. The first paragraph of Subsection 301-1.3 of the Standard Specifications is hereby deleted and replaced with the following:

When pavement is to be placed directly on subgrade material or when base or subbase material, curb, gutter, alley pavement, driveways, or sidewalks are to be placed on the subgrade material, the top 6 inches of such subgrade material shall be compacted to a relative compaction of 90 percent.

301-1.6 Adjustment of Manhole Frame and Cover Sets to Grade.

Class C or D ARHM shall be used to patch around all frame and cover sets.

Subsections 301-1.6.1 and 301-1.6.2 are hereby added to Section 301 of the Standard Specifications as follows:

301-1.6.1 Adjustment of Los Angeles County Flood Control District Manhole Frame and Cover Sets to Grade.

Adjustments to grade of Los Angeles County Flood Control District Manhole Frame and Cover sets do not require a District permit. However, the Contractor shall notify the Inspection Department at (818) 458-3129, 24 hours in advance of any work in the area of the manhole.

301-1.6.2 Adjustment of Los Angeles County Sanitation District Manhole Frame and Cover Sets to Grade.

Los Angeles County Sanitation District manhole frames and covers shall be set to finish grade as follows:

1. Contractor shall notify the District's Superintendent of Maintenance, (310) 638-1161 or (310) 774-7272, 48 hours prior to commencement of any work in the area of the manhole.
2. If grade over manhole is to be lowered:
 - a. Contractor shall furnish and deliver a temporary steel cover plate of thickness and size approved by the District for said manhole.
 - b. Contractor shall excavate around the manholes to a depth and distance outside of the manhole as required by the District for said manhole.
 - c. District shall remove the existing manhole frame and cover, and any interfering portion of the manhole shaft, and shall place the steel cover plate over the manhole.
 - d. Contractor shall store and protect frame and cover for later installation by the District and shall fill and/or pave over the steel plate to final grade.
 - e. Contractor shall remove paving and/or fill as necessary to permit the District to raise manhole to final grade. (Removal of paving and/or fill shall be to a minimum of 2 inches outside of the manhole if the steel plate is less than 6 inches below final grade and 12 inches outside of the manhole if the steel plate is more than 6 inches below final grade.)

- f. District personnel shall raise manhole and set frame and cover to grade.
 - g. Contractor shall place and compact the backfill and pavement as necessary to complete the work.
3. If grade over manhole is to be raised:
- a. Contractor shall fill and/or pave directly over frame and cover to final grade.
 - b. Steps (e) through (g) of 2 above shall be followed, except that if grade is to be raised more than 2 feet, the Contractor shall excavate around the manhole shaft under step (2) to a depth and diameter as necessary, for the District to remove and reconstruct manhole shaft with required taper and as specified by the District.

301-1.6.3 Adjustment of Water Valve Box Frame and Cover.

Water valve box frame and cover within the area to be paved or graded shall be set to finish grade by the Contractor as required by the Plans and Specifications. In the case of portland cement concrete, water valve box frame and cover shall be set to finish grade by the Contractor before paving.

301-1.7 Payment. Add the following paragraph:

Adjustment of water valve and gas valve slip can type frame and covers to grade shall be the responsibility of the Contractor. Utility companies will be responsible for checking and ensuring that such frame and covers do slip properly, such that the contractor can slip them to grade at time of paving. The exact number of such frames and covers may vary from the number shown on the Plan, but it is the responsibility of the contractor to survey the project. Contractor shall notify the engineer at the earliest possible time after discovery if a frame and cover does not slip, but in no case less than ten (10) days prior to paving.

Payment for slipping water or gas valve covers shall be included in the other item of work, and no additional payment will be made.

SECTION 302 - ROADWAY SURFACING

302-5 ASPHALT CONCRETE PAVEMENT

302-5.1 General. The last sentence of Subsection 302-5.1 of the Standard Specifications is hereby deleted and replaced with the following:

Cracks, joints, and holes to be filled shall be cleaned after cold milling.

AC for AC pavement repairs and for PCC pavement repairs shall be placed the same day as removals are performed.

302-5.2 Cold Milling Asphalt Concrete Pavement.

302-5.2.1 General. The following is hereby added to the first paragraph of Subsection 302-5.2.1:

Such straight edge grade along the edge of the cold plane area shall not deviate more than 6-mm (1/4-inch) below nor 3-mm (1/8-inch) above the grade specified in the Plans or Specifications.

302-5.2.3 Removal and Disposal of Material

Cold milling will not be considered complete until all loosened material is removed from the project site. Paving shall not commence until the day after cold milling is complete.

Cold milled streets shall be approved by the Engineer as completed for cold milling prior to paving. Sweepers used for cold mill sweeping shall not enter on streets approved as completed for cold milling.

302-5.4 Tack Coat.

Tack coat for overlay shall be Thermoplastic Polymer Modified High Performance Seal (TPMS) manufactured by Paramount Petroleum Corporation (562-531-2060), for overlay, or an approval equal. The Engineer shall approve the exact rate and number of applications.

The tack coat shall be applied as specified in Subsection 302-5.4 of the Standard specifications and these Special Provisions. The Engineer will determine if the pavement is sufficiently dry for the application of the tack coat. Tack coat shall not be applied when the temperature of the surface to be tacked is below 50°F in the shade. Whenever pavement surface temperatures exceed 120°F, a small test section shall be applied approximately 30-feet in length to gauge setup time for the tack to not stick to truck tires. The setup time shall be recorded. Paving, material delivery and tack coat placement must be coordinated and scheduled to provide that tack is setup before placing trucks on the tacked area. Pavement surface temperatures shall be monitored and additional test sections shall be

performed to revise the paving operation as conditions change. Upon occurrence of tracking of tack coat, paving shall cease, except remaining material in the hopper shall be used, and the tack shall be allowed time to setup.

On all vertical joins of AC patching, apply SS-1H tack coat uniformly in two coats of .20-gallons per square yard each with full "break" in between, or .20-gallons per square yard PG 64-10 uniformly in one coat. Tack coat shall not be applied when the temperature of the surface to be backed is below 60° F in the shade.

The TPMS shall be heated slowly to 350-425°F. At no time TPMS shall be heated above 450°F. The product shall be applied through a distributor truck equipped with a heating unit capable of raising temperature at least 3 F per hour, and shall maintain tack coat temperature at or above 350°F. It shall be equipped with a full circulating spreader bar and pumping system capable of applying TPMS material within a +0.01 gallons per square yard tolerance of specified application rate and give uniform covering of the surface to be treated. The distributor shall also include a tachometer, pressure gauge, and volume measuring device and thermometer.

Tack coat shall not be applied until preparation of the existing surface has been completed and thoroughly cleaned, and then only so far in advance of placing the overlay as permitted by the Engineer. Tack coat shall not be left exposed overnight. Immediately in advance of placing the overlay, additional tack coat shall be applied as directed by the Engineer, to areas where the tack coat has been destroyed or otherwise rendered ineffective, and no additional compensation will be allowed for such work.

Paving of overlay shall not proceed until the tack coat has stiffened sufficiently to not stick to truck tires.

Existing concrete curb faces and all concrete not to be overlaid shall be protected against disfigurement from the tack coat. Residue of tack coat material shall be removed from curb faces by sandblasting to return the concrete to its original condition unless otherwise directed by the Engineer.

Excessive tracking of tack coat onto adjacent pavements will require immediate clean-up. If significant amounts of paving asphalt are traced onto existing adjacent pavements, the contractor shall clean it off to the satisfaction of the Engineer or provide a slurry seal to restore the pavement at their own expense.

302-5.5 Distribution and Spreading. Contractor shall provide 20-foot long automatic screed control on both sides of the paving machine for all paving with paving machine, as directed by Engineer.

Each paving machine used will require a paving foreman for each machine along with a full set of rollers as specified and two rakers and one shoveler laborer at a minimum.

302-5.6 Rolling. Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint.

Rubber tire rollers shall be used on any leveling course.

Three rollers shall be provided for installation of AC greater than 181-tonne (200-tons) per hour, regardless of thickness.

302-5.7 Join lines between successive runs shall be within 150-mm (6-inches) of lane lines or a minimum of 3.6-m (12-feet) outside of the outer most lane line, or 5-feet from a lane line and within a lane.

302-5.8 Manholes (and Other Structures). Asphalt-rubber hot mix (ARHM) Class C or D, shall be used as final cap around adjusted manholes.

302-5.9 Measurement and Payment.

Costs of all work under 302-5.1.1, Preparation shall be included in the tonnage bid price for overlay pavement material, except as otherwise specified or where a bid item is provided for such payment.

Compensation to provide all of the equipment to the site and operated as specified, including all rollers specified regardless of rolling pattern elected by Contractor, shall be considered included in the bid item price for AC material.

302-9 ASPHALT-RUBBER HOT MIX (ARHM).

302-9.1 General.

Contractor's attention is directed to Subsection 302-5.8 Manholes, for requirements for patching manholes and miscellaneous frames and covers in ARHM pavement.

All PCC surfaces, to be crossed by trucks used to haul ARHM, that are within 500-feet of the work limits shall be covered with sand or other durable covering prior to applying tack coat.

Contractor shall have sufficient power brooms on site during all periods of distribution and spreading to provide for cleanup of haul routes and work areas. Power broom shall provide miscellaneous cleanup of ARHM spoils as directed by the Engineer.

Power brooms used ahead of paving operations after acceptance of cold milling shall only sweep areas that are accepted as completed for cold milling. Power brooms shall not be operated more than 80 percent full of sweepings. Power brooms that have swept areas not accepted as completed for cold milling shall not enter onto areas that are accepted as completed for cold milling

302-9.2 Mixing Binder with Aggregate.

Proportioning shall be performed using an automatic batching system, and the proportioning device shall be automatic to the extent that the only manual operation required for proportioning all materials shall be a single operation of a switch or starter.

For drum plants, the system shall run fully automatic with the only input to the AC plant computer being information transmitted automatically from a Corealis mass flow meter on the line of the asphalt-rubber feed to the AC plant. All automatic shutdown features of the AC plant shall be fully functional.

302-9.4 Distribution and Spreading. The temperature of ARHM shall be minimum 290 degrees Fahrenheit directly behind the paving machine and high enough upon delivery that pavement temperature after two passes with the breakdown roller exceeds 240 degrees Fahrenheit.

To avoid picking up loose rock in the overlay area, the tires of all trucks must be lightly oiled with linseed oil or soy bean oil or approved equal. Diesel fuel will not be allowed on the project at all for oil down of any equipment. Raking of ARHM shall be eliminated as much as possible. ARHM material shall not be cast across the mat under any circumstance. Raking shall be just enough to set up edges for uniform joints without casting material. Screed controls shall be the predominant means of controlling material at joints. In areas where paving machines cannot be used due to space constraints, material shall not be thrown by shovels. Material shall be removed directly from the paving machine hopper and shall be placed directly in its final location, to be distributed with minimal raking. Material may be dumped directly from a truck, but further material distribution shall be by shovel directly to its final location with minimal raking. A small rubber tire tractor with a screed type attachment may be used to spread a pile dumped from a truck, but raking shall be minimized after spreading.

The paving machine screed shall not be pulled across an area already paved with ARHM, even adjacent to narrow areas to be paved. Such narrow areas shall have ARHM distributed by methods specified by shovel or rubber tire tractor, unless the adjacent area has hardened enough and will not be significantly marred by passing the screed over it. Even if hardened adequately, Contractor shall spread rock dust by hand tools to avoid cohesion of the ARHM in the screed to the existing surface of such areas of freshly cured ARHM.

Contractor shall maintain a functioning infrared heat measurement device in close proximity to each paving machine at all times. The infrared device shall be correlated by thermometer to the actual mat temperature prior to use. The correlation difference shall be applied to all readings thereafter. Contractor shall provide a pavement temperature reading, with an infrared heat measurement instrument, when requested by the Engineer. Inaccessibility of a heat measurement shall be cause for termination of paving operations.

Transverse cold joints shall be provided such that longitudinal joints are not left exposed at the end of the workday.

302-9.5 Rolling.

Initial breakdown rolling shall be vibratory. **Rolling in vibratory mode shall not be performed after ARHM material temperature falls below 240 degrees F**, due to disturbance of the bonds beginning to set up in the binder at lower temperatures.

An intermediate roller of the same or greater width than the breakdown roller shall be rolling directly behind the breakdown roller at all times, and **paving shall cease if intermediate rolling is terminated for any reason**. Additional intermediate rollers may be necessary depending on production rates.

Once a rolling pattern is elected by Contractor, the rolling pattern shall remain consistent, unless conditions change and/or a modified rolling pattern is needed to conform to specification.

All finish rolling shall be performed by a separate finish roller.

To ensure optimum quality control, the use of more than one paver must be approved in advance by the Engineer, and will generally require one foreman, one sweeper, and a full complement of rollers per Subsection 302-5 of the Standard Specifications and this Subsection 302-9.5 for each paving machine.

An extra breakdown roller shall be on site at all times, free of defects.

302-9.5.1 Density and Smoothness. Density and smoothness shall conform to Subsection 302-5.6.2, except the second and third paragraph of Subsection 302-5.6.2 shall not apply to ARHM.

The compaction after rolling shall be 95 percent of density obtained with the California Kneading Compactor, Calif. Test 304, as modified and measured in conformance to this Subsection 302-9.5.1.

The field density of compacted ARHM shall be determined by:

- 1) A nuclear asphalt testing device, calibrated in conformance with California Test 375, except as modified in this Subsection 302-9.5.1, in the field designed to measure the density of pavement of the thickness being constructed; or
- 2) Core with density determined as follows:
 - a) Saw the ARHM lift of pavement from the top of the core approximately perpendicular to the axis of the core, just above any underlying pavement or as necessary to obtain a clean flat surface at the bottom of the sample.
 - b) Clean and dry the sample as described in ASTM 1188.
 - c) Perform California DOT Test 308 Method A step a.
 - d) Prior to proceeding to steps 308A b., 308A c., 308A d. and 308A e., place the core, top surface down, firmly into a flat pan of hot liquid paraffin approximately 1/4 inches deep. Allow the sample and paraffin to cool to firm solid state and remove the sample from the pan by cutting around the perimeter. Trim the edges of paraffin parallel to the side of the sample cylinder, and weigh the cylinder to obtain:

G = Mass in grams of level sealed paraffin-treated specimen in air.
 - e) Perform 308A b., 308A c., and 308A d on the sample from D) above.
 - f) Complete the remainder of Test 308A, except replace the formula in 308A e. with the following: Bulk Specific Gravity

$$= \frac{A}{(D - E) - (D - G) / F}$$

TABLE 302-9.5.1A REDUCED COMPENSATION FACTORS			
Relative Compaction (Percent)	Reduced Compensation Factor	Relative Compaction (Percent)	Reduced Compensation Factor
95.0	0.000	93.4	0.062
94.9	0.002	93.3	0.068
94.8	0.004	93.2	0.075
94.7	0.006	93.1	0.082
94.6	0.009	93.0	0.090
94.5	0.012	92.9	0.098
94.4	0.015	92.8	0.108
94.3	0.018	92.7	0.118
94.2	0.022	92.6	0.129
94.1	0.026	92.5	0.142
94.0	0.030	92.4	0.157
93.9	0.034	92.3	0.175
93.8	0.039	92.2	0.196
93.7	0.044	92.1	0.225
93.6	0.050	92.0	0.300
93.5	0.056		

302-9.5.1.2 Maximum Density. Maximum density samples shall be prepared in conformance with Calif. Test 304, except:

- 1) Compaction shall be performed between 285 and 290 degrees Fahrenheit.
- 2) The leveling load shall be applied while material is between 190 and 200 degrees Fahrenheit.
- 3) A Marshall base shall be used during leveling load procedure.
- 4) Sample shall be allowed to cool to less than 100 degrees Fahrenheit prior to removal from test sleeve and Marshall base assembly.

California Test 308 Method A as modified in 302-9.5.1.1 C) and D) herein shall be used to determine density of the maximum compaction sample, except bottom surface shall be substituted for top surface in 302-9.5.1.1 D).

In case of dispute, 1) shall be used, except Contractor may elect to use 2), but all costs for such procedures shall be borne by the Contractor to provide the full set of coring, tests and

documentation in conformance with the Standard Specifications, except all test methods shall be modified as specified in these Special Provisions. Also, Contractor shall notify the Engineer at least 3 days in advance of coring operations, and immediately after core testing is complete Contractor shall deliver cores to the Agency for verification.

Nuclear test procedures, including correlation with core densities, shall be in conformance with California Test 375, except as follows:

Core locations for correlation with cores shall be selected based on appearance of relatively tight surface texture, and the test strip shall be selected on this basis. If a test location is determined to have a significantly open texture relative to other areas within the test strip, the location shall not be used. This selection criterion is not to be considered significant to the outcome of, but only as a guideline towards obtaining samples that are relatively well compacted to yield results with minimum standard deviation. The locations shall be well clear of grade breaks and joints. One core centered on the gauge will be used instead of two at each location. Use method 2) in this Subsection 302-9.5.1 to determine density of cores. Surface voids shall not be filled with sand.

Contractor will be notified in writing at least 5 days in advance of such correlation testing and will be invited to have a nuclear gauge onsite to correlate a second gauge. If not independently calibrating at that time, Contractor shall bear the full expense of performing correlation for his nuclear gauge under the specified procedures, but shall notify the City 5 days in advance of such correlation testing, such that the City can correlate with the Contractor's gauge, if Contractor disagrees with City's test results.

302-9.5.2 Compaction Payment Reductions. Based on laboratory tests on AC pavements revealing a highly significant loss of life span accelerating with each 1 percent reduction of compaction, and the well known catastrophic effect of oxidation and stripping of asphalt products due to interconnected voids that develop below 95 percent compaction, and the extreme expense of removing and replacing pavement not compacted to the specified minimum, a nominal deduction of payment will be applied for under-compacted ARHM pavement above 92 percent relative compaction. The bidder in submitting a bid fully accepts the provisions in this Subsection 302-9.5.2 and agrees that the nominal payment deduction is acceptable and reasonable for these purposes.

Payment reductions will be applied to ARHM compacted less than 95 percent, the specified minimum, and greater than 91.9 percent of the maximum density based on nuclear testing with Part 3 Test Site Selection of California Test 375 modified as follows:

A lot will be one day's production or other lesser area of paving as determined by the Engineer to be deficient in terms of compaction, and a pull will be the width between joints as the lot is placed.

Test site selection will conform to California Test 375 Part 3, except the number of tests shall be the area of the lot in square feet divided by 400, or minimum 20 tests whichever is more, and any test site within .5 m of a grade break or pavement joint shall be relocated laterally towards the center of the pull to .5 m from such joint or grade break.

The mathematical mean average of percent of maximum density represented by all these tests shall be calculated, except any test results outside of this mean plus two standard deviations based on all tests, shall be rejected. The mean average shall be calculated directly from the remaining values. A compensation reduction in conformance with Table 302-9.5.1A will be applied to the contract unit price for ARHM for material within any lot determined to be below minimum relative compaction, except any lot with tests indicating compaction 91.9 percent or less shall be removed and replaced at Contractor's expense.

302-9.6 Rock Dust Blotter. Lack of uniformity of application of rock dust shall be cause to terminate paving operations. Rock dust blotter shall not be applied until intermediate rolling is complete, except as approved by the Engineer based on a fine uniform layer of rock dust, or at major intersections and access points.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

Add new Section 303-1.12 Cobblestone Placement.

303-1.12 Cobblestone Placement. Cobblestone to be placed in concrete shall be selected for size and shape to appear as "natural" as feasible. Flat and broken faces of rock shall be placed face down. Rock shall be embedded to the extent necessary to secure it in place.

The Landscape Architect shall be present during rock placement. Provide 48-hour notice to Engineer prior to rock placement.

303-1.13 Landscape Stone.

Landscape stone shall be placed in a manner to produce a reasonably well-graded mass with the minimum practicable percentage of voids. Stone shall be placed to its full course thickness in one (1) operation and in a manner to avoid displacing the underlying material. Material shall not be dropped from a height of more than 18 inches. Contractor shall maintain the landscape stone protection until accepted and any material displaced by any cause shall be replaced at Contractor's expense to the lines and grades indicated. Self-propelled equipment shall not be used on the levee slopes. Hand placing, barring, or placing by crane will be required only to the extent necessary to secure the results specified. Placing landscape stone by dumping into chutes or by similar methods likely to cause segregation will not be permitted.

303-1.15 Payment for furnishing and installing cobblestone paving shall be at the contract bid price per square feet in place for construction, including pick-up from source and delivery to project site, loading and unloading, spreading, and no other payment shall be made therefor.

Payment for furnishing and installing boulder in all areas shall be at the contract bid price per ton, including pick-up from source and delivery to project site, loading and unloading, spreading, and no other payment shall be made therefore.

303-4 MASONRY CONSTRUCTION

Add new Section 303-4.3, Cement Plaster, as follows:

303-4.3 Cement Plaster. Refer to Section 202-3 Special Materials, of these Special Provisions.

303-4.3.1 General. All plaster work shall comply with Chapter 47 of UBC and conform to applicable requirements of "Lathing and Plastering Reference Specifications," California Lathing and Plastering Contractors' Association.

303-4.3.2 Application Procedures Over Masonry Walls.

- (a) Bonding agent over sufficiently rough and clean masonry units.
- (b) Brown coat.
- (c) Finish coat of integral color stucco.

(d) Nominal plaster thickness: 1/2 inch (13mm).

303-4.3.3 Mix Proportions.

(a) Brown coat: Per manufacturer's directions.

(b) Finish coat: Per manufacturer's directions.

303-4.1 Payment. Payment for concrete block wall patching and stucco finish application shall be at the contract bid unit price per square foot, and shall include all costs for cleaning, vine removal, sacking all holes and applying stucco brown coat and finish coat, painting, anti-graffiti coating, and all incidental work thereto.

303-4.1.1 Payment. Payment for furnishing and installing of PVC lattice on existing block wall shall be at the contract bid unit price per linear foot, and shall include all cost for furnishing material, installation and all incidental work thereto.

303-4.2 Payment. Payment for CMU monument sign shall be at the contract bid lump sum price, and shall include all costs for construction of complete sign, including brick cap, cast bronze letter stocks, stucco finish, footings, soil excavation and disposal, anti-graffiti coating, and all incidental work thereto.

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, DRIVEWAYS, AND ALLEY INTERSECTIONS

303-5.1 Requirements.

303-5.1.1 General. All concrete flatwork areas behind sidewalks and driveways and right-of-way limits shall be considered as walks.

303-5.4 Joints.

303-5.4.1 General. Add: Tooled Joints, Cold Joints, and Expansion Joints shall follow the patterns shown on the Plans. Where no pattern is shown, joint intervals shall be spaced equally, and shall not exceed the width of the walk.

303-5.4.2 Expansion Joints. Add: Expansion joints shall be placed against all walls and structures, and around all penetrations of walk, such as posts, poles, or equipment foundations. In non-reinforced slabs, exceeding 8 feet in width, expansion joints shall be placed at a minimum in the

longitudinal centerline, and regularly spaced at intervals not exceeding the width of the slab.

303-6 STAMPED CONCRETE

303-6.1 General. Color shall be determined by Agency or Engineer and shall be applied by Method A of Subsection 303-7.2 and Method B of Subsection 303.7.3 of the Standard Specifications. Two colors of antiquing release agents shall be applied randomly to the plastic surface concrete by a dry shake method in accordance with the approved manufacturer's printed instructions.

While the concrete is still plastic, the forming tools shall be applied to make the patterned surface. The contractor shall pressure clean the concrete to remove residual dust and excess release agent. After curing the minimum calendar days noted on the manufacturer's specifications, the concrete shall be sealed with clear sealant (non-slip type).

Only the concrete work so indicated on the Plans will receive stamped colored treatment. If any concrete work not indicated for color treatment, any curb and gutter, or any existing concrete which is to remain in place should receive any color treatment, it shall be removed and replaced by the Contractor at the Contractor's expense.

Pattern shall be as licensed by the Bomanite Corporation of Palo Alto, California. Refer to the table below for stamped concrete pattern.

Stamped Concrete Pattern:	Bomanite Bomacron – Match Existing Adjacent Pattern on 226 th Street.
Antiquing Agent (2 colors):	City Select.
Clear Sealer:	Bomanite Corporation "Aqua Seal"

Control joints shall be 3/4-inch deep, 1/4-inch wide, tooled score joints placed as shown on the drawings and/or 3 meter (10') maximum intervals. Control joints shall be placed so as to not disrupt the pattern.

Stamped concrete shall be placed, formed, and cured in conformance with the printed instructions, specifications, and technical bulletins issued by the manufacturer of the color hardener and color wax curing system.

The applicator shall be an experienced stamped concrete specialist. The stamped concrete specialist and a supervisor of proven ability (who can provide at least three examples of high-quality installation) shall be listed on the bid form.

Prior to start of stamped concrete work, Contractor shall submit the following to the Engineer, for approval:

- Three copies of the manufacturer's printed instructions, bulletins, and specifications.
- 2 ft. x 2 ft. square sample of stamped, finished concrete finish with color for the Engineer's approval prior to the start stamped concrete work.

The finished concrete sample shall reflect the personnel, procedures, and materials to be used, and shall match the color, pattern, and finish of the stamped concrete to be installed by the Contractor.

The stamped concrete shall be installed in the locations shown on the Plans, and shall be subject to approval by the Engineer. Work not conforming to color(s), pattern, texture, appearance, or otherwise not complying with the Specifications shall be removed and replaced at no additional cost to the Agency.

Payment for 4-inch thick stamped concrete shall be at the contract unit bid price per square foot in place, including sealer, antiquing agents, colored-release agents, construction joints, joint filler, soil excavation, soil disposal and compaction.

SECTION 306 - UNDERGROUND CONDUIT CONSTRUCTION

306-1 OPEN TRENCH OPERATIONS.

306-1.1 Trench Excavation.

306-1.1.1 General. Add the following:

Where conduit is to be placed within the drip line of existing trees, the following conditions apply:

- A. When the trench excavation is outside five (5) diameters of the tree trunk measured at 1.5m (4 feet, 9 inches) above grade, the provisions of Section 300-1.1 apply
- B. When the trench excavation is to encroach within five (5) diameters of the tree trunk measured at 1.5m (4 feet, 9 inches) above grade, the excavation in the vicinity of tree roots shall be by hand, air jet, or water jet to expose affected roots. Conduit shall be placed beneath the structural tree roots (all

roots 2-inches or larger). No structural root shall be cut without the express written permission of the Engineer. Any such cutting shall comply with the provisions of Section 300-1.1.

SECTION 307 - STREET LIGHTING AND TRAFFIC SIGNALS

Add new Section 307-9 LANDSCAPE ELECTRICAL SYSTEMS

307-9 LANDSCAPE ELECTRICAL SYSTEMS

307-9.1 General. The intent of the drawings is to describe complete systems, and the Contractor shall furnish and install all components required to provide complete operating electrical systems.

The following is a brief list of the electrical work to this Contract for the installation of equipment as listed below. The work shall be complete as described in the specifications and shown on the drawings, and shall result in complete operating electrical systems for the purpose intended.

Furnish and install all material, labor, and equipment necessary for complete, operating electrical systems, except as noted otherwise. The following list shall not be considered as a complete and detailed list of work and materials to be supplied, but shall be used as a guide:

- Meter pedestal, switchboard, and panel boards.
- Distribution and control equipment.
- Underground distribution conduit, cable, and pull boxes.
- Branch circuit wiring and miscellaneous work.
- Spare parts.
- Shop drawings, material submittals, and work schedule.
- Connections to all work of other trades.
- Record drawings and guarantees.
- Excavation, backfill and compaction for trenches, and pull boxes.
- Disposal of excess earth.
- Approved shoring, lights, and barricades.
- Repair all damage to existing facilities caused by this work.
- Apply for and obtain all necessary permits and building department inspections.

All materials and equipment shall be installed in a secure, neat and workmanlike manner by competent workmen, and any item not so installed shall be corrected to meet the complete approval of the Agency. If, at any time, the Contractor believes that he cannot secure proper results through

the use of the materials and procedures specified, he shall immediately notify the Engineer and the Agency setting forth his reasons.

The Contractor assumes all responsibility for materials, storage, damage to equipment, and safety for all personnel and the public, until final acceptance by the Agency. Sensitive electrical equipment should not be installed until major construction work is completed. During and after installation, equipment shall be protected from damage by water, dust, paint, wet concrete, plaster, etc. Adequate barricades and lighting shall be provided for allowing trenches and excavations.

Drawings – Performance. All scale dimensions are approximate. Before proceeding with any work, the Contractor shall check and verify all locations and dimensions of equipment at the site of work.

All work specified, but not clearly defined by the drawings, must be installed as directed by the Engineer in a manner satisfactory to him. Work covered by notes on drawings must be furnished and installed, whether or not it is specifically mentioned in the Specifications.

The Contract Drawings indicate the extent and general arrangement of the new and existing equipment, conduit, and wiring systems, and are essentially diagrammatic. The drawings indicate the required sizes and points of termination of conduits and wires and routes to avoid obstructions and provide clearance; however, it is not the intention of these drawings to show all necessary offsets, etc., and it shall be the responsibility of the Contractor to install all of his work to specific conditions found on the site.

All changes from the drawings necessary to make the work conform to existing structures or substructures, or to fit the work of other trades, or to conform to laws and ordinances; and all other reasonable changes and adjustments in locations of equipment, etc., prior to the installation, shall be made at no additional expense to the Agency.

Schedule of Work. The Contractor shall schedule his work and shall coordinate with the Agency and all other contracts in progress on the site at all times. Necessary coordination will be specified during the preconstruction conference.

Contractor shall submit a complete work schedule at the preconstruction conference.

Trenching shall avoid, to the extent possible, damage to existing tree roots. Routing of trenching shall be approved by the Engineer 24 hours prior to trenching.

307-9.2 Trenching and Conduit Work. Trenching shall be coordinated with the irrigation system.

All irrigation lines damaged during prosecution of the work shall be repaired in compliance with the standards in Sections 212 and 308 of the STANDARD SPECIFICATIONS.

PVC conduit shall be laid properly and secured.

Provide warning tape at 6 inches (150mm) below grade.

PVC conduit shall be 24 inches below grade. Backfill shall be placed in 6-inch (150mm) layers, hand or mechanically tamped to 90 percent compaction. Flooding will not be permitted without the specific approval of the Engineer, and then only for the area approved. Backfill shall contain no rocks, broken concrete or trash.

Trenches shall be backfilled level with surrounding grades when fully compacted. Trenches in lawn areas shall be sodded in accordance with Section 308-4.8(c) of the STANDARD SPECIFICATIONS; sod type shall be approved by the Agency.

307-9.3 Pull Boxes. Install pull boxes where noted on drawings. No pull boxes shall be located in an athletic field area, or where it will pose a hazard to the using public.

Boxes shall be set flush with sidewalk or other paving. In lawn areas, set boxes 1-inch above finish grade, or as noted on plans. Notes on plans govern.

Concrete boxes shall be made in sections, and grouted or cemented together to form a watertight seal. Boxes shall have a 6-inch (150mm) drain hole in the bottom. Boxes shall sit on 24-inch (600mm) deep crushed clean 1-inch (25mm) rock. The drain hole shall be opened and cleaned out before sealing the top. Top shall be sealed after inspection, and the entire box made watertight. Pre-cast pull boxes by Brooks or Christy may be submitted for approval.

307-9.4 Splicing and Cable Identification. No splices are permitted except in pull boxes or in pole base at hand hole.

All cable splices shall be made with ILSCO or 3M compression type crimp connectors (not bolted mechanical compression type).

All joints shall be made waterproof by two layers of rubber tape (Scotch No. 70) followed by two layers of 2-lap friction tape (Plymoth ASTM), covered by three layers of 2 lap No. 88 Scotch tape. Splices in underground boxes

shall be made with splice kits as manufactured by 3M Company, Scotchcast #72 for inline and #78 for tap splices or equal.

All cables shall be identified with a punched plastic tag, such as color-coded Dymo tags, in each pull box by circuit number, voltage, and phase.

307-9.5 Connections to Equipment or System. The Contractor shall connect to equipment furnished under other sections of the specifications where noted on drawings.

307-9.6 Grounding. Do not use water supply pipe as a ground. All fixtures shall be connected to system ground. Neutral to ground shall not exceed five ohms. Connect fixture to ground with No.10 TW wire. All rigid galvanized steel conduit shall be properly grounded. Use proper ground clamps and conduit fittings to ground cable and conduit to ground rods. Size, as required by Code. Bond to building cold water piping.

Concrete: All concrete shall be 3000 psi and shall be ready mixed concrete, conforming to UBC Standard 26-13. Alternate 2 of Standard 26-13 shall be the basis of quality, and Items 1 through 4 are specified elsewhere in this section.

Packing: Cement shall be packed in strong paper or jute sacks with the brand and name of the manufacturer plainly marked thereon.

Aggregates: The grading of coarse aggregates for slabs shall be the 1-inch to No. 4 range as set forth in Table 26-2-A of UBC Standard 26-2. Grading of coarse aggregates for all other concrete shall be the ½-inch to No. 4 range of the same Table 26-2-A.

Storage: Aggregate shall be stored on the site separately and measured in a manner to avoid the inclusion of foreign materials as approved by the Inspector.

Water: Water required for all purposes shall be clean, free from strong acids, alkalis, oil, or organic materials.

Mixing: Concrete shall be a mixture in the unit proportion of Portland cement. All concrete shall be mixed in an approved power batch mixer. Materials for each batch of concrete shall be accurately and separately measured and placed in the mixer.

Consistency: The quantity of water used shall not exceed the maximum quantity specified and shall be minimum necessary to produce concrete of the workability required by the Inspector. Supplementing the predetermined amount of water by additional water because of the slowness of discharge or for any other reason will not be permitted.

Transit-Mixed Concrete: The Contractor may use transit-mixed concrete in lieu of concrete manufactured on the site, provided the materials used in its manufacture comply with the requirements of these Specifications.

The manufacturer of the transit-mixed concrete shall deliver to the Inspector on the work, a certificate with each mixer truck, stating the quantity of cement, water, fine, aggregate, and coarse aggregate. Certificate shall be certified at batch plant that it meets these requirements.

Transit-mixed concrete shall not be delivered to the work with the total specified amount of water incorporated; two and one-half gallons of water per cubic yard shall be withheld, and may be incorporated before the concrete is discharged under the supervision of the Engineer.

The Contractor shall not re-temper any concrete or use any concrete that has stood more than 15 minutes after leaving the mixer.

307-9.8 Cleaning Equipment and Materials. The Contractor shall thoroughly clean all fixtures, exposed piping, apparatus, and equipment installed under its Contract. Parts which are to be painted shall be thoroughly cleaned of cement, plaster, etc., brushed with steel brush to remove rust, etc., clean and painted.

All dirt, rubbish, paint spots, or grease on walls, walks, poles, equipment, or fixtures, for which the Contractor is responsible, shall be removed by the Contractor and the premises left in first-class condition in every aspect.

All rubbish resulting from the work shall be cleaned up and removed from the site by the Contractor; also from time to time during construction, and when so directed by the Engineer.

307-9.9 Tests. The Contractor shall make all tests required by the Engineer, or other authorities having jurisdiction.

The costs of all tests, repairing of all damage resulting from these tests, replacement of equipment and materials including labor and other necessary work, due to conformance with the Electrical Ordinances, Safety Orders, these specifications and accompanying drawings, shall be borne by the Contractor.

Should the Contractor refuse or neglect to make any tests necessary to satisfy the Engineer that the work has been performed in accordance with the true intent and meaning of the contract documents, the Agency may make such tests and charge the expense to the Contractor and retain the cost of testing from the final payment to the Contractor.

All wiring and connections shall be tested for continuity grounds and short circuits before the devices and equipment are connected. Upon completion of the work, the contractor shall demonstrate to the Engineer the satisfactory operation of the entire electrical system(s).

At the time of the final inspection, the Contractor shall have a qualified electrician at the job site to make all required tests or demonstrate operation of electrical equipment and lighting system(s).

307-9.10 Protection of Existing Site Improvements. Restore disturbed turf areas, irrigation systems, etc. Repair damaged park equipment and turf caused by the Contractor to new condition, including backfill and sodding of trench surface to the Engineer's satisfaction.

307-9.11 Guarantee. The Contractor shall guarantee all work of this Contract to be free from defects in material and workmanship for a period of one (1) year from the date of acceptance of the work for filing of the Notice of Completion.

The Contractor shall repair or otherwise make good at its own expense all defects developed during the guarantee period. The Agency may notify the Contractor by the telephone or in writing, and all guarantee work shall be performed within 48 hours after receiving notice from the Agency.

The Contractor's general guarantee shall be on their letterhead, and shall include the foregoing provisions and emergency telephone numbers. Together with the required manufacturer's guarantees, the Contractor's guarantee shall be bound and furnished to the Engineer in at least three copies.

307-9.12 Turn-Over Items. Panel keys, spare parts, record drawings, maintenance manuals, guarantees; all items shall be delivered to the Engineer prior to authorization of final payment.

307-9.13 Payment. Payment for Electrical Systems shall be included in the contract bid lump-sum price for furnishing and installing automatic irrigation controller assembly, and shall be for complete operating electrical systems, but not limited to, conduit, conductors, pull boxes, receptacles, trenching, power supply connection, service pedestal electric meter, conduit, metered pedestal combination enclosure, conductors, distribution; power supply to controller, power feed from SCE, and other work appurtenant to the provisions of the electrical systems, as shown on the drawings.

SECTION 308 - LANDSCAPE AND IRRIGATION INSTALLATION

308-1 GENERAL

All existing lawn and landscape areas disturbed by the Contractor as part of or as a result of the work shall be prepared and resodded and/or replanted in kind, except as otherwise designated in the Plans. Existing irrigation systems shall be repaired and restored to operating condition to the satisfaction of the Engineer.

Contractor shall field verify with Engineer exact location of all irrigation components such as, but not limited to, valves, sprinkler heads, piping, etc., prior to start of construction. All irrigation components shall be protected in place. However, where there are conflicts with new sidewalks, the water supply lines, valves, and sprinkler heads shall be modified and adjusted to grade or relocated, as necessary. The reinstallation of irrigation components shall be performed in the same manner in which they were originally installed.

Contractor shall not have the existing irrigation system inoperable for more than 48 hours continuously.

308-2 EARTHWORK AND TOPSOIL PLACEMENT

308-2.3.1 General. Add the following:

After Class C and/or A topsoil has been placed and prior to amendment, the topsoil will be sampled and tested by the Contractor to assure compliance with the Specifications and approved testing source. Supplemental tests may be made to assure compliance with amendment and fertilization specifications. All costs associated with testing shall be borne by the Contractor.

308-2.3.2 Fertilizing and Conditioning Procedures. Add the following:

The topsoil shall be amended as recommended by the testing laboratory. Should the amendment recommendations furnished by the laboratory exceed those required by the bidding documents, the laboratory recommendations shall be applied at no additional cost to the Agency.

Incorporate into the top 150mm (6") of the soil, using a mechanical tiller, tilling in two separate directions the following materials, in all areas to be planted:

Material	Rate per 100m² (1,076 square feet)
Type I Amendment	2.5 m ³ (3 cubic yards)
Commercial Fertilizer	5 Kg (10 pounds)
Agricultural Gypsum	45 Kg (100 pounds)

308-3 HEADER INSTALLATION

Add new Section 308-3.2 ROOT CONTROL BARRIER INSTALLATION

308-3.2.2 Root Control Barrier Installation. Install root control barrier in all tree wells to form a continuous barrier at the perimeter. Install and join sections in strict accordance with manufacturer's printed instructions.

308-4 PLANTING

308-4.3 Layout and Plant Location. Delete the first paragraph and replace with the following:

"The Contractor will layout all planting areas and stake locations of trees for the Engineer's approval prior to planting."

308-4.5 Tree and Shrub Planting. Delete the fourth paragraph of Subsection 308-4.5 of the Standard Specifications and replace it with the following:

All planting holes (except for palms) shall be backfilled with a prepared backfill mix consisting of the following:

Material	Rate per cubic yard	Rate per m ³
Topsoil	1.0 CY	1 m ³
Soil Amendment	0.25 CY	0.25 m ³
Iron Sulfate	2 lbs.	1 Kg
Commercial Fertilizer	1 lb.	0.5 Kg

Insert planting tablets in the manner and of the number specified by the manufacturer in its printed instructions.

308-4.5.1 Palm Tree Planting.

a. Digging. Dig trees as close to date of planting as practical. Hand dig palm and wrap root ball in burlap. Keep moist and tie securely.

b. Pruning and Tying. Prune off old fronds to balance root pruning. Tie fronds together with organic twine to protect heart.

c. Planting. Planting holes shall be at least one-third larger than the root ball. Determine the water percolation rate for each hole by filling the hole with water, allowing it to drain completely and refilling the hole with water. If the hole fails to drain completely within a 24-hour period, then excavate to break through the impermeable layer or to provide a thicker layer of sand under the root ball. The slower the

percolation rate, the deeper the sand layer must be beneath the root ball.

Backfill shall be 100 percent clean concrete sand. Do not use organic amendment.

Add moist fill to the bottom of the hole, blending one to two cups of blood meal into the soil. Thoroughly compact soil to depth required to set tree soil line at finish grade. After insertion of the tree, add moist backfill and thoroughly compact to assure stability.

d. Maintenance. Each irrigation should be deep enough to assure wetting of the entire root ball. During hot months, maintain a watering basin, apply water every day for the first week, and every other or third day thereafter for the next 4 to 6 weeks. Sample soil for moisture content before watering to avoid over saturation at the root ball. Soil sampling shall be done with a soil probe. Do not allow water to stand at base of tree.

Remove frond ties at 60 days after planting during hot months, and after 90 days during the winter months. Do not trim palms for 30 days after untying them.

308-4.6 Planting, Staking and Guying. Tree staking shall be as shown on the drawings.

308-4.10 Mulch.

308-4.10.1 Installation. Following acceptance of plant material installation, apply even layer of mulch, 2-inches (50mm) thick, over all areas shown as planting areas on the Plans, except lawn areas. The mulch blanket inside watering basins shall be 2 inches (50mm) thick. Taper thickness of mulch to meet pavement 15mm (1/2") minimum below the finished surface of pavement. Keep mulch 6 inches away from tree and shrub root crown.

308-5 IRRIGATION SYSTEM INSTALLATION

308-5.1 General.

- (a) Record Drawings. Show dimensioned location of all buried pipe and valves, and control pilot wires to valves and controllers. Take dimensions prior to backfilling trenches. All corrections on record drawings shall be done in red ink. Dimensions must be taken from above ground, permanent, architectural objects. Do not dimension

from plants or trees or sprinkler heads. Record drawings shall be reviewed prior to all progress payment approvals.

- (b) Charts. On the inside surface of the cover of the automatic controller, the Contractor shall prepare and mount a chart showing the valves and sprinkler heads serviced by that particular controller. All valves shall be numbered to match the operation schedule and the drawings. Only those areas controlled by that controller shall be shown. This chart shall be an entire sprinkler plot plan, including walks, roads, and walls. A photostatic print of this plan, reduced as necessary and legible in all details, shall be made to a size that will fit into the controller cover. This print shall be approved by the Engineer and shall be hermetically sealed in plastic. This shall then be secured to the inside of the cover in a manner approved by the Engineer.

308-5.1.2 Items to be Furnished by Contractor. Provide the following tools as a part of this contract:

- (a) Two sets of keys for automatic controller cabinet.
- (b) Two sets of keys for lock on controller enclosure.
- (c) One coupler for quick coupler valves; coupler shall be equipped with 20mm (3/4") diameter 300mm (12") tall bronze hose bib, bent-nose type, with handwheel.
- (d) Two loose keys for quick coupler valves installed under this contract.
- (e) Two special wrenches suitable for operating each type of shut-off valve installed under this contract.
- (f) Two tools for disassembly and assembly or adjustment of each type equipment used in this installation requiring such special tools.
- (g) One valve box key for lock-lid valve boxes used in this installation.
- (h) Two sets of operating instructions and a parts list as printed by each manufacturer of each type of equipment included in this contract; refer to "Materials" section of the Specifications and legend on drawings.

- (i) One specified padlock for controller enclosure, as approved by the City.

308-5.1.3 Guarantees. A letter guarantee from each manufacturer shall be submitted to the Agency guaranteeing materials for a period of 1 year against material defects and workmanship. In cases where longer guarantees are required by these Specifications, such guarantees are separate and distinct from the Contractor's general guarantee.

308-5.1.4 Utilities.

- (a) Water Meter Installation. Contractor shall arrange with the serving Water Utility to have meter location marked in field.

Water Utility will hot tap water main; install service line to meter location, and furnish meter.

Water meter box shall conform to Water Utility standards.

- (b) Water Connection. Contractor shall arrange water service with the serving utility.
- (c) Electric Connection. Contractor shall arrange electric service with the serving utility.
- (d) The Agency shall prepare all applications for services, pay any required application and/or service fees, and shall pay for the water and electricity services required for irrigation and landscape only, as shown on the drawings.
- (e) Contractor shall notify the Engineer fourteen (14) calendar days minimum prior to the anticipated date of service connection.

308-5.2 Irrigation Pipeline Installation.

308-5.2.6 Trench Backfill in Roadways and Parking Areas. Section 308-5.2.6 is hereby added to Section 308 of the Standard Specifications as follows:

1. All trenches for pipeline and electrical conduit under roadways shall be backfilled with a portland cement concrete treated slurry conforming to Subsection 201-1.1.2. Class Use Table for Trench Backfill Slurry. Sand bedding material shall extend at least 6 inches (150mm) above the pipe or conduit.

2. Paving for trench cover shall meet the pavement requirements for this project and shall be at least the thickness of adjacent undisturbed paving plus 1-inch (25mm), thoroughly compacted in place, and finished to a neat continuous surface.

308-5.3 Installation of Valves, Valve Boxes, and Special Equipment. Add the following:

Pull boxes for control wires that are set in pavement shall be flush with the finish surface.

Pull boxes for control wires, valve boxes, etc., shall be offset from and parallel to walk.

308-5.5 Automatic Control System Installation

The Automatic Irrigation Controller Assembly shall include the following:

- Automatic Irrigation Controller
- Radio transmitter/receiver hand-held unit
- Rain shut-off device

Automatic Irrigation Controller Assemblies shall include supplemental irrigation control systems.

Supplemental irrigation control systems equipment shall include furnishing and installing the specified equipment in conformance with the manufacturer's written instructions and specifications, including communications equipment, sensors, wire, valve boxes, special connectors, terminal boards, and any other equipment required to provide a complete operating system.

308-5.6 Flushing and Testing.

308-5.6.1 General. The text of Subsection 308-5.6.1 of the Standard Specifications is hereby deleted and replaced with the following:

Flush Main Lines. Flushing of the lines will be done before quick coupling valves and remote control valves are in place. All open ends shall be piped (temporarily) to exhaust flushing water up and out of the trenches. No water will be permitted to fall into the trench. Flushing procedure will be to first open the ports nearest the source, then recap and move progressively toward the end of the line with only one open port flushing at any one time.

308-5.6.2 Pipeline Pressure Tests. The text of Subsection 308-5.6.2 of the Standard Specifications is hereby deleted and replaced with the following:

1. Main Lines: Pressure tests on main lines shall be made after lines have been flushed and after control valves and quick coupling valves are set in place. Close all control valves by hand. Pipes shall be centerloaded leaving all fittings exposed. Contractor shall furnish force pump and pressure gauges necessary to complete pressure tests.
2. Pipe: All metal main lines in the system shall be capped and pressure tested at 125 psi (860 Kpa) for a period of 1 hour with no drop in pressure. All leaks found shall be corrected by turning the pipe in the fittings as no caulking or epoxy fillers will be permitted.
3. Plastic Pipe: All plastic main lines in the system shall be capped and pressure tested at 125 psi (860 Kpa) for a period of 1 hour with no drop in pressure. All leaks found shall be corrected by removing the leaking pipe or fittings and installing new material in place thereof and retesting.
4. Closing in Uninspected Work: The Contractor shall not allow nor cause any of this work to be covered or enclosed until it has been inspected, tested and approved by the Engineer. Should any of this work be enclosed or covered before such inspection and test, the Contractor shall uncover the work at his own expense and after it has been inspected, tested and approved, shall make all repairs with like materials necessary to restore all his work and that of the other contractors to its original condition.

308-5.6.5 Approval. Subsection 308-5.6.5 is hereby added to Section 308 of the Standard Specifications as follows:

Written approval and acceptance of the irrigation system must be obtained before final payment is considered.

308-6 MAINTENANCE AND PLANT ESTABLISHMENT

308-6.1 General.

The entire project shall be satisfactorily maintained, commencing from the time that all items of work have been completed as specified in the foregoing articles of these Special Provisions and to the satisfaction of the Engineer,

and continuing through the landscape maintenance period until final acceptance of the project.

Project maintenance work shall consist of:

Description of work items:	
Applying irrigation water	Sweeping pavement
Removing weeds	Removing litter and debris
Caring for plants	Preventing and repairing damage
Edging groundcover	Repairing landscape systems

Project maintenance work shall consist of applying water (except initial watering of plants), weeding, caring for plants, edging groundcover, sweeping walks, litter pickup, and performing all general project maintenance.

308-6.3 Landscape Maintenance Period.

The landscape maintenance period shall be a minimum of 90 calendar days, commencing upon written authorization from the Engineer. This period shall not start until all construction work is complete.

308-6.4 Landscape Maintenance Requirements.

308-6.4.1 General. In order to carry out the work, the Contractor shall maintain a sufficient number of men and adequate equipment to perform the work herein specified from the time any planting is done until the final approval.

If at any time the Contractor is not performing maintenance work in the opinion of the Engineer, maintenance period shall be suspended and not restarted until all deficiencies have been corrected to the satisfaction of the Engineer. No payments will be made for work required during the suspended period and the period shall be extended by the length of time of the suspension.

All plants and planted areas shall be kept well watered and kept well weed-free at all times. Weeds shall be removed and disposed of off the site.

(Refer to Section 308-4.5.1 (d) for palm tree maintenance.)

The Contractor shall be responsible for detecting diseases and pests as soon as their presence is manifested. He shall take immediate action to identify the disease and/or pest and apply such remedies as are necessary to control the infestation. He shall remove all rodents, taking control measures immediately upon discovery.

Apply commercial fertilizer on all planted areas as required to sustain growth. The Engineer shall be notified at least 2 days before starting this operation.

Damage to planting areas shall be repaired immediately.

308-6.4.3 Trees, Shrubs, and Ground Covers.

No pruning shall be performed by the Contractor unless directed in writing by the Engineer. The Agency's Certified Arborist must be present for any attempted pruning operations. Seventy-two (72) hours prior notice to the Agency is required before commencing pruning operations.

ANY TREES PRUNED WITHOUT PERMISSION OR IN A FASHION UNACCEPTABLE TO THE AGENCY SHALL BE REPLACED IN KIND AND SIZE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE AGENCY.

If pruning is permitted by the Engineer:

- All trees and shrubs shall be pruned to maintain natural structure. Clipping into formal shapes such as boxes and balls will not be allowed unless such is specified in the design.
- Young trees shall be pruned to select and develop permanent scaffold branches; to remove overlapping and rubbing limbs; to eliminate narrow crotches; and to maintain growth within space limitations. All cuts shall be made to lateral branches, or buds, or flush with branch bark collar. Side pruning of young trees, stubbing or heading back will not be permitted.
- Evergreen trees shall not be pruned, except under the direction of the Engineer.
- The objectives of shrub pruning are the same as for trees.

Ground covers shall be edged and trimmed to keep in bounds and to achieve an overall even appearance. Keep ground cover 12-

inches (300mm) clear of the base of shrubs, and clear of low branches.

308-6.4.4 Replacement of plants. All plants that show signs of failure to grow at any time during the life of the contract or those plants so injured or damaged from any cause, including vandalism, as to render them unsuitable for the purpose intended shall be immediately replaced in kind and size at the expense of the Contractor.

308-6.4.5 Inspections. A written notice requesting an inspection should be submitted to the Engineer at least 48 hours prior to the anticipated date.

Prior to inspection, the site must be thoroughly cleaned up and all excess material and debris removed.

Prior to start of and at the end of landscape maintenance period, the Contractor will be required to have a complete inspection and approval of all landscape construction items.

An inspection shall be scheduled at 30-calendar day intervals during the landscape maintenance period.

308-7 GUARANTEE

- (a) Close Out. The irrigation system shall be ready for complete automatic operation to the satisfaction of the Engineer. Contractor shall provide all appurtenances, devices, record documents, and manufacturers literature necessary to operate and maintain the system, and guarantees, in writing.

308-8 PAYMENT

Add the following:

Payment for Landscape Planting and Irrigation System shall be as follows:

- (a) Soil Preparation: Payment shall be at the contract bid unit price per square foot, and shall include all costs of furnishing and installing fertilizers and conditioners, tilling, soil testing, fine grading, and other work required to prepare soils for planting.
- (b) Root Control Barrier: Payment shall be at the contract bid unit price per linear foot in place, and shall include all costs for furnishing and installing root control barrier.

- (c) Trees and Shrubs: Payment shall be at the appropriate contract unit bid price per each size of container, and shall include all costs for furnishing and installing trees and shrubs.
- (d) Mulch. Payment shall be at the contract bid unit price per cubic yard installed, and shall be full compensation for furnishing and installing mulch.
- (e) Connection to Water Service: Payment shall be at the contract bid lump-sum price for complete connection, saw cutting and pavement replacement at the point shown on the drawings.
- (f) Irrigation Main Line: Payment for irrigation main line shall be at the contract bid unit price per linear foot in place for each size specified in the bid.
- (g) Lateral Line: Payment for irrigation lateral line shall be included in the contract unit price for irrigation head assembly.
- (h) Trenched in future Roadway for Irrigation Mainline, Sleeving, Control Wire Conduit: Payment shall be at the contract bid unit price per linear foot, and shall include all costs for excavation, backfill and compaction.
- (i) Trenched Non-Roadway Pipe Sleeving: Payment shall be at the contract bid unit price per linear foot in place for each size specified in the bid.
- (j) Shutoff Valve Assembly: Payment for shutoff valves shall be at the contract bid unit price per each valve of the size specified in the bid, and shall be for a complete operating assembly, including valve box.
- (k) Remote Control Valve Assembly: Payment for Remote Control Valve shall be at the contract bid unit price per each valve of the size specified in the bid, and shall be for a complete operating assembly, including valve box and cover and furnishing and installing control wires to controller.
- (l) Automatic Irrigation Controller Assembly: Payment for Automatic Irrigation Controller shall be at the contract bid lump-sum price, and shall include all costs for furnishing and installing a complete operating system, including conduits, conductors, pull boxes, receptacles, trenching, power supply connection, service pedestal electric meter, conduit, metered pedestal combination enclosure, conductors, distribution; power supply to controller, power feed from SCE, and other work appurtenant to the provisions of the electrical systems; as shown on the drawings and as required for power supply connection.
- (m) Control Wire: Payment for control wire shall be included in the contract bid unit price for Remote Control Valve Assembly.

- (n) Quick Coupling Valve Assembly: Payment for quick coupling valves shall be at the contract bid unit price per each, and shall be for a complete operating assembly, including valve box.
- (o) Backflow Prevention Device Assembly: Payment for backflow prevention device shall be at the contract bid lump-sum price, and shall include all costs for furnishing and installing a complete operating assembly, including enclosure and concrete pad.
- (p) Supplemental irrigation control systems: Payment for rain shut-off device hand held remote control unit and module shall be paid for as part of the Automatic Irrigation Controller Assembly, and no additional payment will be made.
- (q) Irrigation Head Assembly: Payment for irrigation heads shall be at the contract bid unit price per each for each type of head specified, and shall include serving lateral piping between heads and from control valve, and all other appurtenant devices and work.
- (r) Wye Strainer/Pressure Regulator Assembly: Payment for Wye strainer/pressure regulator assembly shall be at the contract bid unit price for each, and shall be a complete operating assembly, including valve box.
- (s) Landscape Maintenance Period: Payment shall be at the contract lump-sum bid price, and shall include all costs of labor, materials, equipment, tools, and appurtenances to maintain the landscape planting and irrigation system.
- (t) Moisture Barrier: Payment shall be at the contract bid unit price per linear foot in place, and shall include all costs for furnishing and installing moisture barrier.
- (u) Bored Pipe Sleeving: Payment shall be at the contract bid unit lump sum price in place and shall include all costs for furnishing and installing pipe sleeving by boring, including pavement removals and replacement, excavation for set-up pits, potholing, and all other costs necessary for boring.
- (v) Bored Control Wire Conduit. Payment for bored control wire conduit shall be at the contract bid unit lump sum price in place and shall include all costs for furnishing and installing control wire conduit by boring, including pavement removal and replacement, excavation for set-up pits, potholing, and all other costs necessary for boring.

All costs for testing, record drawings, and other miscellaneous costs shall be distributed among the various items, and no additional payment will be made therefor.

SECTION 310 - PAINTING

310-7 GRAFFITI RESISTANT COATING

310-7.1 General. All vertical and horizontal surfaces such as, but not limited to stucco walls and pilasters and PVC fencing shall be painted following installation.

310-7.1.1 Surface Preparation. Surfaces to be coated shall be clean of dirt, grime, efflorescence, lime runs, form oils and release agents, grease, mud, excess mortar, mold and mildew, and any other deleterious substance.

310-7.1.2 Coverage. Consult the manufacturer's literature and the manufacturer's representative to determine coverage rates for the various surfaces to be coated.

310-7.1.3 Warranty Protection.

- a. A site visit must be conducted by an employee or agent of Rainguard. Notify the Engineer 48-hours prior to the scheduled site visit.
- b. A warranty application must be completed fully by the applicator, and a warranty issued by Rainguard in favor of the City of Hawaiian Gardens.

310-7.1.4 Application. Application shall be in strict accordance with the manufacturer's current printed directions and instructions by the manufacturer's representative. The anti-graffiti coating manufacturer's written specification for application is deemed and construed as part of this Specification.

Allow coatings to dry and become clear before applying subsequent coats. Achieve a uniform pinhole free, continuous film.

310-7.1.5 Cleanup. Remove discarded coating materials, rubbish, cans, and rags at end of each work day. Protect work of other trades.

310-7.1.6 Certification. Provide documentation of quantities of each product obtained for the work performed. This documentation is required for payment and warranty purposes.

310-7.1.7 Submittals. Contractor shall submit 3 copies of manufacturer's literature for the paint system proposed for the Engineer's review in accordance with Section 2-5.3.

310-7-2 Payment. Payment for painting all said surfaces described in Section 310-7.1 shall be included in the payment for the item for which anti-graffiti coating is required.

TECHNICAL SPECIFICATIONS
FOR
COUNTY LINE ROAD TRANSPORTATION CORRIDOR PROJECT
BID NO. 2021-16
IN THE CITY OF CALIMESA

The unit prices and lump sum amounts to be paid for the Items listed in the Proposal shall include full compensation for furnishing all labor, materials, tools, equipment, time, and incidentals necessary to complete the work, and for performing all work contemplated and embraced under the Contract, in accordance with the Plans and Specifications. This shall include the Contractor's costs involved with bonding, insurance, worker's compensation, overhead, financing, obtaining required permits and permit fees, mobilization, traffic control, public convenience and safety, protective barricading, sanitary facilities, storage of equipment and materials, security against theft and vandalism, project site maintenance, dust and runoff control, clean-up and all other items incidental to the work.

Payment for Unit Price work shall be made for the actual quantities of Contract Items removed, constructed, or disposed of in accordance with the Plans and these Specifications. Measurement of Unit Price work shall be as specified in Section 7-1, "Measurement of Quantities for Unit Price Work," of the SSPWC. Payment for Lump Sum work shall be paid for at the price indicated in the Bid, in accordance with Section 7-2, "Lump Sum Work," of the SSPWC.

BID SCHEDULE "A":

Each respective bid item and bid schedule as shown on the proposal form shall comply with all respective sections of the 2018 Edition of the Standard Specifications for Public Works Construction (Green Book), its supplements, and any other publications as specified, except as modified herein. If there is a conflict between these inclusions and the Standard Specifications, these inclusions shall have precedence.

1. Mobilization/Demobilization:

Mobilization shall consist of preparatory work and operations for the street rehabilitation improvements, including, but not limited to, those necessary for the movement of personnel, equipment, materials, and incidentals to the project site necessary for work on the project, coordination with utility companies, and for all other work and operations which must be performed or costs incurred including bonds, insurance and financing prior to beginning work on the various contract items, and for obtaining all business licenses and permits, including permit fees, as required for entire project, from all related agencies including, but not limited to, the City of Calimesa and City of Yucaipa. Mobilization shall also include the time, materials, and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site

in a safe condition, and all other related work as required at all times and for all non-working days during construction period. The Contractor is responsible for securing an adequate storage site for equipment and materials.

At the request of the City, the Contractor shall provide a mobile telephone number for use by City representatives.

The Contractor shall have on the work site at all times, as his agent, an English speaking superintendent or foreman capable of reading and thoroughly understanding the plans, specifications, and other related documents

Mobilization shall include project overhead costs, including costs and fees for obtaining construction permits and/or permit riders as may be required by the City of Calimesa and City of Yucaipa, or as may be required by law, and for obtaining bonds, insurance and financing for the entire project prior to beginning work.

Contractor shall confine his operations and work area to the street right-of-way. Unless the Plan shows otherwise, no encroachment into private property will be permitted without the prior written consent of the property owner. Obtaining this consent will be the responsibility and the costs of the Contractor. Material shown on the plans or designated in the Special Provisions which is to be used in the reconstructed work and which has been damaged or destroyed as a result of the Contractor's operations shall be repaired or replaced at the option of the City Engineer by the Contractor at the Contractor's sole expense.

The Contractor shall provide personnel to keep the construction site in a safe condition at all times, including non-working hours.

A Construction Schedule shall be submitted at least one (1) month prior to commencing work. All revisions shall be completed within three days after review by the City Engineer. Requests for changes in the schedule shall be submitted by the Contractor to the City for approval at least three (3) working days prior to performing any work.

Mobilization shall include scheduling of the work in conformance with the traffic control criteria.

Mobilization/demobilization shall include all clearing and grubbing for the construction of the new roadway, improvements and any clearing and grubbing and removals and/or removal and replacement shown on the plans for which there is no bid item of work.

Removals shall include, but is not limited to, the removal and disposal of (1) interfering grass, shrubs, trees, bushes, stumps and other vegetation including roots whether removed in their entirety or just trimmed portions; (2) miscellaneous rocks and debris; (3) tree and shrub trimming as required along entire street length behind new and/or existing curb or edge of pavement; (4) silt from all existing gutter; (5) removal of all marker paint from curbs upon completion of the project; (6) Removal and capping off of irrigation facilities which interfere with construction. Sprinkler heads shall be salvaged

and turned over to the owner of the adjacent property.

Relocations shall include, but not be limited to, the relocation of existing fences, signs, pullboxes, removal and re-location of existing irrigation lines, sprinkler heads, irrigation wires, replacement of adjacent landscape improvements in kind and all other various relocations of existing improvements as directed by the City Engineer.

Clearing and grubbing shall include, but not limited to, the removal, relocation to a temporary location during construction, maintenance/protection during construction, and re-installation of mailboxes as directed by the City Engineer.

Restoration of irrigation and landscaping system affected by the new improvements. Lawn planting adjacent to the improvements constructed (e.g. sidewalk, driveway, curb and gutter, etc.) shall be restored as nearly to its original condition as is reasonably possible. Grass removed or damaged by construction shall be replaced with same grass or equivalent type approved by the City Engineer. Reseeding may be required on areas that currently do not have any grass, as directed by the City Engineer. Seeds shall be covered with suitable mulch and watered until growth is evident.

Adjustments shall include, but is not limited to, the adjustment of all existing boxes, valve covers, and manholes, such as water, sewer, storm drain, street light, electrical pull boxes and conduit, valve boxes, etc. which are to remain in place within and/or adjacent to the project limits and are not specifically covered by an adjust to grade bid item. The Contractor shall coordinate the adjustment with the owner of the utility and the work shall conform to the utility owner's standards and specifications as directed by the City Engineer. The adjustment to grade shall also include any work required by the utility owner or City Engineer to lower the box/manhole/valve/etc. as required and no additional compensation will be allowed therefore.

Blue Reflective Marker shall include the placement of new of the blue reflective markers within the roadway at the fire hydrant locations within the project limits as directed by the City Engineer and in accordance with Section 85 "Pavement Markers" of the Caltrans Standard Specifications, Riverside County Fire Department Standards, City of Calimesa and City of Yucaipa Fire Department Standards.

False Bottom Manholes shall include furnishing and installing $\frac{3}{4}$ " plywood sheeting at the bottom of sewer and storm drain manhole shafts, over the top of the inlet/outlet pipe prior to the start of street reconstruction as directed by the City Engineer or Yucaipa Valley Water District representative. This will serve as temporary cover to catch any debris that falls accidentally into the manhole during construction. The Contractor shall not place the plywood sheeting in such a manner as to impede the flow of sewage or storm water. Such plywood sheeting and debris caught shall be removed by the Contractor after the manhole adjustment work is completed.

Clearing and grubbing shall also include the removal and replacement of existing brick work or concrete parkway improvements (other than driveway approaches and sidewalks), relocations of other manmade items necessary for the construction as disclosed on the project plans. The work shall include excavation and subgrade preparation in compliance with Standard Specifications Section 301-1. Compacting provisions of the Standard Specifications will apply to all subgrade materials.

Clearing and grubbing shall consist of the removal, relocation, or abandonment of all interfering improvements within the job area limits that are not specifically covered by a separate Bid Item. The Contractor is responsible for securing an adequate storage site for equipment and materials.

Dust control throughout the project will be required, including the sweeping of all streets within the vicinity of the project. Mobile sweeping will be required as needed throughout the project duration. Washing of streets will not be allowed unless all runoff is trapped and pumped for disposal at an approved wastewater treatment plant. Under no circumstances will construction water be permitted to enter into the storm drain system. Payment for sweeping of all streets within the project vicinity shall be included in the contract lump sum price bid.

Mobilization/Demobilization item is meant to be a “catch-all” item. All removals, relocations, abandonments, and adjustments required to complete the proposed improvements, as shown on the Plan, whether or not specified herein, but not specifically covered by a separate bid item shall be considered as included in the lump sum price bid for this item. It is the Contractor’s responsibility to visit the project site and determine the extent of removals, relocations, abandonment, and adjustments required to clear the way for the proposed improvements.

Unless otherwise specified in the General Provisions, payment for Mobilization shall include compliance to and furnishing all equipment set forth in the General Provisions.

Full compensation for compliance with the provisions specified and referred to hereinabove shall be considered as included in the contract LUMP SUM price bid for Mobilization/Demobilization, and shall be paid based on the percentage of completed work to date. This item shall not exceed 2% of total contract and No additional compensation will be allowed therefore.

Payment for Mobilization/Demobilization shall be considered full compensation for obtaining all bonding, insurance, business licenses and permits, as required for entire project, from all related agencies including but not limited to utility companies, the City of Calimesa, the City of Yucaipa, private and public agencies. The compensation shall include the compliance with the requirements specified in those licenses and permits; payment of all required fees; all labor, tools, equipment, personnel, materials, and incidentals necessary to perform all related items of work. No additional compensation shall be allowed.

Payment for this item shall be made at the Contract lump sum (LS) price, based on

the following schedule:

- 50% to be paid on the 1st partial payment,
- 25% after 50% project completion, excluding amount earned for Mobilization,
- 25% to be paid on the final payment.

In each of the above payments, 5% retention will be deducted in accordance with Section 7-3, "Payment," of the SSPWC.

2. Traffic Control and Safety:

This Item shall include all work, materials, and equipment necessary to comply with the requirements of Subsection 7-10, "Public Convenience and Safety," of the Standard Specifications for Public Works Construction (SSPWC), the Caltrans' Manual of Traffic Controls in Construction and Maintenance Zones (latest edition), the standards contained in the "Work Area Traffic Control Handbook" (WATCH) published by Building News, Inc.; (latest edition). In the case of a conflict, the highest standard shall prevail.

Ten days prior to the start of construction work, the Contractor is required to submit to the City, for review and approval, a traffic control plan prepared and signed by a licensed Civil Engineer. The plan shall comply with all the requirements of the Plans Specifications.

The Contractor shall conduct his operations so as to offer the least possible obstruction and inconvenience to the public, and shall have under construction, no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public. The Contractor shall furnish and maintain all construction signs, channelizing devices, barricades, k-rail, temporary traffic striping and pavement markings, lighting devices, etc., to safely guide the traffic through the project limits, as described herein, and as directed by the City Engineer.

Contractor will be permitted to close one single intersection of County Line Road at any given time to construct the roundabout and/or pulverization improvements. Detour signage will be required for Avenue L and Avenue H. Access shall be maintained for all residents and businesses at all times. Contractor shall provide 4 CMS boards a minimum of 14-days in advance of any closures.

For non closure areas, one lane of traffic in each direction, with a minimum lane width of 12 feet, shall be provided by the Contractor at all times for local access to all residents. When it becomes necessary to block access to driveways for a short period of time during construction, the Contractor shall notify the affected property owners/occupants 48 hours in advance of such driveway closure. Contractor shall facilitate work in front of driveways so that these driveways may be opened for use immediately. To allow for equipment movement and cleanup during various

construction operations, momentary stoppage of traffic and turn movements will be permitted, using flagging procedures.

If at any time during the course of construction the City Engineer, or his representative, deems traffic control measure are inadequate, or construction impacts to traffic are too great, the City Engineer may require changes be made to the traffic control. Any and all costs as a result of traffic control modifications/ changes shall be borne solely by the Contractor.

Payment for this item shall be made at the contract lump sum (LS) price bid for Traffic Control and Safety, and shall include handing out of construction notices to residents and businesses. No additional compensation will be allowed therefore.

Progress payments shall be pro-rated in proportion to the total value of work completed to date as a function of the total awarded contract amount.

3. Storm Water Pollution Prevention Plan, Best Management Practice and NPDES Requirements:

Water Pollution Control Plan (WPCP):

As part of this project, the Contractor shall prepare and provide a site specific Stormwater Pollution Prevention Plan (SWPPP) to the City prior to commencing construction. The Contractor shall ensure that the SWPPP for all work is developed and amended or revised by a Qualified SWPPP Developer (QSD). The WPCP shall conform to the requirements in the Permits, and these Special Provisions.

The objectives of the WPCP shall be to identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and to identify, construct, implement, and maintain water pollution control measures, hereafter referred to as control measures, to reduce to the maximum extent practicable (MEP, as defined in Title 33 CFR of the United States Code) pollutants in storm water discharges from the construction site both during and after construction is completed under this contract.

Best Management Practice and NPDES Requirements:

The Contractor shall conform to the requirements of General Construction Activity Storm Water NPDES Permit No. CAS000002 and Order No. 2009-0009-DWQ issued by the State Water Resources Control Board. This General Permit, hereafter referred to as the "Permit", regulates storm water discharges associated with construction activities.

The Contractor shall also conform to the requirements of NPDES Permit No. CAS6180036 and Order No. R8-2010-0036 issued by the Santa Ana Regional Water Quality Control Board. This permit, hereafter referred to as the "Permit", regulates

storm water discharges that enter the City's municipal storm drain systems (MS4). Contractor is not responsible for filing a Notice of Intent (NOI) for Permit coverage or a Notice of Termination (NOT) at project end. City staff will file a NOI for permit coverage and file a (NOT) at the end of the project (if applicable).

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Storm Water Quality Handbooks, dated 2009 or most recent edition, and addenda thereto issued up to and including the date of advertisement of the project, hereafter referred to as the "Handbook". Copies of the Handbook may be obtained from CASQA website at: <http://www.cabmphandbooks.com>; Telephone: (650) 366-1042; or email at: info@casqa.org.

The Contractor shall become fully informed of, and comply with, the applicable provisions of the Handbook, Permit, and Federal, State, and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall maintain a copy of the Permit at the project site, and shall make the Permit available during construction activities.

Payment for this item shall be at the contract lump sum (LS) price bid for Stormwater Pollution Prevention Plan, Best Management Practice and NPDES Requirements, and shall be considered as full compensation for preparing and implementing the SWPPP, and for furnishing all labor, materials, tools, equipment, time, and incidentals for doing all work involved in construction of this item as directed by the Engineer, and no additional compensation will be allowed therefore. Payment shall be based on progress of the work completed at the City Engineer's discretion.

4. **Sawcut and Remove Existing AC Berm or Dike as Required:**
5. **Sawcut and Remove Existing PCC Curb and/or Gutter as Required:**
6. **Sawcut And Remove Existing AC/PCC Sidewalk/Ramp, PCC Slab or AC/PCC Drive Approach and/or Driveway Access or PCC Cross Gutter and/or Spandrel as or Remove Existing 24" PCC Park Drain Required:**

Contractor shall sawcut and remove existing asphalt concrete or Portland cement concrete berm or dike, curb and/or gutter, cross gutter, driveway, driveway approach, slab, sidewalk, ramp, park drain and subgrade to the depths required as shown on the construction plans or as directed by the City Engineer.

Except as otherwise called for on the plans, all asphalt concrete and Portland cement pavement cuts shall be cut to neat, clean, and straight lines to the satisfaction of, and as directed by the City Engineer.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's

expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Sawcut and Remove Existing AC Berm or Dike as Required" shall be per the contract unit price bid per linear foot (LF) and will be based on the actual length removed regardless of the depth and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in removal of the existing asphalt concrete curb/berm/dike and subgrade as required, and disposing of material removed offsite, as specified in these special provisions and as directed by the City Engineer.

Payment for "Sawcut and Remove Existing PCC Curb and/or Gutter as Required" shall be per the contract unit price bid per linear foot (LF) and will be based on the actual length removed regardless of the depth and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in removal of the existing portland cement concrete curb and/or gutter and subgrade as required, and disposing of material removed offsite, as specified in these special provisions and as directed by the City Engineer.

Payment for "Sawcut And Remove Existing AC/PCC Sidewalk Ramp, PCC Slab or AC/PCC Drive Approach and/or Driveway Access or PCC Cross Gutter and/or Spandrel as or Remove Existing 24" PCC Park Drain Required" shall be per the contract unit price bid per square foot (SF) and will be based on the actual area of surface removed regardless of the depth and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the sawcut and removal of the existing asphalt concrete and/or portland cement concrete sidewalk, ramp, slab, driveway, driveway approach and/or access, Cross Gutter and/or Spandrel, Park Drain and subgrade as required, and disposing of material removed offsite, as specified in these special provisions and as directed by the City Engineer.

7. Pulverize Existing Asphalt Concrete Pavement as Shown:

Contractor may elect to pulverize and reuse the existing pavement as Aggregate Base or remove all existing material and place class 2 Aggregate Base.

For pulverization method, the existing pavement and subgrade material shall be pulverized and blended to 5" reclamation depth in accordance with these special provisions. The remaining subgrade material will be removed and disposed of the total depth of 9". This w

ork shall consist of pulverizing existing bituminous surfacing within the limits shown on the plans and set in the field by the Engineer, and shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these

Special Provisions.

The existing pavement along County Line Road has been cored at several locations with thickness ranging between 0.33' to 0.42'. It is the Contractor's responsibility to verify existing depths of pavement and to make their own assumptions of average pavement thickness for bidding purposes for all areas. The existing pavement thickness is less than the required 9" total depth, therefore the removal and disposal of additional excavation below the 5" pulverized section shall be paid and consider included under this item.

The pulverized material shall conform to the following gradation:

<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>
2"	98-100
1 1/2"	95

Pulverized material produced within the limits of this project may be substituted for Aggregate Base and can be placed in the sub-grade as Aggregate Base as shown in the typical sections. For removal method, contractor may elect to fully remove and dispose the existing asphalt pavement and subgrade to a total depth of 9". Class 2 Aggregate Base shall be required to be imported and placed to the limits shown on the plans. Class 2 Aggregate Base so used will be measured and paid for at the contract price paid for under 4.5" Aggregate Base bid item. The provisions of Section 4-1.03B(1) "Increases of More Than 25 Percent", of the Standard Specifications shall not be considered to apply to quantities so measured. Costs for hauling, grading, shaping, watering, and compacting the Class 2 Aggregate Base material will be considered as included in the contract prices paid for under 4.5" Aggregate Base, and no additional payment will be made therefor.

Payment for "Pulverize Existing Asphalt Concrete Pavement as Shown:" shall be per the contract unit price bid per square foot (SF), shall include furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in pulverizing, removing, disposing or stockpiling, as specified in the Standard Specifications and these Special Provisions.

8. Cold Plane Existing Asphalt Concrete Pavement 1.5" deep minimum, Limits per Plan or Construct 10' Header Cut or as Shown on Plans (1.5" Min. Thickness) Along Existing Asphalt Concrete Pavement Joints:

The existing AC Pavement shall be cold milled to the depths required per grades as shown on the Plans and in accordance with Section 302-1 entitled "Cold Milling of Existing Asphalt Pavement" of the Standard Specifications. The pavement shall be removed by the use of a cold milling machine designed for this purpose and capable of performing a satisfactory job. Burning or heat planing will not be permitted. The planed pavement shall provide a maximum bond surface suitable for resurfacing.

All cold milling work shall be completed by the Contractor after the removal and replacement of pavement sections.

Except as otherwise called for on the plans, all AC pavement cuts shall be cut to neat, clean, and straight lines to the satisfaction of, and as directed by, the City Engineer.

The cold milling planer machine(s) used on this project shall be loading, and have a cutter head at least 5 feet wide. This machine shall be supported by tracks rather than by wheels, except as otherwise directed by the City Engineer. Bartmill 300 or equivalent cold mining machines may be used in tight areas, at intersections, and other designated locations approved by the City Engineer. The cold planing machines shall be operated so as not to produce dust, fumes or smoke. For smaller, tight areas at curb returns, smaller grinders may be used to facilitate the operation.

The final depth, width, length and shape of the cut shall be as indicated on the plans and the typical cross section details, or as directed by the City Engineer. The final cut shall result in a uniform surface conforming to the typical cross section(s) except as otherwise directed by the City Engineer.

Surveyor's street and property line monuments, not scheduled for removal shall be protected.

The City has made every reasonable effort to locate and mark on the plans all known metal roadway improvements such as sewer manhole covers, water valve covers, catch basin covers, which, if struck, could damage the cold milling cutting drum and/or carbide tipped cutting teeth and makes no guarantee that it has successfully done so or shall, therefore, thoroughly inspect the work site in advance of the cold milling operation to minimize the risk of striking any unseen under surface object(s) and shall include in the price bid for cold milling removal work, an additional amount sufficient to cover the cost of damage related down time and the cost of repair of damage to said cold milling cutting drum and/or carbide tipped cutting teeth.

Care shall be exercised not to damage adjacent concrete gutters. Gutters or curbs damaged shall be replaced at the Contractor's expense. Residue from grinding shall not be permitted to flow or travel into gutters, onto adjacent street surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Temporary ramping, where required by the City Engineer for traffic control or other purposes, shall be considered included in this item of work and no additional compensation will be allowed.

Temporary A.C. Ramp Transition at Pavement Join Lines

Cold milling cuts which are transverse to vehicular traffic shall be paved to taper to existing pavement with temporary asphalt concrete, and maintained in good condition until placement of new wearing surface. Cold milling cuts shall not be left without temporary pavement.

Temporary pavement taper shall have a maximum slope of 1 inch per one (1) foot. The construction and removal of temporary asphalt concrete pavement shall be included in this item of work.

Ponding

To insure public safety, any ponded water on the cold milled areas due to rain, irrigation, etc., shall be immediately removed by the Contractor using pumping or other approved measure.

The pavement surface shall be swept by means of a sweeper having the capabilities to effectively sweep and retain dust, dirt, and debris from the pavement. The suction fan shall move air from the main brush compartment through the air filter in sufficient volume during sweeping to prevent escape of visible dust from the brush compartment directly in the air.

The Contractor shall repair, replace or reseal all areas of the streets which have not been properly or completely sealed, which have been damaged by traffic due to premature opening or other distress. All remedial repairs shall be completed within 14 days after notification by the City Engineer and shall be completed at no cost to the City.

During sealing operations, it shall be the Contractor's responsibility to thoroughly and adequately protect all manhole covers, water valve covers and utility vault covers, raised pavement markers, all survey markers, monuments and bench marks, and all drainage facilities. The Contractor shall employ all means necessary to protect and clean these existing facilities to their original condition or shall bear the cost to replace them where necessary.

Payment for "Cold Plane Existing Asphalt Concrete Pavement 1.5" deep minimum, Limits per Plan or Construct 10' Header Cut or as Shown on Plans (1.5" Min. Thickness) Along Existing Asphalt Concrete Pavement Joints" shall be per the contract unit price bid per square foot (SF) and will be based on the actual area of surface planed regardless of the number of passes required. The contract price paid per square foot shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in cold milling the existing AC pavement and disposing of material removed, as specified in these special provisions and as directed by the City Engineer.

9. Remove Existing Chain Link, Wood, or Wrought Iron Fencing, Including Gates (removal only):

Contractor shall remove existing chain link, wood, or wrought iron fencing including gates to the locations as shown on the construction plans and/or as directed by the City Engineer.

Contractor shall coordinate the removal of the fence/gate with the affected property owner(s) and shall provide temporary fencing/gate as required to properly secure the property(s) during construction as directed by the City Engineer. Temporary fence/gate shall be included in the cost for "Remove and Replace Existing Chain Link, Wood, or Wrought Iron Fencing Including Gates (removal only)" and no additional compensation will be allowed therefore. The Contractor shall maintain temporary fence/gate in good working condition throughout construction and/or until permanent fence/gate is installed as directed by the City Engineer.

Care shall be exercised not to damage adjacent improvements within private property or within the Public Right-of-Way. The contractor shall replace or reconstruct any existing or newly installed improvements damaged during the construction and/or maintenance of temporary and/or permanent fence/gate and related improvements or appurtenances.

Payment for "Remove Existing Chain Link, Wood, or Wrought Iron Fencing, Including Gates (removal only)" shall be per the contract unit price bid per linear foot (LF) and will be based on the actual length removed and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing fence/gate at the location as shown on the plan, installation and maintenance of temporary fence/gate, removal of footings, construction of required footings for temporary fence/gate as required, excavation, backfill, and compaction as specified in these special provisions and as directed by the City Engineer.

10. Remove Existing Tree or Palm Tree (From 6" to 24" Diam.):

Contractor shall remove existing tree or palm tree as required to allow for the construction of new improvements as shown on the construction plans or as directed by the City Engineer.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into

drainage structures will be allowed.

Payment for "Remove Existing Tree or Palm Tree (From 6" to 24" Diam" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved complete in place, including but not limited to, removal of the existing tree or palm tree, removal of roots in conflict with new improvements, excavation, backfill, compaction and restoration of disturbed areas, salvaging, haul away, and disposal of material removed offsite, as specified in these special provisions and as directed by the City Engineer and no additional compensation will be allowed therefore.

11. Remove and Relocate Existing Mail Box. During Construction use 5 Gallon Bucket Base with Compacted Earth. See Street Improvement Sheets for New Location:

Contractor shall remove and relocate existing mail box to the locations as shown on the construction plans and/or as directed by the City Engineer.

Contractor shall notify the local Post Master at least 15 business days prior to the start of construction. The Contractor shall coordinate with the local Post Master the method of mail delivery after construction begins. If mail delivery will be disrupted, rescheduled, or held by the local post office, Contractor shall notify all affected residences at least 5 business days prior to the start of construction, in writing, disclosing any changes in delivery of the mail. The notice to residents shall be approved by the City Engineer prior to distribution.

Existing mail box shall be removed and reset on a temporary portable mount, typically a timber post supported in a 5-gallon can or bucket base with compacted earth as directed by the Engineer. During construction operations, the portable mount and base shall be moved as necessary to clear the Contractor's operations, but at all times shall be easily accessible for mail delivery. Temporary mount and base shall be included in the cost for "Remove and Relocate Existing Mail Box" and no additional compensation will be allowed therefore. The Contractor shall maintain existing mail box, temporary mount, and base in good working condition throughout construction as directed by the City Engineer.

When construction is complete, the mail box shall be reset at its final position as shown on the construction plans and/or as directed by the City Engineer. Prior to final placement, all existing post support shall be replaced with a new single, 4" x 4" wooden post or 2" x 2" metal post. Damaged mail box as the result of the Contractor's operations shall be replaced as well. The costs associated with replacing damaged mail box with new mail box shall be at the Contractor's expense.

Mail boxes with non-standard supports shall be relocated as directed by the Engineer. Contractor shall furnish and provide temporary mail box and support as necessary for

mail box with non-standard support, final replacement of non-standard support mail box shall be in kind to like condition or better and as directed by the City Engineer at no additional cost.

Payment for "Remove and Relocate Existing Mail Box" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing mail box, relocation of the mail box at the final location as shown on the plan, furnishing of temporary mail box and/or support, removal of footings, construction of required footings for temporary and/or permanent mail box as required, excavation, backfill, and compaction as specified in these special provisions and as directed by the City Engineer.

12. Remove Existing Sign and Relocate as Required per Traffic Signing and Striping Sheets (removal only):

Existing Sign shall be removed and reset temporarily behind proposed improvements with compacted earth as directed by the Engineer. During construction operations, the Sign shall be moved as necessary to clear the Contractor's operations. Temporary location/relocation shall be included in the cost for "Remove and Relocate Existing Sign" and no additional compensation will be allowed therefore. The Contractor shall maintain existing Sign temporary location in good working condition throughout construction as directed by the Engineer.

When construction is complete, the Sign shall be reset at it's final position as shown on the Signing and Striping Plans and/or as directed by the Engineer. The costs associated with replacing damaged Sign and/or post support with new Sign and support shall be at the Contractor's expense.

Signs with non-standard supports shall be relocated as directed by the Engineer. Contractor shall furnish and provide temporary sign and support as necessary for Sign with non-standard support in this special provision and as directed by the Engineer at no additional cost.

Payment for "Remove Existing Sign and Relocate as Required per Traffic Signing and Striping Sheets (removal only)" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing Sign, relocation of the Sign at the temporary location, furnishing of temporary Sign and/or support, removal of footings, construction of required footings for temporary location as required, excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

13. Remove Existing Landscape and Irrigation, as Required to Construct Proposed Improvements and Replace In-kind to like Conditions or Better:

The provisions of Subsection 7-9 "Protection and Restoration of Existing Improvements" of the SSPWC shall apply except as modified and supplemented below:

Sprinkler Systems: The Contractor shall be responsible for cutting, capping, and repairing in kind, and/or protecting in place any existing sprinkler systems within the work area under this contract. When any irrigation lines or improvements are damaged through the course of construction, these lines, sprinklers, or other components shall be replaced with City approved like materials and shall be in working order when work is completed. All irrigation systems shall be in proper operating condition within three (3) days of becoming inoperable.

The Contractor, in writing, shall notify impacted residents and/or property owners to inspect their sprinkler system to determine if any damage was caused due to the construction. The notice shall be done within three (3) days of completing the project, and shall request that the residents and/or property owners notify the Project Manager of such condition within seven (7) days. The seven (7) days notification is only a courtesy request and not a requirement; any damaged irrigation reported after the seven (7) days will still be required to be repaired by the Contractor.

If the Contractor fails to repair an irrigation system within the time stated, the City will withhold the anticipated cost of repair of the damaged irrigation system from the progress payment. Any additional work, whether repair or new construction, which is requested by the property owner, shall be fully compensated by the Contractor and the City will not be responsible for additional compensation for this work.

All sprinkler heads shall be salvaged and reused in the same location, if still in working condition. If heads are not reusable, they shall be replaced with a like type. Prior to construction, the Contractor is encouraged to document, in writing and by photograph, any existing damage such as broken or missing sprinkler heads, within the project area.

Landscaping: All damaged grass or shrubs shall be replaced in kind or better within two (2) weeks of the damage. It is the Contractor's responsibility to match the existing grass with a similar variety. Any area, which is rutted, shall be leveled with appropriate topsoil and seeded.

The Contractor, in writing, shall notify impacted residents and/or property owners to inspect their lawn to determine if any damage was caused due to construction. The notice shall be done within three (3) days of completing the project, and shall request that the residents and/or property owners notify the Project Manager of such condition within seven (7) days. The seven (7) days notification is only a courtesy request and not a requirement; any damaged irrigation reported after the seven (7) days will still be required to be repaired.

If the Contractor fails to repair landscaped areas within the time stated, the City will

withhold the anticipated cost of repair of the damaged landscaped areas from the progress payment. Any additional work, whether repair or new construction, which is requested by the property owner, shall be fully compensated by the Contractor and the City will not be responsible for additional compensation for this work.

Prior to construction, the Contractor is encouraged to document, in writing and by photograph, any existing damage within the project area.

Payment for "Remove Existing Landscape and Irrigation, as Required to Construct Proposed Improvements and Replace In-kind to like Conditions or Better" shall be per the contract unit price bid per square foot (SF) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal and Replacement of Existing Landscape and Irrigation and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

14. Remove Existing Road Guard Rail with 4"x8" Wood Supports:

Contractor shall remove existing Road Guard Rail as required to allow for the construction of new improvements as shown on the construction plans or as directed by the Engineer.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Remove Existing Road Guard Rail with 4"x8" Wood Supports" shall be per the contract unit price bid per linear foot (LF) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved complete in place, including but not limited to, removal of the Road Guard Rail, removal of existing footings, excavation, backfill, compaction and restoration of disturbed areas, salvaging, haul away, and disposal of material removed offsite, as specified in these special provisions and as directed by the Engineer and no additional compensation will be allowed therefore.

15. Adjust Existing Sewer Manhole or Clean-Out to Grade:

This item shall include adjustment of sewer and storm drain manhole frame and cover sets to the new finished grades, as shown on the Plan, except as modified or supplemented herein.

Manholes will require a significant grade adjustment and contractor is responsible for reconstructing shaft, cone, and grade adjustment rings as required to lower the manhole to the appropriate finished grade elevations.

- A. In area where the existing pavement is to be removed and reconstructed, and where the manhole structure meet the following criteria:
 - 1) The manholes extend 2 inches or more above the new subgrade, and
 - 2) The difference between the lowest point of manhole removal and the final elevation of the top of the frame is less than 15 inches.

These manholes shall be adjusted in accordance with Subsection 302-5.8 "Manholes (and other structures)" of the SSPWC. The Contractor shall remove the frame and cover set and interfering portions of the manhole shaft to the new subgrade before paving. After the pavement has been completed, the necessary portions of the pavement and base shall be neatly removed, the manhole structure built up and the frame reset to grade, in accordance with Yucaipa Water district Standard Drawing S-5.

- B. In areas where the existing pavement is to be capped with an AC overlay, and where the manhole structure meets the following criteria:
 - 1) The manholes are either flush with the existing pavement, or
 - 2) Project less than two inches above the A.C. surface prior to capping.

These manholes shall be paved over and later adjusted to grade as specified herein.

In order to minimize interference with traffic, the Portland Cement Concrete shall be modified to obtain "high-early" strength through the addition of one percent calcium chloride, in accordance with Subsection 201-1.2.4, "Chemical Admixtures," of the SSPWC. The Contractor shall place concrete paving around the manholes on the same day they were adjusted. The concrete shall be allowed to cure for at least 24 hours prior to placement of finished AC paving. Final AC paving shall be done within 5 working days after the concrete has cured.

Before replacing frames and covers, the Contractor shall clean the frames and covers of both new and old pavement or surface treatments.

Asphalt concrete used for paving around manholes shall be Type D2- PG-64-10 with 6.0 % asphalt binder.

The Contractor shall be responsible for furnishing, placing, and maintaining barricades or other traffic control as necessary to protect the public from any danger due to the work being done.

Full compensation for conforming to the requirements of this item will be made at the contract unit price bid per each (EA) manhole adjusted to grade, in accordance with Subsection 9-3, "Payment," of the SSPWC. The contract unit price bid shall include full compensation for all labor, materials, and equipment necessary to complete the work including repaving around each manhole, and no additional compensation shall be allowed therefor.

16. Remove, Salvage and Relocate Existing PCC Car Stop:

Contractor shall remove, Salvage and properly Store PCC Car Stop until proposed improvements are completed. When construction is complete, the PCC Car Stop shall be reset at it's final position as shown on the construction plans and/or as directed by the Engineer. The costs associated with replacing damaged PCC Car Stop with new PCC Car Stop shall be at the Contractor's expense.

Payment for "Remove and Salvage Existing PCC Car Stop" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing PCC Car Stop, store and relocation of the PCC Car Stop at the final location as shown on the plan and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

17. Remove Existing CMU Block Wall per Plan (H=5' Max.)(Removal Only):

18. Remove Existing PCC or CMU Retaining Block Wall (H=3' Max.-Removal Only):

Contractor shall sawcut a clean and straight line, and remove existing CMU block wall, PCC or CMU Retaining block wall as required, to the depths required as shown on the construction plans or as directed by the Engineer.

The provisions of Subsection 7-9 "Protection and Restoration of Existing Improvements" of the SSPWC shall apply. Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Remove Existing CMU Block Wall per Plan (H=5' Max.-removal only)" and "Remove Existing PCC or CMU Retaining Block Wall (H=3' Max.)(removal only)" shall be per the contract unit price bid per linear foot (LF) and will be based on the actual length removed regardless of the depth/height and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and

incidentals, and for doing all work involved in removal of the existing CMU block wall or PCC/CMU Retaining block wall, reinforcing steel, footing, as required, and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

19. Remove Existing Masonry or CMU Block Pilaster and Replace in Kind to Like Condition or Better:

Contractor shall remove existing masonry and/or CMU block pilaster as shown on the construction plans and/or as directed by the Engineer.

The provisions of Subsection 7-9 "Protection and Restoration of Existing Improvements" of the SSPWC shall apply. Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

This item shall also consist of construction of masonry or CMU block pilaster in kind to like condition or better, as required at the back of sidewalk or behind right of way line to match existing grades, in accordance with Subsection 303-4, "Masonry Construction," of the SSPWC

Payment for "Remove Existing Masonry or CMU Block Pilaster and Replace in Kind to Like Condition or Better" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and replacement of the existing masonry and/or CMU block pilaster, reinforcing steel, footing, as required in kind to like condition or better, and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

20. Remove Existing Real State Business Sign and replace it, in kind to like conditions or better:

Contractor shall remove and replace existing business sign as shown on the construction plans and/or as directed by the Engineer. Construction of business sign, related footings and electrical (if any) shall be in accordance with Subsection 201-1 "Portland Cement Concrete", 303-1 "Concrete Structures", 305-2 "Timber Structures and Timber Construction" and Section 307 "Street Lighting and Traffic Signal Systems" of the SSPWC shall apply.

Portland cement concrete shall be 560-C-3250 per table 201-1.1.2.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Remove Existing Real State Business sign and replace it, in kind to like conditions or better" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and replacement of the existing business sign as required in kind to like condition or better, including but not limited to, removal of footings, relocation/modification/extension of electrical wiring/conduit and any other electrical components needed, construction of required footings, salvaging, storage, hauling, and maintenance of existing removed sign, and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

21. Adjust Existing Water/Gas Valve to Grade:

Contractor shall adjust existing Water/Gas Valve can to Grade as shown on the construction plans, conforming to South Mesa Water Company Standard W-11 and Gas Company standards, as directed by the Engineer and/or Water/Gas Company representative.

Contractor shall coordinate the Water Valve can regrading with South Mesa Water Company and Gas Valve can regrading with Gas company and as directed by the Engineer. Water/Gas Valve Can shall be protected and accessible at all times during construction.

Payment for "Adjust Existing Water/Gas Valve to Grade" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the Adjusting Existing Water/Gas Valve to Grade, including but not limited to, installation of pipe, fittings, slip can, steel lid, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.

22. Remove Existing Sign, Salvage and Provide to the City for Future use:

Existing Sign shall be removed and reset temporarily behind proposed improvements with compacted earth as directed by the Engineer. During construction operations, the Sign shall be moved as necessary to clear the Contractor's operations. Temporary

location/relocation shall be included in the cost for "Remove and Salvage Existing Sign" and no additional compensation will be allowed therefore. The Contractor shall maintain existing Sign, temporary location in good working condition throughout construction as directed by the Engineer.

When construction is complete, the Sign shall be brought to city's Yard or to a location as directed by the Engineer. The costs associated with replacing damaged Sign and/or post support with new Sign and support shall be at the Contractor's expense.

Payment for "Remove Existing Sign, Salvage and provide to the City for future use" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing Sign, relocation of the Sign at temporary, furnishing of temporary Sign and/or support, removal of footings, construction of required footings for temporary Sign as required, excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

23. Remove Existing Storm Drain Structure and Connecting Piping as need per Storm Drain Plans:

Contractor shall remove by Saw Cutting existing portions of Conflicting Storm Drain Pipes, Abandoned Pipes, Manholes, Junction or Transition Structures, Catch Basins, Local Depressions, Risers, Head Walls, Boxes, Floor Drains and Grates, Road Culverts, Reinforcing Steel and Footings as shown on the construction plans or as directed by the Engineer, in accordance with applicable provisions of Section 306, "Underground Conduit Construction", of the SSPWC. Holes created by the removal of such facilities shall be backfilled to grade to match proposed or existing improvements.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Remove Existing Storm Drain Structure and Connecting Piping as need per Storm Drain Plans" shall be per the contract unit price bid per Lump Sum (LS) and will be based on the percentage of completed work to date and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in Remove Existing Storm Drain Structure and Connecting Piping as need per Storm Drain Plans, disposing of material and removed offsite, as specified in these special provisions and as directed by the Engineer.

24. Remove Existing Grouted Rip-Rap as needed to Construct Proposed Storm Drain Improvements:

Contractor shall remove existing grouted Rip-Rap as needed to Construct Proposed Storm Drain Improvements, to the depths required as shown on the construction plans or as directed by the Engineer.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow downstream the Existing Channel or travel into gutters, onto adjacent surfaces. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "remove existing grouted Rip-Rap as needed to Construct Proposed Storm Drain Improvements" shall be per the contract unit price bid per square foot (SF) and will be based on the actual area of surface removed regardless of the depth and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in removing existing grouted Rip-Rap as needed per Storm Drain plans, and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer

25. Remove Existing Floor Drain Including PCC Curb and Replace per Storm Drain Sheets:

Contractor shall remove existing Floor Drain and PCC Curb By Saw Cutting existing Connecting Piping as shown on the construction plans or as directed by the Engineer

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor's expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Remove Existing Floor Drain Including PCC Curb and Replace per Street Improvement Sheets" shall be per the contract unit price bid per Each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in Remove Existing Floor Drain Including PCC Curb and Replace per Street Improvement Sheets and disposing of material removed offsite, as specified in these special provisions and as directed

by the Engineer.

26. Remove Existing Flag Pole and Relocate per Street Improvement Sheets:

Contractor shall remove and relocate existing Flag Pole to the locations as shown on the construction plans and/or as directed by Property Owner.

Payment for “Remove Existing Flag Pole and Relocate per Street Improvement Sheets” shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the “Remove Existing Flag Pole and Relocate per Street Improvement Sheets” as shown on the plan, removal and construction of required footings, excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

27. Remove Top Portion of Existing PCC Headwall by Sawcutting across Horizontally as close as possible from top of 2-60” RCP pipes:

Contractor shall sawcut (Full Wall Thickness) and “Remove Top Portion of Existing PCC Headwall by Sawcutting across Horizontally as close as possible from top of 2-60” RCP pipes” as required, as shown on the construction plans or as directed by the Engineer.

Except as otherwise called for on the plans, all Portland cement concrete cuts shall be cut to neat, clean, and straight lines to the satisfaction of, and as directed by the Engineer.

Care shall be exercised not to damage adjacent concrete Pipes, curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor’s expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow downstream the channel or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for “Remove Top Portion of Existing PCC Headwall by Sawcutting across Horizontally as close as possible from top of 2-60” RCP pipes” shall be per the contract unit price bid per Lump Sum (LS) and shall be considered as full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in Remove Top Portion of Existing PCC Headwall by Sawcutting across Horizontally as close as possible from top of 2-60” RCP pipes and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

28. Remove Existing 3” Steel Post, Including Footing:

Contractor shall “remove existing 3” Steel Post, Including footing” as shown on plans or as directed by the engineering.

Payment for “remove existing 3” Steel Post, Including footing” shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to “remove existing Steel Post, Including footing” excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer

29. Remove Existing Tree Stump as needed to Construct Proposed improvements:

Contractor shall remove existing tree stump (18” min. below finished grade) as required to allow for the construction of new improvements as shown on the construction plans or as directed by the Engineer.

Care shall be exercised not to damage adjacent Underground utilities, concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor’s expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for “remove existing tree stump” shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved complete in place, including but not limited to, removal of the existing tree stump, removal of roots in conflict with new improvements, excavation, backfill, compaction and restoration of disturbed areas, salvaging, haul away, and disposal of material removed offsite, as specified in these special provisions and as directed by the Engineer and no additional compensation will be allowed therefore.

30. Remove Existing Drainage Inlet and Construct Corrugated Steel Cap, Coat Welded, Cut and Abraded Surfaces as Specified in SSPCC 210-3.5:

Contractor shall Remove existing Drainage Inlet and construct Corrugated steel cap, coat welded, cut and abraded surfaces as specified in SSPCC 210-3.5 as shown on the construction plans or as directed by the Engineer.

Care shall be exercised not to damage adjacent concrete curbs/gutters, concrete driveways, pavement, and landscape/irrigation. Gutters, pavement, driveways or curbs damaged by construction operations shall be replaced at the Contractor’s

expense. Damaged landscaping or irrigation shall be replaced or repaired in kind to good working condition. Residue from removal operations shall not be permitted to flow downstream the main line or travel into gutters, onto adjacent surfaces or parkways. All residues shall be completely removed by sweeping and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for "Remove existing Drainage Inlet and construct Corrugated steel cap, coat welded, cut and abraded surfaces as specified in SSPCC 210-3.5" shall be per the contract unit price bid per Each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in Remove and disposing of material removed offsite, as specified in these special provisions and as directed by the Engineer.

31. Remove and Relocate Behind Back of Walk Existing Cathodic Utility Box or AV/AR Vault per Department of Water Resources Standard, Contractor to Coordinate Relocations and/or Adjustments with Department of Water Resources:

Contractor shall remove and relocate existing Cathodic Utility Box or AV/AR Vault as shown on construction plans, conforming to Department of Water Resources Standard Plans as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of Cathodic Utility Box or AV/AR Vault with Department of Water Resources as directed by the Engineer. Cathodic Utility Box or AV/AR Vault shall be protected and accessible at all times during construction. Cathodic Utility Box or AV/AR Vault shall be located behind the Curb and adjusted to final finished grade as shown on the construction drawings and conforming to Department of Water Resources Standard Plans.

All Cathodic Utility Boxes or AV/AR Vaults for relocation shall be replaced per Department of Water Resources Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for "Remove and Relocate Behind Back of Walk Existing Cathodic Utility Box or AV/AR Vault" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing Cathodic Utility Box or AV/AR Vault, including but not limited to, pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Department of Water Resources representative.

32. Adjust Existing Manhole to Grade per Department of Water Resources Standards:

Contractor shall Adjust Existing Manhole to Grade as shown on construction plans,

conforming to Department of Water Resources and Manhole/Vault to grade per Telephone Company Standard Plans and as directed by the Engineer and/or utility Company representative.

Contractor shall coordinate the Adjustment of Existing Manhole to grade with Department of Water Resources and Telephone Company. Manhole/Vault shall be protected and accessible at all times during construction. Manhole/Vault shall be adjusted to final finished grade as shown on the construction.

All Manholes for relocation shall be replaced per Department of Water Resources and Telephone Company Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for "Adjust Existing Manhole to Grade per Department of Water Resources Standards" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the Adjustment of Existing Manhole to Grade, including but not limited to, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Department of Water Resources and Telephone company representative.

33. Remove, Salvage and Relocate Existing Business Sign (Tire Shop). See Street Improvement Sheets for new Location:

Contractor shall remove, salvage and relocate existing business Sign to the location as shown on the construction plans and/or as directed by the Engineer.

Existing Sign shall be removed, salvage and reset temporarily behind proposed improvements with compacted earth as directed by the Engineer. During construction operations, the Sign shall be moved as necessary to clear the Contractor's operations. Temporary location/relocation shall be included in the cost for "Remove, Salvage and Relocate Existing Business Sign" and no additional compensation will be allowed therefore. The Contractor shall maintain existing Sign, temporary location in good working condition throughout construction as directed by the Engineer.

When construction is complete, the Sign shall be reset at it's final position as shown on the construction plans and/or as directed by the Engineer. The costs associated with replacing damaged Sign and/or post support with new Sign and support shall be at the Contractor's expense.

Payment for "Remove, Salvage and Relocate Existing Business Sign (Tire Shop). See street improvement sheets for new location" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing Sign, relocation of the Sign at the temporary and final location as shown on the plan, removal of footings, construction of required

footings for temporary and/or permanent Sign location, excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

34. Adjust Existing Electric/Telephone or Cable TV Box to Grade:

35. Adjust Existing Electric/Telephone or Cable TV Riser to Grade:

Utility boxes shall be adjusted to finished grade in accordance with Section 5, "Utilities" of the Standard Specifications. All facilities shall be adjusted to the finished grade (pavement, concrete or ground) after completion of the work. The Contractor shall provide all materials for adjustments as required.

Measurement and Payment for "Adjust Existing TV Cable Box or Riser to Grade" shall be at the price bid per each (EA) and shall be considered full compensation for doing all work as specified herein and no additional compensation will be allowed therefore.

36. Construct 8" PCC Curb and Gutter per City of Yucaipa Standard 120-1 or Construct Type A-8 PCC Curb and Gutter per Riverside County Standard No.201:

37. Construct 6" PCC Curb and Gutter per City of Yucaipa Standard 120-1 or Construct Type A-6 PCC Curb and Gutter per Riverside County Standard No.200:

38. Construct 6" Type "A1" PCC Curb Per Caltrans Std. Plan A87A:

39. Construct 4" PCC Curb per Detail "F", see Sheet 5:

Contractor shall construct new Portland cement concrete (PCC) curb and gutter, conforming to City of Yucaipa Std. 120-1, County of Riverside Standard No.200 and 201, and Caltrans Std. Plan A874A, and Subsection 303-5, "Concrete Curb, Walks, etc.," of the SSPWC.

Concrete shall be class 520-C-2500.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

New curb and gutter shall be constructed to provide a proper flow line with the asphalt concrete drainage improvements as indicated on the plans. Also the construction of 8" to 6" Variable Curb Height Curb and Cutter Transition is Included in this item.

Any new work found to be defective shall be repaired or replaced by the Contractor in accordance with Subsection 303.5.7 of the SSPWC.

Payment for "Construct Concrete 8" or 6" Curb and Gutter Per City of Yucaipa Standard 120-1", "Construct Concrete A-8 or A-6 Curb and Gutter Per County of Riverside 201 or 200", "Construct 6" Type A1 PCC Curb per Caltrans Std. Plan A87A", "Construct 4" PCC Curb per Detail "F", see sheet 5" and 8" to 6" PCC Variable Curb Height Curb and Cutter Transition, all of the preceding requirements shall be per the contract unit price bid per linear foot (LF) and shall include all labor, tools, equipment, time, materials and incidental required including, but not limited to, excavation, subgrade preparation, forms, backfilling behind gutter, restoring form areas, and for doing all work involved in construction of this item as directed by the Engineer and no other compensation will be allowed therefore.

40. Construct 8" Asphalt Concrete Dike Per San Bernardino County Standard No. 117 or Construct 8" Asphalt Concrete Dike Per County Of Riverside Standard No. 212:

This item shall include construction of Asphalt Concrete Dike at the locations shown on the Plan and in accordance with Subsections 203-6, "Asphalt Concrete" and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt binder to be mixed with the aggregate shall be PG 64-10.

The asphalt concrete dike shall be constructed per San Bernardino County Standard No.117 and County of Riverside Standard No. 212 at the locations and curb heights as shown on the plans and as directed by the Engineer.

Payment for "Construct 8" Asphalt Concrete Dike Per San Bernardino County Standard No. 117 or Construct 8" Asphalt Concrete Dike Per County of Riverside Standard No. 212" will be made at the contract unit price per linear foot (LF) of AC dike. The unit price bid shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, tack coat, asphalt concrete and all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

41. Construct Cross Gutter/Spandrel Per County of Riverside Standard No. 209 or Construct Cross Gutter Per City of Yucaipa Standard No. 122-1:

Contractor shall construct new Portland cement concrete (PCC) cross gutter, conforming to County of Riverside Standard No. 209 and City of Yucaipa Standard No. 122-1 as modified per plans, and Subsection 303-5, "Concrete Curb, Walks, etc.," of the SSPWC.

Concrete shall be class 520-C-2500.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them

in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

New cross gutter shall be constructed to provide a proper flow line with the asphalt concrete drainage improvements as indicated on the plans.

Any new work found to be defective shall be repaired or replaced by the Contractor in accordance with Subsection 303.5.7 of the SSPWC.

Payment for all of the preceding requirements shall be per the contract unit price bid per square foot (SF) and shall include all labor, tools, equipment, time, materials and incidental required including, but not limited to, excavation, subgrade preparation, forms, backfilling behind gutter, restoring form areas, and for doing all work involved in construction of this item as directed by the Engineer and no other compensation will be allowed therefore.

42. Construct Asphalt Concrete Dike per APWA Standard Plan 120-2 with ADA Ramp Transition to Join Existing Pavement and/or Existing Ground:

This item shall include construction of Asphalt Concrete Dike and Ramp Transition at the locations shown on the Plan and in accordance with Subsections 203-6, "Asphalt Concrete" and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt binder to be mixed with the aggregate shall be PG 64-10.

The asphalt concrete dike shall be constructed per APWA Standard Plan 120-2 and Ramp transition per Caltrans Standard Plan A88A at the locations and curb heights as shown on the plans and as directed by the Engineer.

Payment for "Construct Asphalt Concrete Dike Per APWA Standard Plan 120-2 with Ramp Transition" will be made at the contract unit price per square foot (SF) of AC dike with ramp transition. The unit price bid shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, tack coat, asphalt concrete and all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

43. Construct Type "A" or "B" PCC Sidewalk per City of Yucaipa Std. No. 115-2 width as noted or Construct PCC Sidewalk per Riverside County Std. No. 401, width as noted:

44. Construct 4" PCC Sidewalk Pad and/or steps as needed, width to match existing and length as noted:

This item shall consist of construction of PCC sidewalk, as shown and dimensioned on the Plan, in accordance with City of Yucaipa Std. Plan No. 115-2 and Riverside County Std. Plan No. 401, and Subsection 303-5, "Concrete Curb, Walks, etc.," of the SSPWC, except as specified herein, concrete shall be Type V, Class 520-C-2500, as specified in subsection 201-1.1.2, "Concrete Specified by Class" of the Standard Specifications.

In order to meet ADA requirements, cross slope of new sidewalk shall be 1.5%. The Contractor may be directed to construct new concrete walkways or steps in landscaped areas and on private property, where required.

All pull boxes; meter boxes; and valve covers shall be adjusted to proposed finish grade and approved by the engineer in the field prior to placement of PCC.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk within construction limits where encountered for constructing new sidewalk. The remaining asphalt concrete or PCC pavement adjacent to new sidewalk shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

The Contractor shall protect all existing drainage pipes and structures and other existing improvements not designated to be removed in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of 36" clearance adjoining excavated areas within parkway limits for wheelchair and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

Once work is started, the Contractor has ten (10) working days to perform and complete all work (hard and softscape) at each location.

Forming

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete sidewalk construction.

Finishing

All sidewalk areas shall be finished and scored per details on standard, landscape or as directed by the Engineer. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Admixtures

Should the Contractor request and obtain permission to use admixtures for his own

benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Grass damaged on either side of the sidewalk for form or reconstruction shall be replaced with sod or matching type compensation for this work shall be part of this bid item, no additional compensation will be allowed.

Payment for "Construct Type "A" or "B" PCC Sidewalk per City of Yucaipa Std. No. 115-2, width as noted or Construct PCC Sidewalk per Riverside County Std. No. 401, width as noted" and "Construct 4" PCC Sidewalk Pad and/or steps as needed, width to match existing and length as noted" will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

- 45. Construct Residential Driveway per City of Yucaipa Standard Dwg. 109-2 and per APWA Standard Plan 110-2, Type A, Revise Layout per Detail "A" or Construct Residential Driveway per Riverside County Standard No. 213, Revise Layout per Driveway Detail "B", See Sheet 5:**
- 46. Construct Commercial Driveway per City of Yucaipa Standard Dwg. 110-1 and per APWA Standard Plan 110-2, Type C, Revise Layout per Detail "D", See Sheet 5 or Construct Commercial Driveway per Riverside County Standard No. 207A:**
- 47. Construct Residential Driveway per City of Yucaipa Standard Dwg. 109-2 and per APWA Standard Plan 110-2, Type A, Revise Layout per Detail "A", See Sheet 5. Modified with 8" Thick Concrete for Commercial use or Construct Residential Driveway per Riverside County Standard No. 213, Revise Layout per Driveway Detail "B", See Sheet 5. Modified with 8" Thick Concrete for Commercial use:**

Contractor shall construct: "Residential Driveway per City of Yucaipa Standard Dwg. 109-2 and per APWA Standard Plan 110-2, Type A, Revise Layout per Detail "A" or Construct Residential Driveway per Riverside County Standard No. 213, Revise Layout per Driveway Detail "B", See Sheet 5", "Construct Commercial Driveway per City of Yucaipa Standard Dwg. 110-1 and per APWA Standard Plan 110-2, Type C, Revise Layout per Detail "D", See Sheet 5 or Construct Commercial Driveway per Riverside County Standard No. 207A" and "Construct Residential Driveway per City of Yucaipa Standard Dwg. 109-2 and per APWA Standard Plan 110-2, Type A, Revise Layout per Detail "A", See Sheet 5. Modified with 8" Thick Concrete for Commercial use or Construct Residential Driveway per Riverside County Standard No. 213, Revise Layout per Driveway Detail "B", See Sheet 5. Modified with 8" Thick Concrete for Commercial use" All work shall conform to the applicable portions of Section 303-5 "Concrete Curb, Walks, etc.," of the Standard Specifications.

The Contractor shall adjust all existing utility boxes and conduit, or water meter boxes within the new driveway approach, to its new finished grade, and the adjustment shall be included in the bid price per square foot of Driveway Approach. Removals and/or

relocations necessary for driveway approach construction are to be paid as part of clearing and grubbing, except where a separate bid item exists for a stated removal or relocation item of work.

Concrete shall be class 560-C-3250.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

New improvements shall be constructed to grades as indicated on the plans to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

Payment for Construct: "Residential Driveway per City of Yucaipa Standard Dwg. 109-2 and per APWA Standard Plan 110-2, Type A, Revise Layout per Detail "A" or Construct Residential Driveway per Riverside County Standard No. 213, Revise Layout per Driveway Detail "B", See Sheet 5", "Construct Commercial Driveway per City of Yucaipa Standard Dwg. 110-1 and per APWA Standard Plan 110-2, Type C, Revise Layout per Detail "D", See Sheet 5 or Construct Commercial Driveway per Riverside County Standard No. 207A" and "Construct Residential Driveway per City of Yucaipa Standard Dwg. 109-2 and per APWA Standard Plan 110-2, Type A, Revise Layout per Detail "A", See Sheet 5. Modified with 8" Thick Concrete for Commercial use or Construct Residential Driveway per Riverside County Standard No. 213, Revise Layout per Driveway Detail "B", See Sheet 5. Modified with 8" Thick Concrete for Commercial use" will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

48. Construct 3" of Asphalt Concrete Pavement over 95% compacted native, install 2"X4" redwood headers for edge support or Construct Asphalt Concrete Residential Driveway Approach per Riverside County Std. Dwg. 206:

This item shall include construction of Asphalt Concrete Residential Drive Approach at the locations shown on the Plan and in accordance with Subsections 203-6, "Asphalt Concrete" and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt binder to be mixed with the aggregate shall be PG 64-10.

The Contractor shall adjust all existing utility boxes and conduit, or water meter boxes within the new driveway approach, to its new finished grade, and the adjustment shall be included in the bid price per square foot of Driveway Approach. Removals and/or relocations necessary for driveway approach construction are to be paid as part of clearing and grubbing, except where a separate bid item exists for a stated removal or relocation item of work.

New improvements shall be constructed to grades as indicated on the plans to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

Payment for "Construct 3" of Asphalt Concrete Pavement over 95% compacted native, install 2"x4" redwood headers for edge support or Construct Asphalt Concrete Residential Driveway Approach per Riverside County Std. Dwg. 206" will be made at the contract unit price per square foot (SF). The unit price bid shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, tack coat, asphalt concrete and all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

49. Construct 12" of 95% compacted native driveway access:

This item shall include "construct 3" of Asphalt Concrete Pavement over 95% compacted native, install 2"x4" redwood headers for edge support", "Construct 12" of 95% compacted native driveway access" at the locations shown on the Plan and in accordance with Subsections 301-1, "Subgrade Preparations", 203-6, "Asphalt Concrete" and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein.

AC driveway and transitions shall be three inches in total thickness, AC type and binder to be used shall be the same as that on the street pavement. The Contractor shall furnish and install 2"x4" redwood headers at the sides of the driveways or transitions, as directed by the Engineer.

The Contractor shall adjust all existing utility boxes and conduit, or water meter boxes within the new driveway approach, to its new finished grade, and the adjustment shall be included in the bid price per square foot of Driveway Approach. Removals and/or relocations necessary for driveway approach construction are to be paid as part of clearing and grubbing, except where a separate bid item exists for a stated removal or relocation item of work.

New improvements shall be constructed to grades as indicated on the plans to match existing improvements and field condition with proper grade to form a safe and smooth riding surface.

Payment for "Construct 3" of Asphalt Concrete Pavement over 95% compacted native, install 2"x4" redwood headers for edge support" and "Construct 12" of 95% compacted native driveway access" will be made at the contract unit price per square foot (SF). The unit price bid shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, tack coat, asphalt concrete and all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

50. Construct Case "A" Curb Ramp per Caltrans Standard Plan A88A and as Noted (see Sheet 6 for Grading Detail) or Construct Case "A" Curb Ramp per Riverside County Std. No. 403 and as Noted (see Sheet 6 Grading Detail) or Construct Bike Ramp per Notes on Caltrans Standard Plan A88A, NCHRP 672 Exhibit 6-67 and per Detail "G", see Sheet 5

51. Construct 4" Type A Island Passageway Per Caltrans Standard Plan A88A, and per Roundabout Grading Detail Sheet:

This item shall include construction of PCC curb ramps with or without retaining curb and detectable warning devices in conformance with Federal ADA Guidelines and Caltrans Standard Plan No. A88A and A88B, with case and type as shown per plan and NCHRP Report 672 Exhibit 6-67. All work shall be in accordance with the applicable provisions of Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC.

Contractor shall install cast-in-place (wetcast) Detectable Warning Devices (DWD) per Caltrans Standard Plan No. A88A. DWD shall consist of a surface of truncated domes aligned in a square grid pattern. Detectable Warning Devices shall be yellow color and shall be cast in place type. Detectable Warning surface shall extend 36-inches minimum (from the back of the curb face) in the direction of travel, and the full width of the curb ramp.

Concrete shall be class 560-C-3250.

Contractor shall submit a sample of the detectable warning surface to the Engineer for approval, prior to start of construction.

The Contractor shall construct new concrete sidewalk, curb ramps, flares, monolithic curbs, and other miscellaneous concrete construction conforming to Section 303-5 of the SSPWC, with lines and grades to meet existing. In order to meet ADA requirements, cross slope of new sidewalk shall be 1.5% maximum.

All pull boxes; meter boxes; and valve covers shall be adjusted to proposed finish grade and approved by the engineer in the field prior to placement of PCC.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk within construction limits where encountered for constructing new curb ramps. The remaining asphalt concrete or PCC pavement adjacent to new curb ramp shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

The Contractor shall protect all existing drainage pipes and structures and other existing improvements not designated to be removed in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of 36" clearance adjoining excavated areas within parkway limits for wheelchair and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

Construction shall include unclassified excavation which consists of all excavation for the construction of curb ramps. The Contractor shall also cut and remove any tree roots encountered within construction limits to at least six (6) inches below the subgrade, and remove any previously removed tree stumps encountered.

Some areas adjoining to new curb ramps will be lower or higher than new ramp grade. At these locations, the Contractor shall be required to re-grade the area from the edge of the new ramp to meet existing ground. Also, the Contractor shall fill all low areas to meet new or existing grade by using uncontaminated project excavation materials.

Contractor shall construct new Portland cement concrete (PCC) Spandrel Monolithic with Curb Access Ramp, conforming to Subsection 303-5, "Concrete Curb, Walks, etc.," of the SSPWC.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Measurement and Payment for "Construct Case "A" Curb Ramp per Caltrans Standard Plan A88A and as Noted (see Sheet 6 for Grading Detail) or Construct Case "A" Curb Ramp per Riverside County Std. No. 403 and as Noted (see Sheet 6 Grading Detail) or Construct Bike Ramp per Notes on Caltrans Standard Plan A88A, NCHRP 672 Exhibit 6-67 and per Detail "G", see Sheet 5" and "Construct 4" Type A Island Passageway Per Caltrans Standard Plan A88A, and per Roundabout Grading Detail Sheet" shall be paid at the price bid per Square Foot (SF) as listed in the bid schedule and shall be considered full compensation for furnishing all labor, materials, tools, equipment to perform all work involved including excavation, subgrade preparation, root removal, detectable warning devices, restoring form areas, miscellaneous grading of surrounding areas to match grades and all other work as required to complete the work. The unit price bid per each curb ramp or portion thereof, includes monolithic retaining curb where curbs are required based on field conditions, furnishing and installing detectable warning surfaces per Federal ADA and Manufacturer's requirements, warranties, and all miscellaneous improvements located between the BCR and ECR of the curb return where the curb ramp is to be located. No additional compensation will be allowed therefore.

- 52. Construct Chain Link Fence in kind to like conditions or better:**
- 53. Construct 4 to 5-ft Wide Single Swing Walkway Chain-Link Gate in-Kind to like Conditions or Better:**
- 54. Construct 12 to 14-ft Wide Double Swing Driveway Chain-Link Gate in-Kind to like Conditions or Better:**
- 55. Construct 16 to 20-ft Wide Rolling Driveway Chain-Link Gate in-Kind to like Conditions or Better:**
- 56. Construct Wooden Fence in-Kind to like Conditions or Better:**
- 57. Construct 4 to 5-ft Wide Single Swing Walkway Wooden Gate in-Kind to like Conditions or Better:**
- 58. Construct Wrought Iron Fence in-Kind to like Conditions or Better:**
- 59. Construct 4 to 5-ft Wide Single Swing Walkway Wrought Iron Gate in-Kind to like Conditions or Better:**
- 60. Construct 12 to 14-ft Wide Double Swing Driveway Wrought Iron Gate in-Kind to like Conditions or Better:**
- 61. Construct 3' High Decorative Wrought Iron Fence Behind Curb as Shown:**

Contractor shall construct chain link , Wooden or Wrought Iron fence including gates in-kind to like condition or better to the locations as shown on the construction plans, in accordance with standard plan No. 600-3 of the SSPWC, Section 304 "Metal Fabrication and Construction" and/or as directed by the Engineer.

Decorative wrought iron fence profile section, layout and finish, shall be approved by the Engineer.

Care shall be exercised not to damage adjacent improvements within private property or within the Public Right-of-Way. The contractor shall replace or reconstruct any existing or newly installed improvements damaged during the construction and/or

maintenance of temporary and/or permanent fence/gate and related improvements or appurtenances.

Payment for "Construct Chain Link Fence, Including Gates In-Kind to Like Condition or Better", "Construct Wooden or Wrought Iron Fence, Including Gates In-Kind to Like Condition or Better" and "Construct 3' High decorative wrought iron fence behind curb as shown" shall be per the contract unit price bid per linear foot (LF) and will be based on the actual length constructed and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to replacement of the fence/gate at the location as shown on the plan, construction of required footings for permanent fence/gate as required, Walls, Pilasters, required electrical modifications (if needed), excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

62. Construct 1.5" Minimum of Asphalt Concrete Overlay Over 3" of Asphalt Concrete Pavement:

Dense Graded Asphalt Concrete (DGAC) Overlay Type C PG 64-10

This item shall include construction of 1.5 Minimum Dense Graded Asphalt Concrete (DGAC) overlay, as shown on the Plan, in accordance with Subsections 203-6, "Asphalt Concrete," and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt concrete overlay shall be placed in one lift.

Tack coat shall be Grade SS-1H per subsection 302-5.4 of the Standard Specifications. Tack coat shall be applied at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints on A.C. catching and P.C.C. surfaces and edges against which AC is to be placed.

Curbs, walks, gutters, and other structures shall be carefully protected, and any adjoining improvement damaged by spattering or tracking with tack coat shall be thoroughly cleaned.

The contact surfaces of all cold pavement joints, curbs, gutters, etc. shall be painted with Grade SS-1h emulsified asphalt immediately before the adjoining AC pavement is placed. The Contractor shall clean the existing pavement surface, including gutters, immediately prior to application of the tack coat. Cleaning shall be accomplished by means of a self-propelled, mechanical street sweeper. The Contractor shall also be responsible for sweeping areas inaccessible to mechanized sweeping equipment. All debris generated shall be removed from the project site and properly disposed of. Use of air blowing equipment shall be prohibited.

The Contractor shall use a paving machine for the placement of the asphalt concrete overlay. The asphalt paving machine shall be equipped with a hydraulically

extendable variable width screed with heating and vibration for uniform compaction and surface texture over the entire width of the paving mat. The standard screed width shall be ten feet (10'), capable of extension to at least 12 feet.

The initial breakdown rolling and the finished rolling shall be accomplished with a two-axle tandem roller, minimum 8 to 10 tons.

The Contractor shall water-test all finished A.C. surfacing prior to final inspection. Any irregularities causing water to stand shall be corrected at the Contractor's expense.

Upon completion, the pavement surface shall be true to grade and cross section, in accordance with Subsection 302-5.6.2, "Density and Smoothness," of the SSPWC. If the finished surface does not meet the specified surface tolerance, it shall be brought into tolerance by abrasive grinding, utilizing diamond cutting blades followed by a fog seal coat applied to the areas which have been ground.

Abrasive grinding shall conform to the first paragraph and last four paragraphs of Section 42-2.02, "Construction," of the Caltrans Standard Specifications, with the following exception: Residue from grinding operations shall be removed from the project site and properly disposed of at the Contractor's expense.

Corrective work described above shall be at the Contractor's expense.

Temporary surfacing shall be placed only when directed by the Engineer, to safeguard the public. Payment for temporary surfacing shall be included in the unit price bid herein (1.5" DGAC Overlay), unless otherwise specified in these Specifications.

Dense Graded Asphalt Concrete (DGAC) Type B PG 64-10:

This item shall include construction of 3" Asphalt Concrete (AC) as shown on the Plan, in accordance with Subsections 203-6 "Asphalt Concrete," and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt concrete shall be placed in multiple lifts.

Tack coat shall be Grade SS-1H per subsection 302-5.4 of the Standard Specifications. Tack coat shall be applied at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints on A.C. catching and P.C.C. surfaces and edges against which AC is to be placed.

Curbs, walks, gutters, and other structures shall be carefully protected, and any adjoining improvement damaged by spattering or tracking with tack coat shall be thoroughly cleaned.

The contact surfaces of all cold pavement joints, curbs, gutters, etc. shall be painted with Grade SS-1h emulsified asphalt immediately before the adjoining AC pavement is placed. The Contractor shall clean the existing pavement surface, including gutters,

immediately prior to application of the tack coat. Cleaning shall be accomplished by means of a self-propelled, mechanical street sweeper. The Contractor shall also be responsible for sweeping areas inaccessible to mechanized sweeping equipment. All debris generated shall be removed from the project site and properly disposed of. Use of air blowing equipment shall be prohibited.

The Contractor shall use a paving machine for the placement of the asphalt concrete. The asphalt paving machine shall be equipped with a hydraulically extendable variable width screed with heating and vibration for uniform compaction and surface texture over the entire width of the paving mat. The standard screed width shall be ten-feet (10'), capable of extension to at least 12-feet.

The initial breakdown rolling and the finished rolling shall be accomplished with a two-axle tandem roller, minimum 8 to 10 tons.

The Contractor shall water-test all finished A.C. surfacing prior to final inspection. Any irregularities causing water to stand shall be corrected at the Contractor's expense.

Upon completion, the pavement surface shall be true to grade and cross section, in accordance with Subsection 302-5.6.2, "Density and Smoothness," of the SSPWC. If the finished surface does not meet the specified surface tolerance, it shall be brought into tolerance by abrasive grinding, utilizing diamond cutting blades followed by a fog seal coat applied to the areas which have been ground.

Abrasive grinding shall conform to the first paragraph and last four paragraphs of Section 42-2.02, "Construction," of the Caltrans Standard Specifications, with the following exception: Residue from grinding operations shall be removed from the project site and properly disposed of at the Contractor's expense.

Additional grinding/header cuts shall be performed as necessary and as shown on plans, to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel to the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at line perpendicular to the pavement centerline, within any ground area. All ground areas shall be neat rectangular areas of uniform surface appearance. A fog seal coat shall be applied to the areas that have been ground, in accordance with Section 37, "Bituminous Seals," of the Caltrans Standard Specifications.

Corrective work described above shall be at the Contractor's expense.

Temporary surfacing shall be placed only when directed by the Engineer, to safeguard the public. Payment for temporary surfacing shall be included in the unit price bid herein (3" DGAC Over 4.5" Pulverized AC Concrete), unless otherwise specified in these Specifications.

Payment for "Construct 1.5" Minimum of Asphalt Concrete Overlay Over 3" of Asphalt

Concrete Pavement”, will be made at the contract unit price per Square Foot (SF) of AC pavement base course and Overlay. The unit price bid for the DGAC Base Course and Overlay shall include all surface preparation, tack coat, compaction, materials, labor, tools, time, equipment and incidentals required to complete the work. No additional compensation will be allowed therefore for either method selected by the contractor.

63. CONSTRUCT 4.5" THICK AGGREGATE BASE (PULVERIZED MATERIAL):

Prior to placement of Aggregate Base (Pulverized Material), at least the upper 12 inches of subgrade soils should be scarified, moisture-conditioned if necessary, and recompacted to at least 90% of the laboratory maximum dry density as defined by ASTM Standard D1557 test method. Any areas with loose or wet soil, which are considered unsuitable to support pavement sections should be over-excavated and replaced with compacted fill. Aggregate Base shall be Class 2 and shall conform to the provisions in Section 26, “Aggregate Bases,” of the Standard Specifications and these special provisions.

Pulverized asphalt concrete or concrete material produced within the limits of this project (by pulverizing, grinding, cold planing, etc) may be substituted for Aggregate Base and placed in the subgrade in lieu of Aggregate Base shown in the typical section(s). Should the quantity of material generated by pulverizing the existing pavement surfacing be insufficient to construct the subgrade, as shown by the typical section(s) included in the plans, deficiencies shall be made up with Class 2 Aggregate Base.

Surplus pulverized material may be incorporated in embankments not less than one foot below finished grade(s) or shall become the property of the Contractor and shall be disposed of outside of the R/W. Surplus pulverized material shall be included in considerations under provisions of Section 19-2.06, "Surplus Material," of the Standard Specifications.

After pulverized material has been removed, stockpiled, hauled and the subgrade prepared, it shall be placed, shaped, graded and compacted to the lines, grades and depth as shown on the plans and/or typical sections. Water shall be applied to ensure proper moisture content at the time of grading and compaction. The pulverized asphalt concrete shall be thoroughly compacted to not less than 95 percent relative compaction.

The completed compacted aggregate base, pulverized material in lieu of aggregate base, or a combination thereof shall be 4.5” thick and tested for accuracy of grade. Sections found to not meet prescribed grades shall be reshaped and recompacted. Finish grade on aggregate base, pulverized material in lieu of aggregate base, or a combination thereof shall conform to Section 19-1.03, "Grade Tolerance," of the Standard Specifications.

Where pulverized material is used in lieu of aggregate base the restrictions that reclaimed material shall not exceed 50 percent of the total volume of the aggregate used, under Section 26, "Aggregate Bases," of the Standard Specifications shall not apply.

Payment for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in hauling, grading, shaping, watering and compacting the Class 2 Base and/or pulverized asphalt concrete shall be considered as included in the contract price paid per Square Foot (SF) for "4.5" Thick Aggregate Base" and no additional compensation will be allowed therefor. All work associated with utilizing pulverized material as Class 2 base including costs for hauling, stockpiling, grading, shaping, watering, blending, compacting, and disposal of surplus pulverized material shall be considered as included in the contract prices paid for 4.5" Thick Aggregate Base, and no additional payment will be made therefor.

64. Construct 1.5" Thick Minimum Dense Graded Asphalt Concrete (DGAC) Overlay Type C PG 64-10 Or Construct 10' Header Cut or as shown on plans (1.5" min. thickness) along existing asphalt concrete pavement joints:

This item shall include construction of Dense Graded Asphalt Concrete (DGAC) overlay, as shown on the Plan, in accordance with Subsections 203-6, "Asphalt Concrete," and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt concrete overlay shall be placed in one lift.

Tack coat shall be Grade SS-1H per subsection 302-5.4 of the Standard Specifications. Tack coat shall be applied at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints on A.C. catching and P.C.C. surfaces and edges against which AC is to be placed.

Curbs, walks, gutters, and other structures shall be carefully protected, and any adjoining improvement damaged by spattering or tracking with tack coat shall be thoroughly cleaned.

The contact surfaces of all cold pavement joints, curbs, gutters, etc. shall be painted with Grade SS-1h emulsified asphalt immediately before the adjoining AC pavement is placed. The Contractor shall clean the existing pavement surface, including gutters, immediately prior to application of the tack coat. Cleaning shall be accomplished by means of a self-propelled, mechanical street sweeper. The Contractor shall also be responsible for sweeping areas inaccessible to mechanized sweeping equipment. All debris generated shall be removed from the project site and properly disposed of. Use of air blowing equipment shall be prohibited.

The Contractor shall use a paving machine for the placement of the asphalt concrete overlay. The asphalt paving machine shall be equipped with a hydraulically extendable variable width screed with heating and vibration for uniform compaction

and surface texture over the entire width of the paving mat. The standard screed width shall be ten feet (10'), capable of extension to at least 12 feet.

The initial breakdown rolling and the finished rolling shall be accomplished with a two-axle tandem roller, minimum 8 to 10 tons.

The Contractor shall water-test all finished A.C. surfacing prior to final inspection. Any irregularities causing water to stand shall be corrected at the Contractor's expense.

Upon completion, the pavement surface shall be true to grade and cross section, in accordance with Subsection 302-5.6.2, "Density and Smoothness," of the SSPWC. If the finished surface does not meet the specified surface tolerance, it shall be brought into tolerance by abrasive grinding, utilizing diamond cutting blades followed by a fog seal coat applied to the areas which have been ground.

Abrasive grinding shall conform to the first paragraph and last four paragraphs of Section 42-2.02, "Construction," of the Caltrans Standard Specifications, with the following exception: Residue from grinding operations shall be removed from the project site and properly disposed of at the Contractor's expense.

Additional grinding/header cuts shall be performed at 10-ft Min. or as necessary and as shown on plans, to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel to the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at line perpendicular to the pavement centerline, within any ground area. All ground areas shall be neat rectangular areas of uniform surface appearance. A fog seal coat shall be applied to the areas that have been ground, in accordance with Section 37, "Bituminous Seals," of the Caltrans Standard Specifications.

Corrective work described above shall be at the Contractor's expense.

Temporary surfacing shall be placed only when directed by the Engineer, to safeguard the public. Payment for temporary surfacing shall be included in the unit price bid herein (1.5" DGAC Overlay), unless otherwise specified in these Specifications.

Payment for "Construct 1.5" Thick Minimum Dense Graded Asphalt Concrete (DGAC) Overlay Type C PG 64-10 Or Construct 10' Header Cut or as shown on plans (1.5" min. thickness) along existing asphalt concrete pavement joints", will be made at the price bid per Square Foot (SF) as listed in the bid. The unit price bid for the DGAC Overlay Course shall include all surface and subgrade preparation, tack coat, 95% compaction, rock dust blotter, materials, labor, tools, time, equipment and incidentals required to complete the work. No additional compensation will be allowed therefore.

65. Construct 4" of PCC Stamped Concrete Pavement over 12" Compacted Native Soil:

This item shall include "Construct 4" of PCC Stamped Concrete Pavement over 12" Compacted Native Soil", at the locations shown on the Plan and in accordance with Subsections 301-1, "Subgrade Preparations", Section 201 "Concrete, Mortar and Related Materials", Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC; Except as modified or supplemented herein.

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

Relative compaction of finished subgrade under paved areas and concrete curb and gutter shall be modified to require 95% minimum relative compaction of the top 12" of the subgrade. All material removed and replaced for remedial grading, trenching, or disturbed by tree removal shall be compacted at 95% minimum relative compaction, even where it extends beyond 12" below finished subgrade.

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete Pavement construction.

All Pavement areas shall be finished and scored per plans or as directed by the Engineer. Contractor shall present finished stamped Concrete sample for approval before construction. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Payment for "Construct 4" of PCC Stamped Concrete Pavement over 12" Compacted Native Soil", will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, Finished Surface Clear Sealer, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

66. Construct 8" of PCC Pavement over 12" Compacted Native Soil:

This item shall include "Construct 8" of PCC Pavement over 12" Compacted Native Soil", at the locations shown on the Plan and in accordance with Subsections 301-1, "Subgrade Preparations", Section 201 "Concrete, Mortar and Related Materials", Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC; Except as modified or supplemented herein.

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

Relative compaction of finished subgrade under paved areas and concrete curb and gutter shall be modified to require 95% minimum relative compaction of the top 12" of the subgrade. All material removed and replaced for remedial grading, trenching, or disturbed by tree removal shall be compacted at 95% minimum relative compaction, even where it extends beyond 12" below finished subgrade.

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete Pavement construction.

All Pavement areas shall be finished and scored per plans or as directed by the Engineer. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Payment for "Construct 8" of PCC Pavement over 12" Compacted Native Soil", will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

67. Construct 4" of PCC Pavement over 12" Compacted Native Soil:

This item shall include "Construct 4" of PCC Pavement over 12" Compacted Native Soil", at the locations shown on the Plan and in accordance with Subsections 301-1, "Subgrade Preparations", Section 201 "Concrete, Mortar and Related Materials", Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC; Except as modified or supplemented herein.

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

Relative compaction of finished subgrade under paved areas and concrete curb and gutter shall be modified to require 95% minimum relative compaction of the top 12" of the subgrade. All material removed and replaced for remedial grading, trenching, or disturbed by tree removal shall be compacted at 95% minimum relative compaction, even where it extends beyond 12" below finished subgrade.

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete Pavement construction.

All Pavement areas shall be finished and scored per plans or as directed by the Engineer. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Payment for "Construct 4" of PCC Pavement over 12" Compacted Native Soil", will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

68. Construct 24" Wide Curb Outlet structure per San Bernardino County Std. Dwg. 210 or Construct 48" Under Sidewalk Drain per Riverside County Std. Dwg. 309:

This item shall include construction of a curb outlets or Under Sidewalk Drains as shown on the Plan, in accordance with San Bernardino County Standard Dwg. 210 or Riverside County Std. Dwg. 309 including all referenced Standard Plans and Subsection 303-1, "Concrete Structures," of the SSPWC.

Payment for "Construct 24" Wide curb outlet structure per San Bernardino County std. dwg. 210 or Construct 48" Under Sidewalk Drain per Riverside County Std. Dwg. 309" will be made at the contract unit price per each (EA) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

69. Construct 4" Residential Curb Drain per Detail "E" Case "A" or Construct 4" Residential Curb Drain per Detail "E" Case "B", see Sheet 5:

This item shall include construction of curb drains as shown on the Plans, including all referenced Standard Plans and Subsection 303-1, "Concrete Structures," of the SSPWC.

Payment for "Construct 4" Residential Curb Drain per Detail "E" Case "A" or Construct 4" Residential Curb Drain per Detail "E" Case "B", see Sheet" will be made at the contract unit price per each (EA) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

70. Construct 2-2" Sch. 40 PVC Sleeves for Landscape and Irrigation:

This item includes furnishing and installing 2-2" PVC (Schedule 40) conduits and fittings, as shown on the Plan, and in accordance with Section 86-2.05 of the Caltrans Standard Specifications, except as modified or supplemented herein. This shall include excavation, trench backfill, compaction, pull ropes and all appurtenant work thereto. After conductors have been installed, the ends of conduits shall be seal with a temporary Cap. Field conditions at the time of construction may dictate minor changes to the locations of conduits to facilitate the contractors work. Such minor changes will not constitute extra work. Actual installation shall be done in the most direct manner or as directed by the Engineer.

Conduit may be placed by open trench method. Conduit under existing sidewalk may be placed by the boring/jacking method, or by removing and reconstructing the entire width of the sidewalk. Conduit depth shall follow depth shown on sleeving Detail E, Sheet 6 of Landscape and Irrigation Plans. The conduit shall be placed in the bottom of the trench and the trench backfilled with native soil up to the top of subgrade, and compacted to 95% relative minimum compaction. No open trench will be allowed in the travel lane overnight.

Payment for "Construct 2-2" Sch. 40 PVC sleeves for landscape and irrigation", will be made at the contract unit price per linear foot (LF) and shall include but not be limited to all excavations and/or placement/compaction of native material, re-grading to match proposed grades, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

71. Construct Reinforced Concrete Block Wall per APWA standard plan 601-4, Type 3 and as Noted:

72. Construct Split Face Masonry Retaining Wall per APWA Standard plan 618-3, Type B and as Noted:

73. Construct Concrete Block Slough Wall per APWA standard plan 622-4 and as noted:

This item shall consist of construction of Concrete block wall and concrete block slough wall, as shown on plans at the back of sidewalk to match existing grades, in accordance with Standard Plan No. 601-4, 618-3 and 622-4 of the SPPWC, applicable City Standards, and Subsection 303-4, "Masonry Construction," of the SSPWC.

Payment for "Construct Reinforced Concrete Wall per APWA standard plan 601-4, type 3 and as noted", "Construct Split Face Masonry Retaining Wall per APWA standard plan 618-3, type B and as noted" and "Construct Concrete Block Slough Wall per APWA standard plan 622-4 and as noted" will be made at the contract unit price per linear foot (LF) and shall include but not be limited to all excavations and/or placement/compaction of native material, re-grading to match proposed grades, footings, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

74. Install 2 Sack Slurry Backfill over 48" Storm Drain Pipe per Detail "C", see Sheet 5:

This item shall consist of "Install 2 sack slurry backfill over 48" storm drain pipe per detail "C", see sheet 5" as shown on the Plans, including all referenced Standard Plans and Subsection 303-1, "Concrete Structures," of the SSPWC. Slurry placement shall extend the full driveway width plus an additional 5' to every side.

Payment for "Install 2 sack slurry backfill over 48" storm drain pipe per detail "C", see sheet 5" will be made at the contract unit price per each (EA) and shall include but not be limited to all excavations and/or placement/compaction of native material, re-grading to match proposed grades, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

75. Construct 60" RCP Storm Drain Pipe, Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 60" Reinforced Concrete Pipe (RCP) storm drain mainline to the indicated grade and alignment shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC, except as modified herein.

Pipe Class shall be as shown on the Plan. Where pipe class is not shown on the Plan, it shall be in accordance with the manufacturer's recommendation with a minimum D-load of 1500.

Contractor shall perform onsite factory inspections of pipe to ensure pipe quality. Pipe shall not be damaged in any way. Once Contractor takes possession of pipe, it shall be his responsibility to ensure pipe is not damaged.

RCP shall be manufactured in accordance with applicable provisions of Subsection 207-2, "Reinforced Concrete Pipe (RCP)," of the SSPWC. Basis of acceptance of the reinforced concrete pipe shall be a signed Certificate of Compliance with these Specifications from the manufacturer in accordance with Section 6-1.07 of the Caltrans Standard Specifications.

The Contractor is responsible for protecting existing utilities in place during all phases of storm drain trenching.

Excavation, installation, bedding, backfill and compaction for the RCP shall conform to Section 306, "Underground Conduit Construction" of the SSPWC, CALOSHA Safety Regulations, the details shown on the Plan, and these Special Provisions. Materials for reinforced concrete pipe shall conform to Section 207-2, "Reinforced Concrete Pipe (RCP)," of the SSPWC.

Any materials encountered during excavation, including but not limited to, asphalt concrete, concrete (reinforced or non-reinforced), rocks, and boulders, shall be removed and disposed off by the Contractor. The Contractor may place excavated materials temporarily on one side of the trench.

Trenching, Bedding and backfill shall be per City of Yucaipa "Main Line trench repair detail" Standard Drawing 106-3

Rocks included in the backfill shall be mixed with suitable excavated material so as to eliminate voids. Crushed Aggregate Base to be used for bedding shall conform to Subsection 200-2.2 of the SSPWC. Backfill shall be placed on each side of the pipe simultaneously to avoid unbalanced loads on the pipe. Spoils from trench excavation shall be immediately removed from the project site and disposed off.

Relative compaction requirements shall be in accordance with Section 306, "Underground Conduit Construction" of the SSPWC. Testing shall be done in each lift of trench backfill placed and compacted. Areas not passing compaction shall be recompacted and retested. Backfilling over a lift that failed compaction is not permitted.

Payment for this item shall be made at the price bid per lineal foot (LF) of RCP actually furnished and installed, including removal and construction of brick and mortar seal, connecting new pipes to existing or new facilities, excavation, export of excess materials, installation, bedding, backfill, compaction, and no additional compensation will be allowed therefor.

76. Construct 8 Gauge 48" CMP Storm Drain Pipe with 2-2/3"x1/2" Corrugations. Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 48" Corrugated Metal Pipe (CMP) storm drain mainline to the indicated grade and alignment shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC, except as modified herein.

Pipe Gauge shall be as shown on the Plan. Where pipe gauge is not shown on the Plan, it shall be in accordance with the manufacturer's recommendation. with 8 gauge minimum.

Contractor shall perform onsite factory inspections of pipe to ensure pipe quality. Pipe shall not be damaged in any way. Once Contractor takes possession of pipe, it shall be his responsibility to ensure pipe is not damaged.

CMP shall be manufactured in accordance with applicable provisions of Subsection 207-11, "Corrugated Steel Pipe and Pipe Arches," of the SSPWC. Basis of acceptance of the Corrugated Metal pipe shall be a signed Certificate of Compliance with these Specifications from the manufacturer in accordance with Section 6-1.07 of the Caltrans Standard Specifications.

The Contractor is responsible for protecting existing utilities in place during all phases of storm drain trenching.

Excavation, installation, bedding, backfill and compaction for the CMP shall conform to Section 306, "Underground Conduit Construction" of the SSPWC, CALOSHA Safety Regulations, the details shown on the Plan, and these Special Provisions. Materials for Corrugated Metal Pipe shall conform to Section 207-11, "Corrugated Steel Pipe and Pipe Arches" of the SSPWC.

Any materials encountered during excavation, including but not limited to, asphalt concrete, concrete (reinforced or non-reinforced), rocks, and boulders, shall be removed and disposed off by the Contractor. The Contractor may place excavated materials temporarily on one side of the trench.

Trenching, Bedding and backfill shall be per City of Yucaipa "Main Line trench repair detail" Standard Drawing 106-3

Rocks included in the backfill shall be mixed with suitable excavated material so as to eliminate voids. Crushed Aggregate Base to be used for bedding shall conform to Subsection 200-2.2 of the SSPWC. Backfill shall be placed on each side of the pipe simultaneously to avoid unbalanced loads on the pipe. Spoils from trench excavation shall be immediately removed from the project site and disposed off.

Relative compaction requirements shall be in accordance with Section 306, "Underground Conduit Construction" of the SSPWC. Testing shall be done in each lift of trench backfill placed and compacted. Areas not passing compaction shall be recompacted and retested, until the required compaction is met. Backfilling over a lift that failed compaction is not permitted.

Payment for this item shall be made at the price bid per lineal foot (LF) of CMP actually furnished and installed, connecting new pipes to existing or new facilities, excavation, export of excess materials, installation, bedding, backfill and compaction and no additional compensation will be allowed therefor.

77. Construct 8 Gauge 57"x38" Arch CMP Storm Drain Pipe with 2-2/3"x1/2" Corrugations. Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 57"x38" Arch Corrugated Metal Pipe (CMP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 76 of these Special Provisions.

78. Construct 8 Gauge 17"x13" Arch CMP Storm Drain Pipe with 2-2/3"x1/2" Corrugations. Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 17"x13" Arch Corrugated Metal Pipe (CMP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 76 of these Special Provisions.

79. Construct 36" RCP Storm Drain Pipe, Backfill Trench per City of Yucaipa Std. Dwg. 106-3.

This item shall include furnishing and installing 36" Reinforced Concrete Pipe (RCP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 75 of these Special Provisions.

80. Construct Construct 24" RCP Storm Drain Pipe, Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 24" Reinforced Concrete Pipe (RCP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 75 of these Special Provisions.

81. Construct 8 Gauge 24" CMP Storm Drain Pipe with 2-2/3"x1/2" Corrugations. Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 24" Corrugated Metal Pipe (CMP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 76 of these Special Provisions.

82. Construct Construct 18" RCP Storm Drain Pipe, Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 18" Reinforced Concrete Pipe (RCP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 75 of these Special Provisions.

83. Construct 8 Gauge 18" CMP Storm Drain Pipe with 2-2/3"x1/2" Corrugations. Backfill Trench per City of Yucaipa Std. Dwg. 106-3:

This item shall include furnishing and installing 18" Corrugated Metal Pipe (CMP) storm drain mainline to the indicated grade and alignment, as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Requirements for this item, including payment, shall be the same as Item No. 76 of these Special Provisions.

84. Construct 48" to 57"x38" CMP Storm Drain Pipe Transition. Coat Welded, Cut and Abraded Surfaces as Specified in SSPWC 210-3.5:

This item shall include furnishing and installing 48" to 57"X38" CMP Storm Drain Pipe Transition, Coat Welded, cut and abraded surfaces as specified in SSPWC 210-3.5 and to the indicated grade and alignment shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC, except as modified herein.

Pipe Gauge shall be as shown on the Plan. Where pipe gauge is not shown on the Plan, it shall be in accordance with the manufacturer's recommendation, with 8 gauge minimum.

Contractor shall perform onsite factory inspections of pipe to ensure pipe quality. Pipe shall not be damaged in any way. Once Contractor takes possession of pipe, it shall be his responsibility to ensure pipe is not damaged.

CMP shall be manufactured in accordance with applicable provisions of Subsection 207-11, "Corrugated Steel Pipe and Pipe Arches," of the SSPWC. Basis of acceptance of the Corrugated Metal pipe shall be a signed Certificate of Compliance with these Specifications from the manufacturer in accordance with Section 6-1.07 of the Caltrans Standard Specifications.

The Contractor is responsible for protecting existing utilities in place during all phases of storm drain trenching.

Excavation, installation, bedding, backfill and compaction for the CMP shall conform to Section 306, "Underground Conduit Construction" of the SSPWC, CALOSHA Safety Regulations, the details shown on the Plan, and these Special Provisions. Materials for Corrugated Metal Pipe shall conform to Section 207-11, "Corrugated Steel Pipe and Pipe Arches" of the SSPWC.

Any materials encountered during excavation, including but not limited to, asphalt concrete, concrete (reinforced or non-reinforced), rocks, and boulders, shall be removed and disposed off by the Contractor. The Contractor may place excavated materials temporarily on one side of the trench.

Trenching, Bedding and backfill shall be per City of Yucaipa "Main Line trench repair detail" Standard Drawing 106-3

Rocks included in the backfill shall be mixed with suitable excavated material so as to eliminate voids. Crushed Aggregate Base to be used for bedding shall conform to Subsection 200-2.2 of the SSPWC. Backfill shall be placed on each side of the pipe simultaneously to avoid unbalanced loads on the pipe. Spoils from trench excavation shall be immediately removed from the project site and disposed off.

Relative compaction requirements shall be in accordance with Section 306, "Underground Conduit Construction" of the SSPWC. Testing shall be done in each lift of trench backfill placed and compacted. Areas not passing compaction shall be recompacted until the required compaction is met. Backfilling over a lift that failed compaction is not permitted.

Payment for this item shall be made at the price bid per each (EA) of CMP Storm Drain Pipe Transition actually furnished and installed, including excavation, export of excess materials, installation, bedding, backfill and compaction and no additional compensation will be allowed therefor.

85. Construct Manhole Pipe-to-Pipe (Large side Inlet) Per Standard Plans For Public Works Construction Standard Plan No. 321-2:

This item shall include construction of storm drain Manhole Pipe-to-Pipe (Large side inlet), as shown on the Plan, in accordance with Standard Plan No. 321-2, of the SPPWC, including all referenced Standard Plans, and Subsection 303-1, "Concrete Structures," of the SSPWC.

The Portland Cement Concrete to be used shall be Class 560-C-3250, in conformance with Section 201-1, "Portland Cement Concrete," of the SPPWC. Reinforcing steel shall be grade 60 billet steel ASTM-A615, conforming to Section 201-2, "Steel Reinforcement for Concrete," of the SSPWC.

Payment for this item will be made at the Contract Unit Price per each (EA) Manhole constructed, including excavation, export of excess materials, installation, bedding, backfill and compaction, and no additional compensation will be allowed therefor.

86. Construct 60" Concrete Collar Per Standard Plans For Public Works Construction Standard Plan No. 380-4:

87. Construct 24" or 18" Concrete Collar Per Standard Plans For Public Works Construction Standard Plan No. 380-4:

This item shall include construction of 60", 24" or 18" Concrete Collar, as shown on the Plan, in accordance with Standard Plan No. 380-4, of the SPPWC, including all referenced Standard Plans, and Subsection 303-1, "Concrete Structures," of the SSPWC.

The Portland Cement Concrete to be used shall be Class 560-C-3250, in conformance with Section 201-1, "Portland Cement Concrete," of the SPPWC. Reinforcing steel shall be grade 60 billet steel ASTM-A615, conforming to Section 201-2, "Steel Reinforcement for Concrete," of the SSPWC.

Payment for this item will be made at the Contract Unit Price per each (EA) Concrete Collar constructed, including excavation, export of excess materials, installation, bedding, backfill and compaction, and no additional compensation will be allowed therefor.

88. Construct 25' Curb Opening Catch Basin and Local Depression per Standard Plans For Public Works Construction Standard Plan No.300-3 and 313-3 Case E:

This item shall include construction of standard twenty-five (25) foot-wide curb opening catch basin, and construction of the local depression adjacent to the catch basin, as shown on the Plan.

Catch basin shall be constructed in accordance with Standard Plan No. 300-3, of the SPPWC, including all referenced standard plans, and Subsection 303-1, "Concrete Structures," of the SSPWC. The Portland Cement Concrete to be used for the catch basin construction shall be Class 560-C-3250, in conformance with Section 201-1, "Portland Cement Concrete," of the SSPWC.

Reinforcing steel shall be grade 60 billet steel ASTM-A615 conforming to Subsection 201-2, "Steel Reinforcement for Concrete," of the SSPWC.

Local depression shall be constructed in accordance with Standard Plan No. 313-3, of the SPPWC, and Subsection 303-5, "Concrete Curbs, Walks, etc." of the SSPWC.

Payment for this item will be made at the contract unit price per each (EA) Catch Basin and Local Depression constructed, including excavation, export of excess materials, installation, backfill and compaction, and no additional compensation will be allowed therefor.

89. Construct 24' Curb Opening Catch Basin and Local Depression per Standard Plans For Public Works Construction Standard Plan No.300-3 and 313-3 Case E:

This item shall include construction of standard twenty-four (24) foot-wide curb opening catch basin, and construction of the local depression adjacent to the catch basin, as shown on the Plan.

All other requirements for this item, including payment, shall be the same as Item No. 119 of these Special Provisions.

90. Construct 21' Curb Opening Catch Basin and Local Depression per Standard Plans For Public Works Construction Standard Plan No.300-3 and 313-3 Case E:

This item shall include construction of standard twenty-one (21) foot-wide curb opening catch basin, and construction of the local depression adjacent to the catch basin, as shown on the Plan.

All other requirements for this item, including payment, shall be the same as Item No. 119 of these Special Provisions.

91. Construct 19' Curb Opening Catch Basin and Local Depression per Standard Plans For Public Works Construction Standard Plan No.300-3 and 313-3 Case E:

This item shall include construction of standard nineteen (19) foot-wide curb opening catch basin, and construction of the local depression adjacent to the catch basin, as shown on the Plan.

All other requirements for this item, including payment, shall be the same as Item No. 119 of these Special Provisions.

92. Construct 14' Curb Opening Catch Basin and Local Depression per Standard Plans For Public Works Construction Standard Plan No.300-3 and 313-3 Case E:

This item shall include construction of standard fourteen (14) foot-wide curb opening catch basin, and construction of the local depression adjacent to the catch basin, as shown on the Plan.

All other requirements for this item, including payment, shall be the same as Item No. 119 of these Special Provisions.

93. Construct 10' Curb Opening Catch Basin and Local Depression per Standard Plans For Public Works Construction Standard Plan No.300-3 and 313-3 Case E:

This item shall include construction of standard ten (10) foot-wide curb opening catch basin, and construction of the local depression adjacent to the catch basin, as shown on the Plan.

All other requirements for this item, including payment, shall be the same as Item No. 119 of these Special Provisions.

94. Construct 7' Modified Curb Opening Catch Basin per Standard Plans For Public Works Construction Standard Plan No.300-3, with Entrance Projection per Std. Plan 314-3 Case 1 and per Detail "A", See Sheet 47:

This item shall include construction of seven (7) foot-wide modified curb opening catch basin, in accordance with Standard Plan No. 303-3, of the SPPWC and entrance projection in accordance with Standard Plan No. 314-3 Case A and per detail A as shown on plan, including all referenced Standard Plans, and Subsection 303-1, "Concrete Structures," of the SSPWC.

The Portland Cement Concrete to be used shall be Class 560-C-3250, in conformance with Section 201-1, "Portland Cement Concrete," of the SPPWC. Reinforcing steel shall be grade 60 billet steel ASTM-A615, conforming to Section 201-2, "Steel Reinforcement for Concrete," of the SSPWC.

Payment for this item will be made at the contract unit price per each (EA) Modified Catch Basin with entrance projection constructed, including excavation, export of excess materials, installation, backfill and compaction, and no additional compensation will be allowed therefor.

95. Construct (2-60" RCP) PCC Headwall Per Caltrans Standard Plan D86B:

96. Construct (1-48" or 2-48" CMP) PCC Headwall Per Caltrans Standard Plan D86B:

This item shall include construction of (2-60" RCP), (1-48" or 2-48" CMP) PCC Headwall, as shown on the Plan, in accordance with Standard Plan D86B of Caltrans Standards, including all referenced Standard Plans, and Subsection 303-1, "Concrete Structures," of the SSPWC.

The Portland Cement Concrete to be used shall be Class 560-C-3250, in conformance with Section 201-1, "Portland Cement Concrete," of the SPPWC. Reinforcing steel shall be grade 60 billet steel ASTM-A615, conforming to Section 201-2, "Steel Reinforcement for Concrete," of the SSPWC.

Payment for this item will be made at the Contract Unit Price per each (EA) Headwall constructed, including excavation, export of excess materials, installation, backfill and compaction, and no additional compensation will be allowed therefor.

97. Construct 4" PVC Yard Drain Connection with Flex Coupling, cut and extend existing pipe as needed to connect to proposed Rip-Rap Channel:

This item shall include construction of 4" Yard Drain Connection with flex coupling, cut and extend existing pipe as needed to connect to proposed Rip-Rap Channel as shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC.

Payment for this item will be made at the Contract Unit Price per each (EA) 4" PVC Yard Drain Connection constructed, including excavation, export of excess materials, installation, backfill and compaction, and no additional compensation will be allowed therefor.

98. Construct Brick and Mortar Bulkhead:

This item shall include construction of double layer brick and mortar bulkhead, as shown on the Plans, in accordance with Subsection 202-1, "Brick" and 303-4, "Masonry Construction".

Payment for this item shall be at the contract unit price for each (EA) bulkhead constructed.

99. Construct Pipe Connection to Existing Storm Drain Structure per Standard Plans For Public Works Construction Standard Plan No. 335-2:

This item shall include construction of pipe connection to existing storm drain pipe or proposed storm drain structure as shown on the Plan, in accordance with Standard Plan No. 335-2 of the SPPWC and as specified in Section 306, "Open Trench Conduit Construction," of the SSPWC.

Payment for this item will be made at the Contract Unit Price per each (EA) pipe Connection constructed, including excavation, export of excess materials, installation, backfill and compaction, and no additional compensation will be allowed therefor.

- 100. Construct Pipe Connection, Coat Welded, Cut and Abraded Surfaces as Specified in SSPCC 210-3.5:**
- 101. Construct Welded Connection and Connect Existing ABS Yard Drain with Flex Coupling, Coat Welded , Cut and Abraded Surfaces as Specified in SSPWC 210-3.5:**

This item shall include “Construct Pipe Connection, Coat Welded, cut and abraded surfaces as specified in SSPWC 210-3.5”, “Construct Welded Connection and Connect Existing ABS Yard Drain with Flex Coupling, Coat Welded , Cut and Abraded Surfaces as Specified in SSPWC 210-3.5” and to the indicated grade and alignment shown on the Plan and as specified in Section 306, “Underground Conduit Construction,” of the SSPWC, except as modified herein.

The Contractor is responsible for protecting existing utilities in place during all phases of storm drain trenching.

Excavation, installation, bedding, backfill and compaction for the CMP shall conform to Section 306, “Underground Conduit Construction” of the SSPWC, CALOSHA Safety Regulations, the details shown on the Plan, and these Special Provisions. Materials for Corrugated Metal Pipe shall conform to Section 207-11, “Corrugated Steel Pipe and Pipe Arches” of the SSPWC.

Any materials encountered during excavation, including but not limited to, asphalt concrete, concrete (reinforced or non-reinforced), rocks, and boulders, shall be removed and disposed off by the Contractor. The Contractor may place excavated materials temporarily on one side of the trench.

Trenching, Bedding and backfill shall be per City of Yucaipa “Main Line trench repair detail” Standard Drawing 106-3

Rocks included in the backfill shall be mixed with suitable excavated material so as to eliminate voids. Crushed Aggregate Base to be used for bedding shall conform to Subsection 200-2.2 of the SSPWC. Backfill shall be placed on each side of the pipe simultaneously to avoid unbalanced loads on the pipe. Spoils from trench excavation shall be immediately removed from the project site and disposed off.

Relative compaction requirements shall be in accordance with Section 306, “Underground Conduit Construction” of the SSPWC. Testing shall be done in each lift of trench backfill placed and compacted. Areas not passing compaction shall be recompacted and retested until the required compaction is met. Backfilling over a lift that failed compaction is not permitted.

Payment for this item shall be made at the price bid per each (EA) pipe connection, including excavation, export of excess materials, installation, bedding, backfill and compaction, and no additional compensation will be allowed therefor

102. Construct Chain-Link Fence Per San Bernardino County Flood Control District File No. S.P. 162:

This item shall consist of construction of Chain-Link as shown on the plan and in accordance with File No. S.P. 162, of San Bernardino County Flood Control District, including all referenced standard plans. Fencing shall be installed at the proposed grade elevations.

Payment for this item will be made at the contract unit price bid per lineal foot (LF) of Chain-Link fence constructed. Payment for fencing, posts, footings, and all work described and specified herein and no additional compensation will be allowed therefor.

103. Construct 24" Thick Grouted Rip-Rap 1/2 Ton. Per Section 72 of Caltrans Std. Specifications:

This item shall include construction of 24" Thick Grouted Rip-Rap ½ Ton., as shown on the Plan and in accordance with Section 72 "Slope Protection" of Caltrans Specifications.

Payment for this item will be made at the Contract Unit Price per square feet (SF) Grouted Rip-Rap constructed, including excavation, export of excess materials, installation, backfill and compaction, and no additional compensation will be allowed therefor.

STREET LIGHTING IMPROVEMENTS (ITEMS 104-107)

The work under this part of the project consists of furnishing and installing street lighting system including City-furnished materials, such as poles, mast arms and luminaries, as described in the bid items.

- a. The Contractor shall furnish and install hardware as specified herein, including electrical service, concrete footings, conduits, wires, pull boxes, service cabinet, electroliers, luminaires, service enclosure, and other items not specifically mentioned, but required to meet local functional requirements for a complete street lighting system. These items may include, but are not limited to, any additional hardware, wire, etc. These items shall be considered as incidental items; the cost for these items is included as part of the various bid items and no separate payment shall be made therefor.
- b. The locations of standards, lighting fixtures, services and appurtenances

shown on the plans are approximate and the exact locations will be established by the Contractor in the field. The Contractor shall coordinate with Southern California Edison (SCE) Company and/or its contractor for the installation of new electrical service, as specified herein. The City will assist the Contractor in working with SCE to identify service location/s if these are not identified on the Plan.

- c. Payment for the street lighting system installation, including furnishing all labor, materials, tools, potholing, equipment and incidentals required to complete the work, including installation of conduits, lighting standards, foundations, etc, will be made in accordance with the appropriate bid item. No additional compensation will be allowed therefore.
- d. Installation of all street lighting system items shall conform to Section 86-2 MATERIALS AND INSTALLATION of the CALTRANS Standard Specifications, May 2006.

Any lighting circuits to be modified must remain in operation during normal lighting hours. All necessary temporary circuits must be first approved by the Engineer.

All systems shall be complete and in operating condition at the time of acceptance of the Contract. Prior to acceptance of the work, the Contractor shall submit one complete set of "as-built" plans and any pertinent data as required by the Engineer showing in detail all construction stages.

104. Install LED Street Light Pole Footings:

This item includes installing light pole foundations, reinforcing steel, where required, and anchor bolts, per APWA Standard Plan 430-1, Type C-1-B. Street Light Pole to be installed by SCE. This shall include excavation, concrete pole foundations, anchor bolts and all appurtenant work thereto associated with this item.

1. Portland cement concrete for pole footings shall be 560-C-3250.
2. Flash substitutes and/or admixtures shall not be permitted unless approved by the Engineer.
3. Anchor bolts shall be steel-hot galvanized dipped.

Payment for this item shall be at the price bid per each (EA) pole foundation, including excavation, foundation concrete, reinforcing steel, where required, anchor bolts, handling and delivery of oversize materials to the project site; labor, materials, tools and equipment necessary, to complete the work in accordance with these Specifications and Southern California Edison requirements.

105. Install 1-1/2" Underground Electrical Conduit for Street Lighting:

106. Install 3" Underground Electrical Conduit for Street Lighting:

Furnish and Install 1-1/2" and 3" Conduit:

Contractor shall excavate and construct 1-1/2" and 3" conduit duct as required, to the depths as shown on the plans or as directed by the SCE inspector or City Engineer. Conduit type shall be Schedule 40" PVC or per approved materials as shown on UGS CD 110.1. Duct construction shall include saw cutting, removal of asphalt or PCC improvements, trenching, bedding, spacer, conduit and pull rope installation, encasement, backfill, compaction, and trench repair. Trench repair for all existing paved areas outside the project new paving limits shall consist of replacement of 2" Type C PG 64-10 HMA over 3" Type B PG 64-10 HMA over 95% compacted native to the trench width limits plus an additional 2" deep T-section header cut one foot wide on both sides of the trench. Conduit under existing sidewalk may be placed by the boring/jacking method, or by removing and reconstructing the entire width of the sidewalk. For areas within existing PCC sidewalk, any portion of a panel which is damaged as part of the installation shall require the replacement of the entire panel.

All saw cutting residues shall be completely removed by vacuuming and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for 1-1/2" or 3" Conduit Duct shall be per the contract unit price bid per LINEAR FOOT (LF) as listed in the bid schedule and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved, including but not limited to, excavation, backfill, compaction, borrow materials, export, disposal, installing spacers, conduit, and pull rope, bedding, encasement, connecting conduit to existing facilities and surface repair, as shown on the drawings and as specified herein complete in place and no additional compensation will be allowed therefore.

107. Install Underground Electrical Pull Boxes for Street Lighting:

Contractor shall excavate and install streetlight pull box as required, to the depths as shown on the plans or as directed by the SCE inspector or City Engineer. Pull box installation shall include saw cutting, removal of asphalt or PCC improvements, trenching, bedding, backfill, compaction, and surface repair. For pull boxes within existing sidewalk, any portion of a panel which is damaged as part of the installation shall require the replacement of the entire panel.

All saw cutting residues shall be completely removed by vacuuming and properly disposed. No washing of residues into drainage structures will be allowed.

Payment for 11"x17"x12" Handhole per UGS HP 205 shall be per the contract unit price bid per EACH (EA) as listed in the bid schedule and shall be considered full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved, including but not limited to, excavation, backfill, compaction, borrow materials, export, disposal, installation of handhole, bedding, encasement, and surface repair as shown on the drawings and as specified herein complete in place and no additional compensation will be allowed therefore.

PEDESTRIAN SIGNAL AND LANDSCAPE LIGHTING IMPROVEMENTS (ITEMS 108-110)

The work under this part of the project consists of furnishing and installing power supply with service Cabinet, landscape lighting system and Lighted Pedestrian Crosswalk Approach Leg System, as described in the bid items.

- a. The Contractor shall furnish and install hardware as specified herein, including electrical service, concrete footings, conduits, wires, pull boxes, service cabinet, luminaires, service enclosure, and other items not specifically mentioned, but required to meet local functional requirements for a complete street lighting system. These items may include, but are not limited to, any additional hardware, wire, etc. These items shall be considered as incidental items; the cost for these items is included as part of the various bid items and no separate payment shall be made therefor.
- b. The locations of standards, lighting fixtures, services and appurtenances shown on the plans are approximate and the exact locations will be established by the Contractor in the field. The Contractor shall coordinate with Southern California Edison (SCE) Company and/or its contractor for the installation of new electrical service, as specified herein. The City will assist the Contractor in working with SCE to identify service location/s if these are not identified on the Plan.
- c. Payment for traffic control power supply and landscape lighting system installation, including furnishing all labor, materials, tools, potholing, equipment and incidentals required to complete the work, including installation of conduits, lighting standards, foundations, etc, will be made in accordance with the appropriate bid item. No additional compensation will be allowed therefore.
- d. Installation of all traffic control power supply and landscape lighting system items shall conform to Section 86-2 MATERIALS AND INSTALLATION of the CALTRANS Standard Specifications, May 2006.

Any lighting circuits to be modified must remain in operation during normal lighting hours. All necessary temporary circuits must be first approved by the Engineer.

All systems shall be complete and in operating condition at the time of acceptance of the Contract. Prior to acceptance of the work, the Contractor shall submit one complete set of "as-built" plans and any pertinent data as required by the Engineer showing in detail all construction stages.

108. Install New MP Service Cabinet, Pullbox and Connect to SCE as shown on Plans:

Furnish and Install Type III-CF Electric Service:

This item shall consist of furnishing and installing Type III-CF Electric Service at the locations shown on the Plan. Electrical service installation and materials shall be in accordance with Section 86-2.11 of the Caltrans Standard Specifications, except as modified or supplemented herein.

The Contractor shall furnish and install a Type III-CF service equipment enclosure with provisions for a 100 A meter per Caltrans Standard Plan Sheet ES-2E, as shown on the Plan.

Proposed location of the electrical service or services (connection point or points) will be as shown on Southern California Edison Plans. The Contractor shall provide the conduit between the service enclosure and the electrical feed point. Wiring and service connection will be provided by Southern California Edison.

Foundations shall be in accordance with Section 86-2.03 of the Caltrans Standard Specifications. Portland cement concrete for pole footings shall be Class A and in conformity with Section 90-10 "Minor Concrete," of the Caltrans Standard Specifications.

All work and materials required for the full functionality of the equipment, including but not limited to, installation of 3" or 4" PVC schedule 40 conduit, riser, pull boxes, pull ropes, and conductors, as shown on the Plan, shall be considered as part of this item.

Payment for this item shall be at the price bid per each (EA) roundabout location, with all conduit, pull boxes, service cabinets, including excavation, foundation, labor, materials, tools and equipment necessary, to complete the work in accordance with these Specifications and Caltrans and shall be considered as full compensation for providing all work described herein and no additional compensation will be allowed.

109. Install Central Island LED Decorative Light per Specifications:

LED Decorative Light:

This item includes assembling, furnish and installing LED Decorative light at the locations shown on the Plan and per up light detail, see sheet 5. This shall include excavation, concrete, foundations, junction box and all appurtenant work thereto associated with this item. LED decorative light model shall be as follows:

Surface to grade lensed L.E.D., medium spread up light with one lamp. 34 watts, type L.E.D. 53k, manufactured by Lumascope model LS452LEDP-27w4-85-ME-23-Q-09-CB-LS637-K or approved equal.

Verify landscape plans before rough-in and corroborate final location with city engineer.

Payment for this item shall be at the price bid per each (EA) roundabout location (central island), with pull boxes, lighting with base and lamp installed, including excavation, foundation, labor, materials, tools and equipment necessary, to complete the work in accordance with these Specifications and Caltrans and shall be considered as full compensation for providing all work described herein and no additional compensation will be allowed.

110. Install Underground Electrical Conduit, Pull Boxes and Conductor for Landscape Lighting

Furnish and Install 1" or 2" Conduit:

This item includes furnishing and installing 1" or 2" PVC (Schedule 40) conduits and fittings, as shown on the Plan, and in accordance with Section 86-2.05 of the Caltrans Standard Specifications, except as modified or supplemented herein. This shall include excavation, trench backfill, compaction, and all appurtenant work thereto. After conductors have been installed, the ends of conduits terminating in pull boxes and service cabinets shall be sealed with an approved type of sealing compound. Field conditions at the time of construction may dictate minor changes to the locations of conduits to facilitate the contractors work. Such minor changes will not constitute extra work. Actual installation shall be done in the most direct manner or as directed by the Engineer.

Conduit may be placed by open trench method. Conduit under existing sidewalk may be placed by the boring/jacking method, or by removing and reconstructing the entire width of the sidewalk. Conduit depth shall not exceed 30 inches or conduit trade diameter plus 10 inches, whichever is greater. The top of the installed conduit shall be a minimum of 18 inches below finish grade. The outline of all areas of pavement to be removed shall be cut to the outside diameter plus 12" on either side of trench and full depth of existing pavement, with an abrasive type saw or with a rock cutting excavator specifically designed for this purpose. Cuts shall be neat and true with no shatter outside the removal area. The conduit shall be placed in the bottom of the trench and the trench backfilled with native soil up to the top of subgrade, and compacted to the required density. No open trench will be allowed in the travel lane over night.

Furnish and Install Conductors and Wires:

Unless otherwise specified or provided herein, conductors and wiring shall be in accordance with Sections 86-2.08 and 86-2.09 of the Caltrans Standard Specifications, except as modified or supplemented herein:

- A. Conductors for multiple circuits shall be UL listed and rated for 600 volt operation, conforming to the requirements of Section 86-2.08B, "Multiple Circuit Conductors", of the State Specifications, and of the size and type indicated on the Plans.
- B. Conductor from luminaire to pull box shall be #10 AWG stranded with THHN insulation. Wire size for main feeder shall be designed for the circuit and of the size indicated on the Plans.
- C. All below ground conductors shall have a "WET Rating" insulation as specified by the NEC.
- D. All stranded and braided conductors shall be terminated with approved terminal lugs, which shall then be soldered to the conductors.
- E. The splices between the stranded and solid wire shall be made by careful cleaning of the bare conductors, twisting the wires together for a good mechanical bond, applying a non-corrosive paste flux to the conductors and then applying heat to the conductors so that when solder is applied to the conductors, it will completely melt and flow into all voids. A wire nut shall then be encapsulated within an epoxy pack to form a complete waterproof connection. Splices shall be Type "C" insulated by Method "B", as shown on Caltrans Standard Plan ES-13A.
- F. Contractor shall furnish and install conductor cable and service/lighting conductors as specified on the Plans.
- G. Conductors shall be copper of the gage shown on the plans.
- H. Copper Wires shall conform to the requirements in ASTM Designations: B 3 and B 8.
- I. Sizes as specified American Wire Gauge (AWG).
- J. Conductors shall be drawn in conduit after the installation of the conduit run has been completed, and the conduit has been cleaned or swabbed out, and if the conduit is installed in a concrete foundation, after the concrete has attained a compressive strength of at least one thousand pounds per square inch (1,000 psi).
- K. Conductors shall be installed without injury to the insulation. Where two

cables are to be installed in the same conduit, both cables shall be drawn into the conduit at the same time.

- L. Conductors shall be continuous from luminaire to luminaire or to junction box without a splice, except those splices, if necessary, may be made in any pole base or pull box.

Furnish & Install Caltrans No. 3-1/2 (6E) Pull Box w/Conduit Sweeps:

This item shall consist of furnishing and installing No. 3-1/2 pull boxes with covers and conduit sweep, as shown, on the Plan, in accordance with Sections 307-11 "Pull Boxes" and 307-12 "Conduit" of the SSPWC, Section 86-2.06, of the Caltrans Standard Specifications, and as specified in these Special Provisions, or as directed by the Engineer.

Pull boxes, covers and extensions shall be precast reinforced Portland Cement Concrete (PCC). The cover marking for each pull box shall read "ELECTRIC TRAFFIC" "HIGH VOLTAGE". Pull boxes shall be installed in accordance with Standard Plan No. 405-1, of the SPPWC. Grout in bottom of pull boxes will not be required. Covers shall be provided with at least one recessed lifting bolt or bar, as shown in the Standard Plans. The lifting bolts or bars shall be designed so as not to provide a path for electrical current to follow through the lid.

Payment for this item shall be at the price bid per each (EA) roundabout location, with all conduit, conductor wiring, pull boxes, including excavation, foundation, labor, materials, tools and equipment necessary, to complete the work in accordance with these Specifications and Caltrans and shall be considered as full compensation for providing all work described herein and no additional compensation will be allowed.

- 111. **Apply Thermoplastic, 8" Solid White Channelizing Stripe, Per Fig 3A-112 (CA), Detail 38:**
- 112. **Apply Thermoplastic, 12" Solid White Crosswalk Line:**
- 113. **Apply Thermoplastic, 6" Solid White Bike Lane Stripe, per Fig. 3A-112 (CA), Detail 39:**
- 114. **Apply Thermoplastic, Type IV (L) Arrow as Shown per Fig. 3B-24 (CA):**
- 115. **Apply Thermoplastic, 12" Solid White Limit Line:**
- 116. **Apply Thermoplastic, 6" White Bike Lane Intersection Stripe, per Fig. 3A-112 (CA), Detail 39A:**
- 117. **Apply Thermoplastic, Pavement Legend, per Fig. 3B-23 (CA):**
- 118. **Apply Thermoplastic, Bicycle Lane Symbol and arrow, per Fig. 9B-3B (CA):**
- 119. **Apply Thermoplastic, Double Yellow Stripe, per Fig. 3A-104, Detail 22:**
- 120. **Apply Thermoplastic, 12" Solid White Line as Shown:**
- 121. **Apply Thermoplastic, Stop Legend, per CA. MUTCD 2014, Fig. 3B-23 (CA):**
- 122. **Apply Thermoplastic, 12" Solid Yellow Crosswalk Line:**
- 123. **Apply Thermoplastic, 4" Solid Yellow Left Edge Line, per Fig. 3A-105 (CA), Detail 24:**

- 124. Apply Thermoplastic, 12" Broken White 3-Ft. Stripe with 3-Ft Gap:**
- 125. Apply Thermoplastic, White Right Edge Line Stripe, per Fig. 3A-106 (CA), Detail 27B:**
- 126. Sandblast All Existing Conflicting Striping:**
- 127. Furnish and Install Street Name Sign as Noted Per City of Yucaipa Std. Dwg. 421-0:**
- 128. Furnish and Install Street Name Sign as Noted Per City of Calimesa Standards:**
- 129. Furnish and Install Sign:**
- 130. Relocate Existing Sign:**
- 131. Furnish and Install Sign on Street Light Pole or Power Pole:**
- 132. Apply Thermoplastic Share Lane Symbol and Stripped Arrows per CA. MUTCD 2014, Fig. 9C-9 (CA) and 9C-108 (CA):**
- 133. Apply Thermoplastic 4" Solid White Lane Stripe with Type G RPM 24' C-C.**
- 134. Construct 2" Galvanized Pipe Pedestrian Barrier, 6-ft wide, Type A, per APWA Standard Plan 606-4, Furnish and Install Sign Top-Center as Noted.**

The work to be performed under this Items consists of the removal and replacement of existing traffic lane striping, markings and reflective markers, the placement of temporary pavement striping, the placement of reflective pavement markers at fire hydrant locations, furnish and install new signs, remove and relocate existing signs, remove and provide sign to city for future use. The work shall be as shown on plan, in accordance with Division IX "Traffic Control Devices" of the Caltrans Standard Specifications and in conformance with the California Manual on Uniform Traffic Control Devices 2014 Edition (or the most current edition of the MUTCD California), except as modified or supplemented herein.

The Contractor shall renew or replace any existing traffic striping and/or pavement markings which, during his operations, have either been removed or reduced in effectiveness, in addition to that which is designated herein. Renewal of traffic striping and/or pavement markings and installation of temporary pavement striping shall be accomplished in a manner as to restore any damaged striping back to original.

Any existing paint or thermoplastic pavement markings and traffic striping which require removal outside of the paving operations shall be removed in their entirety by sandblasting. The sandblasting shall be accomplished in accordance with acceptable industry practice. The existing pavement markings and traffic striping shall be removed to the satisfaction of the Engineer, prior to construction of the asphalt concrete overlay.

In areas of existing valve cans and manholes, such utility covers shall be raised to final grade and surface improvements restored to final conditions before traffic striping operations are started.

Where existing pavement markings (i.e. Stop Legends, limit lines, X-walks, etc.) have

been partially removed by the Contractors' operations, the Contractor shall renew the entire set of markings at that intersection unless otherwise instructed by the City Engineer. Renewing a portion of the marking will not be acceptable.

The striping layout shall be approved by the City Traffic Engineer prior to installation of permanent striping. The layout shall be subject to minor changes and variations from the Plans, as required by existing field conditions. The Contractor shall contact the City Traffic Engineer at least two working days prior to commencing work, for approval of proposed striping layout.

The Contractor is required to complete permanent traffic striping within five (5) working days after final paving has been completed.

Paint for pavement marking and striping shall be either rapid dry white conforming to State Specification 711-80-195 or rapid dry yellow conforming to state Specification 711-80-198, in accordance with the color stipulated on the Plan or as directed by the Engineer.

Two coats of paint shall be applied. Reflective material consisting of glass beads shall be applied to the surface of each coat of paint prior to setting so that the beads shall have proper adhesion.

Glass beads shall conform to State Specification 69-80-34 and shall be mechanically applied at a rate of 6 to 8 pounds of beads per gallon of paint. Glass beads shall be applied to pavement markings, crosswalks, and striping by a dispensing device developed for this purpose or other methods approved by the Engineer. Stencils for pavement marking shall match City of Calimesa stencils exactly.

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

Pavement markers shall be placed in conformance with the provisions in Section 81, "Miscellaneous Traffic Control Devices," of Caltrans Standard Specifications and these Special Provisions.

Retroreflective pavement markers shall comply with the specific intensity provisions for reflectance after abrading the lens surface in conformance with the "Steel Wool Abrasion Procedure" as specified in Section 81-3.02C "Retroreflective Pavement Markers".

Signs and Markers materials and construction shall comply with Section 82 "Signs and Markers" of Caltrans Standard Specifications and these Special Provisions.

Payment for this items is at a Linear Foot (LF), or Each (EA), bid shall be considered as full compensation for all necessary removal, striping, pavement marking, raised

pavement markers, retroreflective pavement markers and road sandblasting, including signing, as shown on the Plan and for furnishing all labor, materials, tools, equipment, time, and incidentals for doing all work involved in construction of this items, and no additional compensation will be allowed therefore.

BID SCHEDULE “B”:

Each respective bid item and bid schedule as shown on the proposal form shall comply with all respective sections of the 2018 Edition of the Standard Specifications for Public Works Construction (Green Book), its supplements, and any other publications as specified, except as modified herein. If there is a conflict between these inclusions and the Standard Specifications, these inclusions shall have precedence.

1. **Remove and Relocate Existing Water Meter Box Behind Back of Walk per Water Company Standards, Contractor to Coordinate Relocations and /or Adjustments with South Mesa Water Company:**

Contractor shall remove and relocate existing water meter box as shown on the construction plans, conforming to South Mesa Water Company Standard W-4A as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of the water meter box with South Mesa Water Company as directed by the Engineer. Water meters shall be protected and accessible at all times during construction. Water meter box shall be located behind the sidewalk and adjusted to final finished grade as shown on the construction drawings and conforming to South Mesa Water Company Standard W-4A.

All meter boxes for relocations shall be replaced per Water Company Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for “Remove and Relocate Existing Water Meter Box Behind Back of Walk per Water Company Standards, Contractor to Coordinate Relocations and /or Adjustments with South Mesa Water Company” shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing water meter box, including but not limited to, installation of new pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.

2. **Remove and Relocate Existing 3” Max. Diam. Back Flow Preventer Behind Back of Walk per Water Company Standards, Contractor to Coordinate Relocations**

and/or Adjustments with South Mesa Water Company:

Contractor shall remove and relocate existing Back Flow Preventer as shown on the construction plans, conforming to South Mesa Water Company Standard W-4, W-4A, W-5 as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of the Back Flow Preventer with South Mesa Water Company as directed by the Engineer. Back Flow Preventer shall be protected and accessible at all times during construction. Back Flow Preventer shall be located behind the sidewalk and adjusted to final finished grade as shown on the construction drawings and conforming to South Mesa Water Company Standard W-4, W-4A, W-5.

All Back Flow Preventers for relocations shall be replaced per Water Company Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for "Remove and Relocate Existing 3" Max. Diam. Back Flow Preventer Behind Back of Walk per Water Company Standards, Contractor to Coordinate Relocations and/or Adjustments with South Mesa Water Company" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing Back Flow Preventer, including but not limited to, new pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.

3. Remove and Relocate Existing Fire Hydrant, AV/AR or Blow-Off Valve per Water Company Standards, Contractor to Coordinate Relocations and/or Adjustments with South Mesa Water Company:

Contractor shall remove and relocate existing Fire Hydrant, AV/AR or Blow-Off Valve as shown on the construction plans, conforming to South Mesa Water Company Standard W-6, W-7A, W-7B, W-8A or W-8B as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of Fire Hydrant, AV/AR or Blow-Off Valve with South Mesa Water Company as directed by the Engineer. Fire Hydrant, AV/AR or Blow-Off Valve shall be protected and accessible at all times during construction. Fire Hydrant, AV/AR or Blow-Off Valve shall be located behind the Curb and adjusted to final finished grade as shown on the construction drawings and conforming to South Mesa Water Company Standard W-6, W-7A, W-7B, W-8A or W-8B.

All Fire Hydrant, AV/AR or Blow-Off Valve for relocations shall be replaced per Water Company Standards and Specifications and shall be included in this item of work and

no additional compensation will be allowed therefore.

Payment for "Remove and Relocate Existing Fire Hydrant, AV/AR or Blow-Off Valve per Water Company Standards, Contractor to Coordinate Relocations and/or Adjustments with South Mesa Water Company" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing Fire Hydrant, AV/AR or Blow-Off Valve, including but not limited to, new pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.

4. Install Irrigation Meter per Water Company Standards, Contractor to Coordinate Installations with South Mesa Water Company:

This item shall include furnishing and installing water service lateral, including connection to the existing water main as shown on the Plan. The work shall include, but not limited to, the furnishing of the corporation stop, threaded coupling, Copper pipe, coupling(s), bushing(s), elbows, backflow, appurtenances, and all labor and equipment necessary to complete the work in accordance with South Mesa Water Company standard Drawing W-4B. The size of the new laterals to be installed shall be 1-1/4" (with 3/4" Meter), unless otherwise directed by the Engineer.

Payment for "Install Irrigation Meter per Water Company Standards, Contractor to Coordinate Installations with South Mesa Water Company" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in Installation of the Irrigation Meter, including but not limited to, installation of lateral from main to meter, new meter box, pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative, and no additional compensation will be allowed therefore.

BID SCHEDULE "C":

Each respective bid item and bid schedule as shown on the proposal form shall comply with all respective sections of the 2018 Edition of the Standard Specifications for Public Works Construction (Green Book), its supplements, and any other publications as specified, except as modified herein. If there is a conflict between these inclusions and the Standard Specifications, these inclusions shall have precedence.

1. Mobilization/Demobilization:

Mobilization shall consist of preparatory work and operations for the street rehabilitation improvements, including, but not limited to, those necessary for the movement of personnel, equipment, materials, and incidentals to the project site necessary for work on the project, coordination with utility companies, and for all other work and operations which must be performed or costs incurred including bonds, insurance and financing prior to beginning work on the various contract items, and for obtaining all business licenses and permits, including permit fees, as required for entire project, from all related agencies including, but not limited to, the City of Calimesa and City of Yucaipa. Mobilization shall also include the time, materials, and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site in a safe condition, and all other related work as required at all times and for all non-working days during construction period. The Contractor is responsible for securing an adequate storage site for equipment and materials.

At the request of the City, the Contractor shall provide a mobile telephone number for use by City representatives.

The Contractor shall have on the work site at all times, as his agent, an English speaking superintendent or foreman capable of reading and thoroughly understanding the plans, specifications, and other related documents

Mobilization shall include project overhead costs, including costs and fees for obtaining construction permits and/or permit riders as may be required by the City of Calimesa and City of Yucaipa, or as may be required by law, and for obtaining bonds, insurance and financing for the entire project prior to beginning work.

Contractor shall confine his operations and work area to the street right-of-way. Unless the Plan shows otherwise, no encroachment into private property will be permitted without the prior written consent of the property owner. Obtaining this consent will be the responsibility and the costs of the Contractor. Material shown on the plans or designated in the Special Provisions which is to be used in the reconstructed work and which has been damaged or destroyed as a result of the Contractor's operations shall be repaired or replaced at the option of the City Engineer by the Contractor at the Contractor's sole expense.

The Contractor shall provide personnel to keep the construction site in a safe condition at all times, including non-working hours.

A Construction Schedule shall be submitted at least one (1) month prior to commencing work. All revisions shall be completed within three days after review by the City Engineer. Requests for changes in the schedule shall be submitted by the Contractor to the City for approval at least three (3) working days prior to performing any work.

Mobilization shall include scheduling of the work in conformance with the traffic control criteria.

Mobilization/demobilization shall include all clearing and grubbing for the construction of the new roadway, improvements and any clearing and grubbing and removals and/or removal and replacement shown on the plans for which there is no bid item of work.

Removals shall include, but is not limited to, the removal and disposal of (1) interfering grass, shrubs, trees, bushes, stumps and other vegetation including roots whether removed in their entirety or just trimmed portions; (2) miscellaneous rocks and debris; (3) tree and shrub trimming as required along entire street length behind new and/or existing curb or edge of pavement; (4) silt from all existing gutter; (5) removal of all marker paint from curbs upon completion of the project; (6) Removal and capping off of irrigation facilities which interfere with construction. Sprinkler heads shall be salvaged and turned over to the owner of the adjacent property.

Relocations shall include, but not be limited to, the relocation of existing fences, signs, pullboxes, removal and re-location of existing irrigation lines, sprinkler heads, irrigation wires, replacement of adjacent landscape improvements in kind and all other various relocations of existing improvements as directed by the City Engineer.

Clearing and grubbing shall include, but not limited to, the removal, relocation to a temporary location during construction, maintenance/protection during construction, and re-installation of mailboxes as directed by the City Engineer.

Restoration of irrigation and landscaping system affected by the new improvements. Lawn planting adjacent to the improvements constructed (e.g. sidewalk, driveway, curb and gutter, etc.) shall be restored as nearly to its original condition as is reasonably possible. Grass removed or damaged by construction shall be replaced with same grass or equivalent type approved by the City Engineer. Reseeding may be required on areas that currently do not have any grass, as directed by the City Engineer. Seeds shall be covered with suitable mulch and watered until growth is evident.

Adjustments shall include, but is not limited to, the adjustment of all existing boxes, valve covers, and manholes, such as water, sewer, storm drain, street light, electrical pull boxes and conduit, valve boxes, etc. which are to remain in place within and/or adjacent to the project limits and are not specifically covered by an adjust to grade bid item. The Contractor shall coordinate the adjustment with the owner of the utility and the work shall conform to the utility owner's standards and specifications as directed by

the City Engineer. The adjustment to grade shall also include any work required by the utility owner or City Engineer to lower the box/manhole/valve/etc. as required and no additional compensation will be allowed therefore.

Blue Reflective Marker shall include the placement of new of the blue reflective markers within the roadway at the fire hydrant locations within the project limits as directed by the City Engineer and in accordance with Section 85 "Pavement Markers" of the Caltrans Standard Specifications, Riverside County Fire Department Standards, City of Calimesa and City of Yucaipa Fire Department Standards.

False Bottom Manholes shall include furnishing and installing $\frac{3}{4}$ " plywood sheeting at the bottom of sewer and storm drain manhole shafts, over the top of the inlet/outlet pipe prior to the start of street reconstruction as directed by the City Engineer or Yucaipa Valley Water District representative. This will serve as temporary cover to catch any debris that falls accidentally into the manhole during construction. The Contractor shall not place the plywood sheeting in such a manner as to impede the flow of sewage or storm water. Such plywood sheeting and debris caught shall be removed by the Contractor after the manhole adjustment work is completed.

Clearing and grubbing shall also include the removal and replacement of existing brick work or concrete parkway improvements (other than driveway approaches and sidewalks), relocations of other manmade items necessary for the construction as disclosed on the project plans. The work shall include excavation and subgrade preparation in compliance with Standard Specifications Section 301-1. Compacting provisions of the Standard Specifications will apply to all subgrade materials.

Clearing and grubbing shall consist of the removal, relocation, or abandonment of all interfering improvements within the job area limits that are not specifically covered by a separate Bid Item. The Contractor is responsible for securing an adequate storage site for equipment and materials.

Dust control throughout the project will be required, including the sweeping of all streets within the vicinity of the project. Mobile sweeping will be required as needed throughout the project duration. Washing of streets will not be allowed unless all runoff is trapped and pumped for disposal at an approved wastewater treatment plant. Under no circumstances will construction water be permitted to enter into the storm drain system. Payment for sweeping of all streets within the project vicinity shall be included in the contract lump sum price bid.

Mobilization/Demobilization item is meant to be a "catch-all" item. All removals, relocations, abandonments, and adjustments required to complete the proposed improvements, as shown on the Plan, whether or not specified herein, but not specifically covered by a separate bid item shall be considered as included in the lump sum price bid for this item. It is the Contractor's responsibility to visit the project site and determine the extent of removals, relocations, abandonment, and adjustments required to clear the way for the proposed improvements.

Unless otherwise specified in the General Provisions, payment for Mobilization shall include compliance to and furnishing all equipment set forth in the General Provisions.

Full compensation for compliance with the provisions specified and referred to hereinabove shall be considered as included in the contract LUMP SUM price bid for Mobilization/Demobilization, and shall be paid based on the percentage of completed work to date. This item shall not exceed 2% of total contract and No additional compensation will be allowed therefore.

Payment for Mobilization/Demobilization shall be considered full compensation for obtaining all bonding, insurance, business licenses and permits, as required for entire project, from all related agencies including but not limited to utility companies, the City of Calimesa, the City of Yucaipa, private and public agencies. The compensation shall include the compliance with the requirements specified in those licenses and permits; payment of all required fees; all labor, tools, equipment, personnel, materials, and incidentals necessary to perform all related items of work. No additional compensation shall be allowed.

Payment for this item shall be made at the Contract lump sum (LS) price, based on the following schedule:

- 50% to be paid on the 1st partial payment,
- 25% after 50% project completion, excluding amount earned for Mobilization,
- 25% to be paid on the final payment.

In each of the above payments, 5% retention will be deducted in accordance with Section 7-3, "Payment," of the SSPWC.

2. Traffic Control and Safety:

This Item shall include all work, materials, and equipment necessary to comply with the requirements of Subsection 7-10, "Public Convenience and Safety," of the Standard Specifications for Public Works Construction (SSPWC), the Caltrans' Manual of Traffic Controls in Construction and Maintenance Zones (latest edition), the standards contained in the "Work Area Traffic Control Handbook" (WATCH) published by Building News, Inc.; (latest edition). In the case of a conflict, the highest standard shall prevail.

Ten days prior to the start of construction work, the Contractor is required to submit to the City, for review and approval, a traffic control plan prepared and signed by a licensed Civil Engineer. The plan shall comply with all the requirements of the Plans Specifications.

The Contractor shall conduct his operations so as to offer the least possible obstruction and inconvenience to the public, and shall have under construction, no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public. The Contractor shall furnish and maintain all construction signs, channelizing devices, barricades, k-rail, temporary traffic striping and pavement

markings, lighting devices, etc., to safely guide the traffic through the project limits, as described herein, and as directed by the City Engineer.

Contractor will be permitted to close one single intersection of County Line Road at any given time to construct the roundabout and/or pulverization improvements. Detour signage will be required for Avenue L and Avenue H. Access shall be maintained for all residents and businesses at all times. Contractor shall provide 4 CMS boards a minimum of 14-days in advance of any closures.

For non closure areas, one lane of traffic in each direction, with a minimum lane width of 12 feet, shall be provided by the Contractor at all times for local access to all residents. When it becomes necessary to block access to driveways for a short period of time during construction, the Contractor shall notify the affected property owners/occupants 48 hours in advance of such driveway closure. Contractor shall facilitate work in front of driveways so that these driveways may be opened for use immediately. To allow for equipment movement and cleanup during various construction operations, momentary stoppage of traffic and turn movements will be permitted, using flagging procedures.

If at any time during the course of construction the City Engineer, or his representative, deems traffic control measure are inadequate, or construction impacts to traffic are too great, the City Engineer may require changes be made to the traffic control. Any and all costs as a result of traffic control modifications/ changes shall be borne solely by the Contractor.

Payment for this item shall be made at the contract lump sum (LS) price bid for Traffic Control and Safety, and shall include handing out of construction notices to residents and businesses. No additional compensation will be allowed therefore.

Progress payments shall be pro-rated in proportion to the total value of work completed to date as a function of the total awarded contract amount.

3. **Water Pollution Prevention Plan, Best Management Practice and NPDES Requirements:**

Water Pollution Control Plan (WPCP):

As part of this project, the Contractor shall prepare and provide a site specific Stormwater Pollution Prevention Plan (SWPPP) to the City prior to commencing construction. The Contractor shall ensure that the SWPPP for all work is developed and amended or revised by a Qualified SWPPP Developer (QSD). The WPCP shall conform to the requirements in the Permits, and these Special Provisions.

The objectives of the WPCP shall be to identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and to identify, construct, implement, and maintain water pollution control measures, hereafter

referred to as control measures, to reduce to the maximum extent practicable (MEP, as defined in Title 33 CFR of the United States Code) pollutants in storm water discharges from the construction site both during and after construction is completed under this contract.

Best Management Practice and NPDES Requirements:

The Contractor shall conform to the requirements of General Construction Activity Storm Water NPDES Permit No. CAS000002 and Order No. 2009-0009-DWQ issued by the State Water Resources Control Board. This General Permit, hereafter referred to as the "Permit", regulates storm water discharges associated with construction activities.

The Contractor shall also conform to the requirements of NPDES Permit No. CAS6180036 and Order No. R8-2010-0036 issued by the Santa Ana Regional Water Quality Control Board. This permit, hereafter referred to as the "Permit", regulates storm water discharges that enter the City's municipal storm drain systems (MS4). Contractor is not responsible for filing a Notice of Intent (NOI) for Permit coverage or a Notice of Termination (NOT) at project end. City staff will file a NOI for permit coverage and file a (NOT) at the end of the project (if applicable).

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Storm Water Quality Handbooks, dated 2009 or most recent edition, and addenda thereto issued up to and including the date of advertisement of the project, hereafter referred to as the "Handbook". Copies of the Handbook may be obtained from CASQA website at: <http://www.cabmphandbooks.com>; Telephone: (650) 366-1042; or email at: info@casqa.org.

The Contractor shall become fully informed of, and comply with, the applicable provisions of the Handbook, Permit, and Federal, State, and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall maintain a copy of the Permit at the project site, and shall make the Permit available during construction activities.

Payment for this item shall be at the contract lump sum (LS) price bid for Stormwater Pollution Prevention Plan, Best Management Practice and NPDES Requirements, and shall be considered as full compensation for preparing and implementing the SWPPP, and for furnishing all labor, materials, tools, equipment, time, and incidentals for doing all work involved in construction of this item as directed by the Engineer, and no additional compensation will be allowed therefore. Payment shall be based on progress of the work completed at the City Engineer's discretion.

4. Pulverize Existing Asphalt Concrete Pavement as Shown:

Contractor may elect to pulverize and reuse the existing pavement as Aggregate Base or remove all existing material and place class 2 Aggregate Base.

For pulverization method, the existing pavement and subgrade material shall be pulverized and blended to 5" reclamation depth in accordance with these special provisions. The remaining subgrade material will be removed and disposed of the total depth of 9". This work shall consist of pulverizing existing bituminous surfacing within the limits shown on the plans and set in the field by the Engineer, and shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these Special Provisions.

The existing pavement along County Line Road has been cored at several locations with thickness ranging between 0.33' to 0.42'. It is the Contractor's responsibility to verify existing depths of pavement and to make their own assumptions of average pavement thickness for bidding purposes for all areas. The existing pavement thickness is less than the required 9" total depth, therefore the removal and disposal of additional excavation below the 5" pulverized section shall be paid and considered included under this item.

The pulverized material shall conform to the following gradation:

<u>SIEVE SIZE</u>	<u>PERCENT PASSING</u>
2"	98-100
1 1/2"	95

Pulverized material produced within the limits of this project may be substituted for Aggregate Base and can be placed in the sub-grade as Aggregate Base as shown in the typical sections. For removal method, contractor may elect to fully remove and dispose the existing asphalt pavement and subgrade to a total depth of 9". Class 2 Aggregate Base shall be required to be imported and placed to the limits shown on the plans. Class 2 Aggregate Base so used will be measured and paid for at the contract price paid for under 4.5" Aggregate Base bid item. The provisions of Section 4-1.03B(1) "Increases of More Than 25 Percent", of the Standard Specifications shall not be considered to apply to quantities so measured. Costs for hauling, grading, shaping, watering, and compacting the Class 2 Aggregate Base material will be considered as included in the contract prices paid for under 4.5" Aggregate Base, and no additional payment will be made therefor.

Payment for "Pulverize Existing Asphalt Concrete Pavement as Shown:" shall be per the contract unit price bid per square foot (SF), shall include furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in pulverizing, removing, disposing or stockpiling, as specified in the Standard Specifications and these Special Provisions.

5. **Remove and Dispose of Existing Concrete Sidewalk:**
6. **Remove and dispose of Existing Concrete:**

Remove and Dispose of Existing Concrete Sidewalk or Remove and Dispose of Existing Concrete shall conform to provisions in subsection 401-3.2, "Concrete Curb, Walk, Gutters, Cross Gutters, Curb Ramps, Driveway, and Alley Intersections", of the Standard Specifications, and these Special Provisions.

Removal and disposal of Concrete shall include but not limited to the following items:

Remove and Dispose of Existing Concrete Cross Gutter
Remove and Dispose of Existing Parkway Culvert
Removal and disposal of any concrete structure as shown on the plans, or as directed by the ENGINEER.

All work shall conform to provisions in section 401, "Removal", of the Standard Specifications, and these Special Provisions.

Existing sidewalk or Concrete shall be sawcut to the limits as shown on plans, or as instructed by the ENGINEER. All joins to existing conditions shall be constructed to provide a smooth transition between the existing sidewalk and adjacent areas.

PAYMENT – Full compensation for conforming to the requirements of Remove and Dispose of Existing Concrete Sidewalk or Remove and Dispose of Existing Concrete associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered as included in the CONTRACT unit price per SQUARE FOOTAGE of Remove and Dispose of Existing Concrete Sidewalk and no additional compensation will be allowed, therefore.

7. **Remove and Dispose of Existing Concrete Curb/Curb & Gutter:**
8. **Remove and Dispose of Existing AC Berm:**

Remove and Dispose of Existing Concrete Curb/Curb & Gutter or Remove and Dispose of Existing AC Berm shall conform to provisions in subsection 401-3.2, "Concrete Curb, Walk, Gutters, Cross Gutters, Curb Ramps, Driveway, and Alley Intersections", of the Standard Specifications, and these Special Provisions.

Removal and disposal of Concrete Curb/Curb & Gutter or AC Berm shall include but not limited to the following items:

Removal and Disposal of Asphalt Concrete Berms and Dikes
Sawcut, Remove, And Dispose of Existing Concrete Curb and Curb and Gutter
Removal and disposal of any concrete structure as shown on the plans, or as directed by the ENGINEER.

All work shall conform to provisions in section 401, "Removal", of the Standard

Specifications, and these Special Provisions.

PAYMENT – Full compensation for conforming to the requirements of Remove and Dispose of Existing Concrete Curb/Curb & Gutter or AC Berm associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered as included in the CONTRACT unit price per LINEAR FOOT of Remove and Dispose of Existing Concrete Curb/Curb & gutter or AC berm and no additional compensation will be allowed, therefore.

9. Remove and Dispose of Existing Tree:

Remove and Dispose of Existing Tree shall consist of removing those trees indicated on the plans or as directed by the ENGINEER, including felling of tree, grinding the stump, removal of all wood (unless otherwise designated), limbs and debris, and area cleanup.

Any wood logs resulting from tree removal or tree trimming operations shall become the property of the CONTRACTOR and shall be disposed of outside City right-of-way and also in accordance with sections 300-1 and 401-1.

PAYMENT – Full compensation for conforming to the requirements of Remove and Dispose of Existing Tree including:

- Furnishing labor, tools, equipment, and materials necessary for accomplishing the work complete and in place
- Grinding of stump, felling of tree
- Area clean up
- Disposal of wood

Shall be considered as included in the CONTRACT EACH (EA) and no additional compensation will be allowed, therefore.

10. Remove and Dispose of Existing Catch Basin:

The contractor shall Remove and Dispose of Existing Catch Basin at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT - Full compensation for conforming to the requirements of REMOVE AND DISPOSE OF EXISTING CATCH BASIN associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered as included in the unit price per EACH and no additional compensation will be allowed therefore.

11. Remove and Dispose of Existing 18" RCP Pipe:

The contractor shall Remove and Dispose of Interfering Portion of Existing 18" RCP Pipe at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT - Full compensation for conforming to the requirements of REMOVE AND DISPOSE OF EXISTING 18" RCP PIPE associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered as included in the unit price per LINEAR FOOT and no additional compensation will be allowed therefore.

12. Remove In Kind Existing Traffic Signal Poles and Deliver to City Storage:

13. Remove Existing Traffic Signal Cabinet/Box and Deliver to City Storage:

The contractor shall Remove and Dispose of Existing Traffic Signal Post or Cabinet/Box at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT – The per Each contract unit price paid for “Remove In Kind Existing Traffic Signal Poles And Deliver To City Storage” or “Remove Existing Traffic Signal Cabinet/Box and Deliver to City Storage” shall include full compensation for providing all materials and doing all the work involved in the removal of existing Traffic Signal Poles, Cabinet/Box and delivering to City Storage. The work shall be completed as directed by the Engineer, complete in place, and no additional or separate compensation will be allowed, therefore.

14. Remove And Replace Mailbox W/New Post Behind Curb. Place Mailbox And Post In 5 Gal. Bucket Filled W/Dirt During Construction:

The contractor shall Relocate Existing Mailbox per San Bernardino County DPW STD. No. 312 or as designated by the City. The contractor shall backfill and compact all open excavations created by this removal process. Contractor shall reinstall mail box as specified on the construction plans in kind or replace damaged mail box in kind to like condition or better. During Construction Contractor shall place Mailbox and Post in 5 Gallon bucket filled with dirt during construction.

PAYMENT - The per Each contract unit price paid for “Relocate Existing Mailbox per San Bernardino County DPW STD. No. 312” shall include full compensation for doing all the work involved in the removal, salvage, disposal of the existing mail box, footing, and all associated appurtenances and the backfill and compaction of any open excavations and reinstallation and/ or replacement of mail box, footing, and associated appurtenances in kind to like condition or better as directed by the Engineer, complete in place. No additional or separate compensation will be allowed, therefore.

15. Remove and Dispose of Interfering Portion of Existing Wall:

The contractor shall Remove and Dispose of Interfering Portion of Existing Wall at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT – The Linear Foot contract unit price paid for “Remove and Dispose of Interfering Portion of Existing Wall” shall include full compensation for providing all materials and doing all the work involved in the removal of existing retaining wall. The work shall be completed as directed by the Engineer, complete in place, and no additional or separate compensation will be allowed, therefore.

16. Remove and Relocate in Kind Interfering Portion of Ex. Fence to R/W:

GENERAL - The contractor shall remove all chain link, wood, wrought iron, tubular steel, etc., fences, gates, and footings as specified on the construction plans or as designated by the City. The contractor shall backfill and compact all open excavations created by this removal process. Contractor shall reinstall fence or gate as specified in kind or replace damaged fence or gate in kind to like condition or better.

PAYMENT - The Linear Foot contract unit price paid for “Remove and Relocate in Kind Interfering Portion of Ex. Fence to R/W” shall include full compensation for doing all the work involved in the removal, salvage, disposal of the existing fence, gate, footings, and all associated appurtenances and the backfill and compaction of any open excavations and reinstallation and/ or replacement of fence, gate, footings, and associated appurtenances in kind to like condition or better and proper operation as directed by the Engineer, complete in place. No additional or separate compensation will be allowed, therefore.

17. Remove Existing Sign:

Existing Sign shall be removed and reset temporarily behind proposed improvements with compacted earth as directed by the Engineer. During construction operations, the Sign shall be moved as necessary to clear the Contractor’s operations. Temporary location/relocation shall be included in the cost for “Remove Existing Sign” and no additional compensation will be allowed therefore. The Contractor shall maintain existing Sign, temporary location in good working condition throughout construction as directed by the Engineer.

When construction is complete, the Sign shall be brought to city’s Yard or to a location as directed by the Engineer. The costs associated with replacing damaged Sign and/or post support with new Sign and support shall be at the Contractor’s expense.

Payment for “Remove Existing Sign” shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing Sign, relocation of the Sign at temporary, furnishing of

temporary Sign and/or support, removal of footings, construction of required footings for temporary Sign as required, excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

18. Remove and Relocate Existing Sign:

Existing Sign shall be removed and reset temporarily behind proposed improvements with compacted earth as directed by the Engineer. During construction operations, the Sign shall be moved as necessary to clear the Contractor's operations. Temporary location/relocation shall be included in the cost for "Remove and Relocate Existing Sign" and no additional compensation will be allowed therefore. The Contractor shall maintain existing Sign temporary location in good working condition throughout construction as directed by the Engineer.

When construction is complete, the Sign shall be reset at its final position as shown on the Signing and Striping Plans and/or as directed by the Engineer. The costs associated with replacing damaged Sign and/or post support with new Sign and support shall be at the Contractor's expense.

Signs with non-standard supports shall be relocated as directed by the Engineer. Contractor shall furnish and provide temporary sign and support as necessary for Sign with non-standard support in this special provision and as directed by the Engineer at no additional cost.

Payment for "Remove and relocate Existing Sign" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved, including but not limited to, the removal of the existing Sign, relocation of the Sign at the temporary location, furnishing of temporary Sign and/or support, removal of footings, construction of required footings for temporary location as required, excavation, backfill, and compaction as specified in these special provisions and as directed by the Engineer.

19. Remove and Dispose of Existing Drain Pipe:

The contractor shall Remove and Dispose of Interfering Portion of Existing Drain Pipe at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT - Full compensation for conforming to the requirements of REMOVE AND DISPOSE OF EXISTING DRAIN PIPE associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered as included in the unit price per LINEAR FOOT and no additional compensation will be allowed therefore.

20. Sawcut Existing Asphalt:

Saw cutting existing asphalt pavement shall conform to provisions in Subsection 401-2, "Asphalt Concrete Pavement", of the Standard Specifications, and these Special Provisions.

PAYMENT – Full compensation for conforming to the requirements of Sawcut existing asphalt including furnishing all labor, tools, equipment and materials necessary for accomplishing the work complete and in place, shall be considered in the unit price per LINEAR FEET and no additional compensation will be allowed, therefore.

21. Sawcut Existing Concrete Pavement:

Sawcutting existing concrete pavement shall conform to provisions in Subsection 401-3.1, "Concrete Pavement", of the Standard Specifications, and these Special Provisions.

PAYMENT – Full compensation for conforming to the requirements of Sawcut Existing Concrete Pavement including furnishing all labor, tools, equipment and materials necessary for accomplishing the work complete and in place, shall be considered in the unit price per LINEAR FEET and no additional compensation will be allowed, therefore.

22. Remove and Dispose of Existing Safety Netting Fence:

The contractor shall Remove and Dispose of Existing Safety Netting at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT - Full compensation for conforming to the requirements of REMOVE AND DISPOSE OF EXISTING SAFETY NETTING associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered as included in the unit price per LINEAR FOOT and no additional compensation will be allowed therefore.

23. Remove and Dispose Metal Posts:

The contractor shall Remove and Dispose of Metal Posts at the locations shown on the drawings. All work shall be performed to specification of supervising City official.

PAYMENT - Full compensation for conforming to the requirements of REMOVE AND DISPOSE OF Metal Posts associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the removal, and disposal of removed materials shall be considered

as included in the unit price per EACH and no additional compensation will be allowed therefore.

24. Communications Riser To Be Relocated By Others. Contractor To Coordinate With Utility Company For Relocation:

Utility Riser shall be Relocated in accordance with Section 5, "Utilities" of the Standard Specifications and Utility Company Construction Standards. All facilities shall be adjusted or relocated to the finished grade (pavement, concrete or ground) after completion of the work. The Contractor shall coordinate adjustments or relocations as required.

Measurement and Payment for "Communications Riser To Be Relocated By Others. Contractor To Coordinate With Utility Company For Relocation" shall be at the price bid per each (EA) and shall be considered full compensation for doing all work as specified herein and no additional compensation will be allowed therefore.

25. Construct 1.5" Minimum of Asphalt Concrete Overlay Over 3" of Asphalt Concrete Pavement:

Dense Graded Asphalt Concrete (DGAC) Overlay Type C PG 64-10

This item shall include construction of 1.5 Minimum Dense Graded Asphalt Concrete (DGAC) overlay, as shown on the Plan, in accordance with Subsections 203-6, "Asphalt Concrete," and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt concrete overlay shall be placed in one lift.

Tack coat shall be Grade SS-1H per subsection 302-5.4 of the Standard Specifications. Tack coat shall be applied at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints on A.C. catching and P.C.C. surfaces and edges against which AC is to be placed.

Curbs, walks, gutters, and other structures shall be carefully protected, and any adjoining improvement damaged by spattering or tracking with tack coat shall be thoroughly cleaned.

The contact surfaces of all cold pavement joints, curbs, gutters, etc. shall be painted with Grade SS-1h emulsified asphalt immediately before the adjoining AC pavement is placed. The Contractor shall clean the existing pavement surface, including gutters, immediately prior to application of the tack coat. Cleaning shall be accomplished by means of a self-propelled, mechanical street sweeper. The Contractor shall also be responsible for sweeping areas inaccessible to mechanized sweeping equipment. All debris generated shall be removed from the project site and properly disposed of. Use of air blowing equipment shall be prohibited.

The Contractor shall use a paving machine for the placement of the asphalt concrete

overlay. The asphalt paving machine shall be equipped with a hydraulically extendable variable width screed with heating and vibration for uniform compaction and surface texture over the entire width of the paving mat. The standard screed width shall be ten feet (10'), capable of extension to at least 12 feet.

The initial breakdown rolling and the finished rolling shall be accomplished with a two-axle tandem roller, minimum 8 to 10 tons.

The Contractor shall water-test all finished A.C. surfacing prior to final inspection. Any irregularities causing water to stand shall be corrected at the Contractor's expense.

Upon completion, the pavement surface shall be true to grade and cross section, in accordance with Subsection 302-5.6.2, "Density and Smoothness," of the SSPWC. If the finished surface does not meet the specified surface tolerance, it shall be brought into tolerance by abrasive grinding, utilizing diamond cutting blades followed by a fog seal coat applied to the areas which have been ground.

Abrasive grinding shall conform to the first paragraph and last four paragraphs of Section 42-2.02, "Construction," of the Caltrans Standard Specifications, with the following exception: Residue from grinding operations shall be removed from the project site and properly disposed of at the Contractor's expense.

Corrective work described above shall be at the Contractor's expense.

Temporary surfacing shall be placed only when directed by the Engineer, to safeguard the public. Payment for temporary surfacing shall be included in the unit price bid herein (1.5" DGAC Overlay), unless otherwise specified in these Specifications.

Dense Graded Asphalt Concrete (DGAC) Type B PG 64-10:

This item shall include construction of 3" Asphalt Concrete (AC) as shown on the Plan, in accordance with Subsections 203-6 "Asphalt Concrete," and 302-5, "Asphalt Concrete Pavement," of the SSPWC, except as modified or supplemented herein. The asphalt concrete shall be placed in multiple lifts.

Tack coat shall be Grade SS-1H per subsection 302-5.4 of the Standard Specifications. Tack coat shall be applied at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints on A.C. catching and P.C.C. surfaces and edges against which AC is to be placed.

Curbs, walks, gutters, and other structures shall be carefully protected, and any adjoining improvement damaged by spattering or tracking with tack coat shall be thoroughly cleaned.

The contact surfaces of all cold pavement joints, curbs, gutters, etc. shall be painted with Grade SS-1h emulsified asphalt immediately before the adjoining AC pavement

is placed. The Contractor shall clean the existing pavement surface, including gutters, immediately prior to application of the tack coat. Cleaning shall be accomplished by means of a self-propelled, mechanical street sweeper. The Contractor shall also be responsible for sweeping areas inaccessible to mechanized sweeping equipment. All debris generated shall be removed from the project site and properly disposed of. Use of air blowing equipment shall be prohibited.

The Contractor shall use a paving machine for the placement of the asphalt concrete. The asphalt paving machine shall be equipped with a hydraulically extendable variable width screed with heating and vibration for uniform compaction and surface texture over the entire width of the paving mat. The standard screed width shall be ten-feet (10'), capable of extension to at least 12-feet.

The initial breakdown rolling and the finished rolling shall be accomplished with a two-axle tandem roller, minimum 8 to 10 tons.

The Contractor shall water-test all finished A.C. surfacing prior to final inspection. Any irregularities causing water to stand shall be corrected at the Contractor's expense.

Upon completion, the pavement surface shall be true to grade and cross section, in accordance with Subsection 302-5.6.2, "Density and Smoothness," of the SSPWC. If the finished surface does not meet the specified surface tolerance, it shall be brought into tolerance by abrasive grinding, utilizing diamond cutting blades followed by a fog seal coat applied to the areas which have been ground.

Abrasive grinding shall conform to the first paragraph and last four paragraphs of Section 42-2.02, "Construction," of the Caltrans Standard Specifications, with the following exception: Residue from grinding operations shall be removed from the project site and properly disposed of at the Contractor's expense.

Additional grinding/header cuts shall be performed as necessary and as shown on plans, to extend the area ground in each lateral direction so that the lateral limits of grinding are at a constant offset from, and parallel to the nearest lane line or pavement edge, and in each longitudinal direction so that the grinding begins and ends at line perpendicular to the pavement centerline, within any ground area. All ground areas shall be neat rectangular areas of uniform surface appearance. A fog seal coat shall be applied to the areas that have been ground, in accordance with Section 37, "Bituminous Seals," of the Caltrans Standard Specifications.

Corrective work described above shall be at the Contractor's expense.

Temporary surfacing shall be placed only when directed by the Engineer, to safeguard the public. Payment for temporary surfacing shall be included in the unit price bid herein (3" DGAC Over 4.5" Pulverized AC Concrete), unless otherwise specified in these Specifications.

Payment for "Construct 1.5" Minimum of Asphalt Concrete Overlay Over 3" of Asphalt Concrete Pavement", will be made at the contract unit price per Square Foot (SF) of AC pavement base course and Overlay. The unit price bid for the DGAC Base Course and Overlay shall include all surface preparation, tack coat, compaction, materials, labor, tools, time, equipment and incidentals required to complete the work. No additional compensation will be allowed therefore for either method selected by the contractor.

26. Construct 4.5" Thick Aggregate Base (Pulverized Material):

Prior to placement of Aggregate Base (Pulverized Material), at least the upper 12 inches of subgrade soils should be scarified, moisture-conditioned if necessary, and recompacted to at least 90% of the laboratory maximum dry density as defined by ASTM Standard D1557 test method. Any areas with loose or wet soil, which are considered unsuitable to support pavement sections should be over-excavated and replaced with compacted fill. Aggregate Base shall be Class 2 and shall conform to the provisions in Section 26, "Aggregate Bases," of the Standard Specifications and these special provisions.

Pulverized asphalt concrete or concrete material produced within the limits of this project (by pulverizing, grinding, cold planing, etc) may be substituted for Aggregate Base and placed in the subgrade in lieu of Aggregate Base shown in the typical section(s). Should the quantity of material generated by pulverizing the existing pavement surfacing be insufficient to construct the subgrade, as shown by the typical section(s) included in the plans, deficiencies shall be made up with Class 2 Aggregate Base.

Surplus pulverized material may be incorporated in embankments not less than one foot below finished grade(s) or shall become the property of the Contractor and shall be disposed of outside of the R/W. Surplus pulverized material shall be included in considerations under provisions of Section 19-2.06, "Surplus Material," of the Standard Specifications.

After pulverized material has been removed, stockpiled, hauled and the subgrade prepared, it shall be placed, shaped, graded and compacted to the lines, grades and depth as shown on the plans and/or typical sections. Water shall be applied to ensure proper moisture content at the time of grading and compaction. The pulverized asphalt concrete shall be thoroughly compacted to not less than 95 percent relative compaction.

The completed compacted aggregate base, pulverized material in lieu of aggregate base, or a combination thereof shall be 4.5" thick and tested for accuracy of grade. Sections found to not meet prescribed grades shall be reshaped and recompacted. Finish grade on aggregate base, pulverized material in lieu of aggregate base, or a combination thereof shall conform to Section 19-1.03, "Grade Tolerance," of the Standard Specifications.

Where pulverized material is used in lieu of aggregate base the restrictions that reclaimed material shall not exceed 50 percent of the total volume of the aggregate used, under Section 26, "Aggregate Bases," of the Standard Specifications shall not apply.

Payment for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in hauling, grading, shaping, watering and compacting the Class 2 Base and/or pulverized asphalt concrete shall be considered as included in the contract price paid per Square Foot (SF) for "4.5" Thick Aggregate Base" and no additional compensation will be allowed therefor. All work associated with utilizing pulverized material as Class 2 base including costs for hauling, stockpiling, grading, shaping, watering, blending, compacting, and disposal of surplus pulverized material shall be considered as included in the contract prices paid for 4.5" Thick Aggregate Base, and no additional payment will be made therefor.

27. Construct 4" Type A Island Passageway Per Caltrans Standard Plan A88A, and per Detail Sheet:

This item shall include construction of PCC Island in conformance with Federal ADA Guidelines and Caltrans Standard Plan No. A88A. All work shall be in accordance with the applicable provisions of Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC.

Contractor shall install cast-in-place (wetcast) Detectable Warning Devices (DWD) per Caltrans Standard Plan No. A88A. DWD shall consist of a surface of truncated domes aligned in a square grid pattern. Detectable Warning Devices shall be yellow color and shall be cast in place type. Detectable Warning surface shall extend 36-inches minimum (from the back of the curb face) in the direction of travel, and the full width of the curb ramp.

Concrete shall be class 560-C-3250.

Contractor shall submit a sample of the detectable warning surface to the Engineer for approval, prior to start of construction.

The Contractor shall construct new concrete sidewalk, curb ramps, flares, monolithic curbs, and other miscellaneous concrete construction conforming to Section 303-5 of the SSPWC, with lines and grades to meet existing. In order to meet ADA requirements, cross slope of new sidewalk shall be 1.5% maximum.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Measurement and Payment for "Construct 4" Type A Island Passageway Per Caltrans Standard Plan A88A, and per Detail Sheet" shall be paid at the price bid per Square Foot (SF) as listed in the bid schedule and shall be considered full compensation for furnishing all labor, materials, tools, equipment to perform all work involved including excavation, subgrade preparation, root removal, detectable warning devices, restoring form areas, miscellaneous grading of surrounding areas to match grades and all other work as required to complete the work. The unit price bid per each curb ramp or portion thereof, includes monolithic retaining curb where curbs are required based on field conditions. No additional compensation will be allowed therefore.

28. Construct 8" of PCC Concrete Pavement Over 12" Compacted Native Soil:

This item shall include "Construct 8" of PCC Pavement over 12" Compacted Native Soil", at the locations shown on the Plan and in accordance with Subsections 301-1, "Subgrade Preparations", Section 201 "Concrete, Mortar and Related Materials", Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC; Except as modified or supplemented herein.

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

Relative compaction of finished subgrade under paved areas and concrete curb and gutter shall be modified to require 95% minimum relative compaction of the top 12" of the subgrade. All material removed and replaced for remedial grading, trenching, or disturbed by tree removal shall be compacted at 95% minimum relative compaction, even where it extends beyond 12" below finished subgrade.

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete Pavement construction.

All Pavement areas shall be finished and scored per plans or as directed by the Engineer. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Payment for "Construct 8" of PCC Pavement over 12" Compacted Native Soil", will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

29. Grind Existing Asphalt Concrete Pavement 0.10' Minimum and Construct Asphalt Concrete Pavement Overlay 0.10' Minimum:

Pavement grinding shall conform to the provisions in Section 404, "Cold Milling," City of Yucaipa Standard No. 160-1, these Special Provisions, and as directed by the ENGINEER. Limits of construction shall be shown on the plans and as directed by the ENGINEER. All pavement cold milling shall be performed after removal and replacement work has been completed. The milling shall be a minimum of 0.10' deep unless otherwise shown on the plans.

Asphalt Concrete Overlay shall comply with the requirements of Section 203-6, "Asphalt Concrete", and Section 302-5, "Asphalt Concrete Pavement", of the Standard Specifications, City of Yucaipa Standard No. 105-1 and these Special Provisions. This bid item shall include, but not be limited to the following items as shown on the Plans, as specified in these Special Provisions, or as directed by the Engineer:

TACK COAT - Tack coat shall be applied in compliance with Sub-Section 302-5.4, "Tack Coat" of the Standard Specifications, and as directed by the Engineer.

PAYMENT: The Square Foot contract unit price paid for "Grind Existing Asphalt Concrete Pavement 0.10' Minimum and Construct Asphalt Concrete Pavement Overlay 0.10' Minimum ", shall include full compensation for doing all the work involved in removing material, placing material, complete in place, and tack coat as designated on the Plans, and as directed by the Engineer, and no additional or separate compensation will be allowed therefore.

30. Construct 4" of PCC Stamped Concrete Pavement over 12" Compacted Native Soil:

This item shall include "Construct 4" of PCC Stamped Concrete Pavement over 12" Compacted Native Soil", at the locations shown on the Plan and in accordance with Subsections 301-1, "Subgrade Preparations", Section 201 "Concrete, Mortar and Related Materials", Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC; Except as modified or supplemented herein.

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

Relative compaction of finished subgrade under paved areas and concrete curb and gutter shall be modified to require 95% minimum relative compaction of the top 12" of the subgrade. All material removed and replaced for remedial grading, trenching, or disturbed by tree removal shall be compacted at 95% minimum relative compaction, even where it extends beyond 12" below finished subgrade.

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete Pavement construction.

All Pavement areas shall be finished and scored per plans or as directed by the Engineer. Contractor shall present finished stamped Concrete sample for approval before construction. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Payment for "Construct 4" of PCC Stamped Concrete Pavement over 12" Compacted Native Soil", will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match proposed grades, Construction Joints, Control Joints, Joint Sealing, Concrete Curing, Finished Surface Clear Sealer, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

- 31. Construct 8" Curb & Gutter Per San Bernardino County Std. No. 115:**
- 32. Construct 6" Curb & Gutter Per San Bernardino County Std. No. 116:**
- 33. Construct 6" Concrete Curb Only Per SPPWC Standard Plan 120-2 Type A1-6(200):**
- 34. Construct 6" Concrete Curb & Gutter Per San Bernardino County Std. No. 116. (Modified):**
- 35. Construct 3.5" Mountable Curb Per Detail On Sheet 12:**

Contractor shall construct new Portland cement concrete (PCC) curb and gutter, conforming to San Bernardino County Std. No.115, 116, 116 (Modified), SPPWC Std. Plan 120-2 Type A1-6(600), 3.5" Mountable Curb Detail, and Subsection 303-5, "Concrete Curb, Walks, etc.," of the SSPWC.

Concrete shall be class 520-C-2500.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

New curb and gutter shall be constructed to provide a proper flow line with the asphalt concrete drainage improvements as indicated on the plans. Also the construction of 8" to 6" Variable Curb Height Curb and Cutter Transition is Included in this item.

Any new work found to be defective shall be repaired or replaced by the Contractor in accordance with Subsection 303.5.7 of the SSPWC.

Payment for "Construct 8" Curb & Gutter Per San Bernardino County Std. No. 115", "Construct 6" Curb & Gutter Per San Bernardino County Std. No. 116", "Construct 6" Concrete Curb Only Per SPPWC Standard Plan 120-2 Type A1- 6(200)", "Construct 6" Concrete Curb & Gutter Per San Bernardino County Std. No. 116. (Modified)", "Construct 3.5" Mountable Curb Per Detail On Sheet 12" and 8" to 6" PCC Variable Curb Height Curb and Cutter Transition, all of the preceding requirements shall be per the contract unit price bid per linear foot (LF) and shall include all labor, tools, equipment, time, materials and incidental required including, but not limited to, excavation, subgrade preparation, forms, backfilling behind gutter, restoring form areas, and for doing all work involved in construction of this item as directed by the Engineer and no other compensation will be allowed therefore.

- 36. Construct 8" Ac Dike Per County Of San Bernardino Std. No. 117:**
- 37. Construct 4" Ac Dike Per County Of San Bernardino Std. No. 117 (Modified):**

his work shall consist of constructing asphalt berm to the dimensions and grade as shown on the plans and on San Bernardino County Road Department Standard Plan No.117. The surface on which the asphalt curb is to be constructed shall be thoroughly cleaned and a tack coat applied by means of an approved spraying device prior to the placing of the curb. The asphalt curb shall be extruded to such dimensions

that it will have the required cross section. The material shall be extruded under pressure to obtain minimum density of 90% of the density obtainable for the same material compacted in the laboratory by the Marshall Method. After the curb material has set, the exposed surfaces shall be sealed with asphalt applied by an approved spraying device.

The temperature and rate of application of the asphalt shall be as directed by the Engineer.

PAYMENT - The Linear Foot unit price paid for "Construct AC Berm Per San Bernardino County Standard No. 117-0", "Construct 4" Ac Dike Per County Of San Bernardino Std. No. 117 (Modified)", "Construct AC Berm Transition", "Construct 3' AC Berm Transition" and "Depress AC Berm for Handicap Ramp", and the Each unit price paid for "Depress AC Berm for Handicap Ramp" shall include furnishing all labor, tools, equipment and materials necessary for accomplishing the work complete and in place, and no additional compensation will be allowed therefore.

38. Construct 4" PCC Sidewalk Per City Of Yucaipa Std. Dwg. No. 115-2 Type "B" (Width Per Plan):

This item shall consist of construction of PCC sidewalk, as shown and dimensioned on the Plan, in accordance with City of Yucaipa Std. Plan No. 115-2 Type "B", and Subsection 303-5, "Concrete Curb, Walks, etc.," of the SSPWC, except as specified herein, concrete shall be Type V, Class 520-C-2500, as specified in subsection 201-1.1.2, "Concrete Specified by Class" of the Standard Specifications.

In order to meet ADA requirements, cross slope of new sidewalk shall be 1.5%. The Contractor may be directed to construct new concrete walkways or steps in landscaped areas and on private property, where required.

All pull boxes; meter boxes; and valve covers shall be adjusted to proposed finish grade and approved by the engineer in the field prior to placement of PCC.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk within construction limits where encountered for constructing new sidewalk. The remaining asphalt concrete or PCC pavement adjacent to new sidewalk shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

The Contractor shall protect all existing drainage pipes and structures and other existing improvements not designated to be removed in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of 36" clearance adjoining excavated areas within parkway limits for wheelchair and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

Once work is started, the Contractor has ten (10) working days to perform and complete all work (hard and softscape) at each location.

The contractor shall construct 2:1 slopes behind sidewalk to Right of Way at the locations shown on the drawings. All work shall be performed in accordance with these special provisions, all City standards as well as the latest edition of the Standard Specifications for Public Works Construction.

PAYMENT – The cost for this item will be included in all other items of work and no additional compensation will be paid.

Forming

Forming shall include all sawcutting, removal, slot paving, replacement, grading, and backfilling necessary to build forms for any concrete sidewalk construction.

Finishing

All sidewalk areas shall be finished and scored per details on standard, landscape or as directed by the Engineer. The Contractor shall be responsible to oversee the curing of all concrete improvements to prevent graffiti damage or other unauthorized markings in new concrete surfaces. Any concrete surface deemed unacceptable to the Engineer, shall be replaced by the Contractor at no cost to the City.

Admixtures

Should the Contractor request and obtain permission to use admixtures for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Grass damaged on either side of the sidewalk for form or reconstruction shall be replaced with sod or matching type compensation for this work shall be part of this bid item, no additional compensation will be allowed.

Payment for "Construct 4" PCC Sidewalk Per City Of Yucaipa Std. Dwg. No. 115-2 Type "B" (Width Per Plan):" will be made at the contract unit price per square foot (SF) and shall include but not be limited to all surface and subgrade preparation (as applicable) and/or placement/compaction of native material, re-grading to match existing grades, all materials, labor, tools, time, equipment and incidentals required to complete the work as directed by the Engineer and no additional compensation will be allowed therefore.

- 39. Construct (Modified) Residential Driveway Approach Per City Of Yucaipa Std. Dwg. No. 109-2 And Details On Sheet 12:**
- 40. Construct (Modified) Residential Driveway Approach Per City Of Yucaipa Std. Dwg. No. 109-2 And Details On Sheet 12. (3" Asphalt Concrete Pavement Over 12" Compacted Subgrade):**
- 41. Construct (Modified) Commercial Driveway Approach Per City Of Yucaipa Std. Dwg. No. 110-1:**
- 42. Construct Curb Ramp Per Sppwc Std Plan 111-5 Case B, type 1 (Modified) as Shown on Plans:**
- 43. Construct Bike Ramp Per Detail On Sheet 12:**

This item shall include construction of PCC/AC Driveways, curb ramps or Bike Ramps in conformance with City of Yucaipa Std. Plan No. 109-2 and Details on Sheet 12, Federal ADA Guidelines and Caltrans Standard Plan No. A88A and A88B, and NCHRP Report 672 Exhibit 6-67. All work shall be in accordance with the applicable provisions of Subsection 303-5, "Concrete Curb, Walk....," of the SSPWC.

Concrete shall be class 560-C-3250.

The Contractor shall construct new concrete or AC Driveway, curb ramps, flares, monolithic curbs, and other miscellaneous concrete construction conforming to Section 303-5 of the SSPWC, with lines and grades to meet existing. In order to meet ADA requirements, cross slope of new sidewalk/Landings shall be 1.5% maximum.

All pull boxes; meter boxes; and valve covers shall be adjusted to proposed finish grade and approved by the engineer in the field prior to placement of PCC or AC.

The Contractor shall sawcut and remove existing asphalt concrete or existing concrete sidewalk within construction limits where encountered for constructing new curb ramps. The remaining asphalt concrete or PCC pavement adjacent to new curb ramp shall be protected in-place and intact. Any damage caused by the Contractor shall be replaced at no cost to the City.

The Contractor shall protect all existing drainage pipes and structures and other existing improvements not designated to be removed in-place and intact.

At all times the Contractor shall provide a safe and walkable temporary sidewalk with a minimum width of 36" clearance adjoining excavated areas within parkway limits for wheelchair and pedestrians to travel around construction areas. If such clearance is not possible, barricading, plating, filling, or other measures shall be required.

Construction shall include unclassified excavation which consists of all excavation for the construction of curb ramps. The Contractor shall also cut and remove any tree roots encountered within construction limits to at least six (6) inches below the subgrade, and remove any previously removed tree stumps encountered.

Some areas adjoining to new curb ramps will be lower or higher than new ramp grade. At these locations, the Contractor shall be required to re-grade the area from the edge of the new ramp to meet existing ground. Also, the Contractor shall fill all low areas to meet new or existing grade by using uncontaminated project excavation materials.

Should the Contractor request and obtain permission to use admixtures (and/or Quikcrete) for his own benefit, he shall furnish such admixtures and incorporate them in the concrete mixture at his expense, and no additional compensation will be allowed therefore.

Measurement and Payment for "Construct (Modified) Residential Driveway Approach Per City Of Yucaipa Std. Dwg. No. 109-2 And Details On Sheet 12", "Construct (Modified) Residential Driveway Approach Per City Of Yucaipa Std. Dwg. No. 109-2 And Details On Sheet 12. (3" Asphalt Concrete Pavement Over 12" Compacted Subgrade)", "Construct (Modified) Commercial Driveway Approach Per City Of Yucaipa Std. Dwg. No. 110-1", "Construct Curb Ramp Per Sppwc Std Plan 111-5 Case B, type 1 (Modified) as Shown on Plans", "Construct Bike Ramp Per Detail On Sheet 12" shall be paid at the price bid per Square Foot (SF) as listed in the bid schedule and shall be considered full compensation for furnishing all labor, materials, tools, equipment to perform all work involved including excavation, subgrade preparation, root removal, restoring form areas, miscellaneous grading of surrounding areas to match grades and all other work as required to complete the work. The unit price bid per each curb ramp or portion thereof, includes monolithic retaining curb where curbs are required based on field conditions, warranties, and all miscellaneous improvements located between the BCR and ECR of the curb return where the curb ramp is to be located. No additional compensation will be allowed therefore.

44. Construct Detectable Warning Surface "Truncated Domes" per details on sheet 12:

The contractor Construct Detectable Warning Surface "Truncated Domes" per detail on sheet 12 or as designated by the City.

Contractor shall submit a sample of the detectable warning surface to the Engineer for approval, prior to start of construction.

PAYMENT - Full compensation for conforming to the requirements of "Construct Detectable Warning Surface "Truncated Domes" per detail on sheet 12" associated with the construction of the street improvements including furnishing labor, tools, equipment, materials necessary for accomplishing the installation of the truncated domes shall be considered as included in the CONTRACT unit price per EACH of Construct Detectable Warning Surface "Truncated Domes" per detail on sheet 12 and no additional compensation will be allowed, therefore.

45. Adjust Manhole to Grade:

46. Adjust Gas Valve Box to Grade:

47. Adjust Water Valve to Grade:

48. Adjust Cleanout to Grade:

Adjusting manhole, valve covers, water meters, utility pull boxes and vaults to grade after completion of paving shall be in accordance with section 403, "Manhole Adjustment and Reconstruction", of the Standard Specifications and these Special Provisions.

The CONTRACTOR shall note and reference the location of manholes, valves, water meters, pull boxes and vaults prior to placing asphalt pavement in order to locate and raise them following the work. The CONTRACTOR shall exercise care so that construction materials and surface materials such as rocks, dirt and debris do not enter sewer lines.

PAYMENT – Full compensation for conforming to the requirements of Utility Adjustment including the adjustment of covers of manholes, valves, water meters, vaults, and pull boxes, furnishing all labor, tools, equipment and materials necessary for accomplishing the work complete and in place, shall be considered in the unit price per EACH as included in the various items of work and no additional compensation will be allowed, therefore.

49. Construct 4" PCC Over 12" Compacted Subgrade:

Portland Cement concrete shall comply with the requirements of Section 302-6, "Portland Cement Concrete Pavement", and Section 201-1, "Concrete, Mortar, and Related Materials", of the Standard Specifications and these Special Provisions. Compaction of subgrade shall comply with subsection 301.3, "Relative Compaction".

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

PAYMENT: The Square Foot contract unit price paid for "Construct 4" PCC Over 12" Compacted Subgrade", shall include full compensation for doing all the work involved in placing material, complete in place, and, preparing the sub-grade as designated on the Plans, and as directed by the Engineer, and no additional or separate compensation will be allowed therefore.

50. Construct 3" Asphalt Concrete Pavement. Over 12" Compacted Subgrade:
51. Construct 3" Gravel Over 12" Compacted Subgrade:

Asphalt concrete shall comply with the requirements of Section 203-6, "Asphalt Concrete", and Section 302-5, "Asphalt Concrete Pavement", of the Standard Specifications and these Special Provisions. Crushed Aggregate Base shall comply with requirements of Section 200-2, "Untreated Base Materials", and Section 301-2, "Untreated Base", of the Standard Specifications and these Special Provisions for crushed aggregate base. Crushed rock for Cl. II Aggregate Base shall be 3/4 inch. As an alternate, Crushed Miscellaneous Base shall be allowed under the following conditions:

- Compliance with SPPWC (Green Book) specifications, Section 200-2.4 is required.
- Batch plant certification is required.
- Compaction testing and certification by a licensed geotechnical engineer is required.

Subgrade preparation for areas of new pavement shall include scarification, moisture conditioning, and compaction of the upper 12 inches of subgrade. If areas of soft, saturated, or otherwise unsuitable materials are encountered, they should be removed to competent underlying material, as evaluated in the field by the geotechnical consultant, and replaced with compacted fill.

Fill should be placed in horizontal lifts approximately 8 inches in loose thickness and compacted by appropriate mechanical methods. Fill should be generally free of rocks or hard chunks of material in excess of 6 inches in diameter.

Fill material placed to support structures, such as pavements, curbs, and gutters, should be compacted to 95 percent or more relative compaction in accordance with ASTM D 1557-91 at a moisture content at or near optimum.

PAYMENT: The Square Foot contract unit price paid for "Construct 3" Asphalt Concrete Over 12" Compacted Subgrade" or "Construct 3" Gravel Over 12" Compacted Subgrade", shall include full compensation for doing all the work involved in placing material, complete in place, and tack coat, preparing the sub-grade and placing Cl. II aggregate base material as designated on the Plans, and as directed by the Engineer, and no additional or separate compensation will be allowed therefore.

52. Construct 12" RCP Per City of Yucaipa Std. Plan 106-3 (D-Load Per Plan):
53. Construct 15" RCP Per City of Yucaipa Std. Plan 106-3 (D-Load Per Plan):
54. Construct 24" RCP Per City of Yucaipa Std. Plan 106-3 (D-Load Per Plan):

This item shall include furnishing and installing 12", 15" or 24" Reinforced Concrete Pipe (RCP) storm drain mainline to the indicated grade and alignment shown on the Plan and as specified in Section 306, "Underground Conduit Construction," of the SSPWC, except as modified herein.

Pipe Class shall be as shown on the Plan. Where pipe class is not shown on the Plan, it shall be in accordance with the manufacturer's recommendation with a minimum D-load of 1500.

Contractor shall perform onsite factory inspections of pipe to ensure pipe quality. Pipe shall not be damaged in any way. Once Contractor takes possession of pipe, it shall be his responsibility to ensure pipe is not damaged.

RCP shall be manufactured in accordance with applicable provisions of Subsection 207-2, "Reinforced Concrete Pipe (RCP)," of the SSPWC. Basis of acceptance of the reinforced concrete pipe shall be a signed Certificate of Compliance with these Specifications from the manufacturer in accordance with Section 6-1.07 of the Caltrans Standard Specifications.

The Contractor is responsible for protecting existing utilities in place during all phases of storm drain trenching.

Excavation, installation, bedding, backfill and compaction for the RCP shall conform to Section 306, "Underground Conduit Construction" of the SSPWC, CALOSHA Safety Regulations, the details shown on the Plan, and these Special Provisions. Materials for reinforced concrete pipe shall conform to Section 207-2, "Reinforced Concrete Pipe (RCP)," of the SSPWC.

Any materials encountered during excavation, including but not limited to, asphalt concrete, concrete (reinforced or non-reinforced), rocks, and boulders, shall be removed and disposed off by the Contractor. The Contractor may place excavated materials temporarily on one side of the trench.

Trenching, Bedding and backfill shall be per City of Yucaipa "Main Line trench repair detail" Standard Drawing 106-3

Rocks included in the backfill shall be mixed with suitable excavated material so as to eliminate voids. Crushed Aggregate Base to be used for bedding shall conform to Subsection 200-2.2 of the SSPWC. Backfill shall be placed on each side of the pipe simultaneously to avoid unbalanced loads on the pipe. Spoils from trench excavation shall be immediately removed from the project site and disposed off.

Relative compaction requirements shall be in accordance with Section 306, "Underground Conduit Construction" of the SSPWC. Testing shall be done in each lift of trench backfill placed and compacted. Areas not passing compaction shall be recompacted and retested. Backfilling over a lift that failed compaction is not permitted.

Payment for this item shall be made at the price bid per lineal foot (LF) of RCP actually furnished and installed, including removal and construction of brick and mortar seal, connecting new pipes to existing or new facilities, excavation, export of excess materials, installation, bedding, backfill, compaction, and no additional compensation will be allowed therefor.

55. Construct Concrete Collar per SPPWC STD. Plan 380-4:

Construct Concrete Collar per SPPWC STD. PLAN 380-4 and as shown on the plans. The concrete must attain the compressive strength of 3250 PSI before any backfilling will be allowed, or CONTRACTOR to use high early strength concrete as specified in 201-1.2.4 of the "Standard Specifications", reinforcing steel shall be grade 60 billet steel ASTM-A615, conforming to Section 201-2, "Steel Reinforcement for Concrete," of the SSPWC, and as approved by the ENGINEER.

PAYMENT – Full compensation for conforming to the requirements of Construct Concrete Collar per SPPWC STD. Plan 380-4 furnishing all labor, tools, equipment, and materials necessary for accomplishing the work complete and in place, shall be considered as included in the CONTRACT unit bid per EACH of Construct Concrete Collar per SPPWC STD. Plan 380-4 and no additional compensation will be allowed, therefore.

56. Construct Transition Junction Structure per SPPWC STD. PLAN 341-2:

Construct Transition Junction Structure per SPPWC STD. PLAN 341-2 and as shown on the plans. The concrete must attain the compressive strength of 3250 PSI before any backfilling will be allowed, or CONTRACTOR to use high early strength concrete as specified in 201-1.2.4 of the "Standard Specifications", reinforcing steel shall be grade 60 billet steel ASTM-A615, conforming to Section 201-2, "Steel Reinforcement for Concrete," of the SSPWC, and as approved by the ENGINEER.

PAYMENT – Full compensation for conforming to the requirements of Construct Transition Junction Structure per SPPWC STD. PLAN 341-2 including pipe transition structure as shown on the plan, excavation, backfilling, furnishing all labor, tools, equipment, and materials necessary for accomplishing the work complete and in place, shall be considered as included in the CONTRACT unit bid per EACH of Construct Transition Junction Structure per SPPWC STD. PLAN 341-2 and no additional compensation will be allowed, therefore.

57. Construct Curb Opening Catch Basin with Grating Per SPPWC STD. Plan 302-3:

The contractor shall construct Curb Opening Catch Basin with Grating Per SPPWC STD. Plan 302-3 at the locations shown on the drawings. All work shall be performed in accordance with all City standards as well as the latest edition of the Standard Specifications for Public Works Construction.

PAYMENT – The per Each contract unit price paid for “Construct Curb Opening Catch Basin with Grating Per SPPWC STD. Plan 302-3” shall include full compensation for providing all materials and doing all the work involved in the construction. The work shall be completed as directed by the Engineer, complete in place, and no additional or separate compensation will be allowed, therefore.

58. Construct Grating Catch Basin with Per SPPWC STD. Plan 304-3:

The contractor shall construct Curb Opening Catch Basin with Grating Per SPPWC STD. Plan 302-3 at the locations shown on the drawings. All work shall be performed in accordance with all City standards as well as the latest edition of the Standard Specifications for Public Works Construction.

PAYMENT – The per Each contract unit price paid for “Construct Grating Catch Basin with Per SPPWC STD. Plan 304-3” shall include full compensation for providing all materials and doing all the work involved in the construction. The work shall be completed as directed by the Engineer, complete in place, and no additional or separate compensation will be allowed, therefore.

59. Construct Local Depression Per SPPWC STD. Plan 313-3:

The contractor shall construct PCC local depression per Riverside County Standard No. 203 at the locations shown on the drawings. All work shall be performed in accordance with all City standards as well as the latest edition of the Standard Specifications for Public Works Construction.

PAYMENT – The per Each contract unit price paid for “Construct Local Depression Per SPPWC STD. Plan 313-3” shall include full compensation for providing all materials and doing all the work involved in the construction. The work shall be completed as directed by the Engineer, complete in place, and no additional or separate compensation will be allowed, therefore.

60. Construct to Existing Junction Structure per SPPWC STD. PLAN 335-2:

Construct to Existing Junction Structure per SPPWC STD. PLAN 335-2 and as shown on the plans. The concrete must attain the compressive strength of 3250 PSI before any backfilling will be allowed, or CONTRACTOR to use high early strength concrete as specified in 201-1.2.4 of the “Standard Specifications” and as approved by the ENGINEER.

PAYMENT – Full compensation for conforming to the requirements of Construct to Existing Junction Structure per SPPWC STD. PLAN 335-2 including pipe transition structure as shown on the plan, excavation, backfilling, furnishing all labor, tools, equipment, and materials necessary for accomplishing the work complete and in place, shall be considered as included in the CONTRACT unit bid per EACH of Construct to Existing Junction Structure per SPPWC STD. PLAN 335-2 and no additional compensation will be allowed, therefore.

61. Install Grate Inlet R-3501-TB Neenah Foundry Co. or approved equal (Heavy Duty) See Detail on sheet 14.

The contractor shall Install Grate Inlet R-3501-TB Neenah Foundry Co. or approved equal (Heavy Duty) (see detail on sheet 14) at the locations shown on the drawings. All work shall be performed in accordance with all City standards as well as the latest edition of the Standard Specifications for Public Works Construction.

PAYMENT – The per Each contract unit price paid for “Install Grate Inlet R-3501-TB Neenah Foundry Co. or approved equal (Heavy Duty) see detail on sheet 14” shall include full compensation for providing all materials and doing all the work involved in the construction. The work shall be completed as directed by the Engineer, complete in place, and no additional or separate compensation will be allowed, therefore.

Signing and Striping (Item 62 to 104)

Striping shall conform to Section 210, “Paint and Protective Coating”, and Subsection 310-5.6, “Painting, Traffic Striping, Pavement Markings, and Curb Markings”, of the Standard Specifications, the current State of California Manual on Uniform Traffic Control Devices (MUTCD) and these Special Provisions.

Traffic Stripes and Markings shall be as shown on the plans. Quantities on plans are for reference only.

Paint for traffic striping and pavement markings shall be either rapid dry white conforming to State Specifications 8010-81D-04, or rapid dry yellow conforming to State Specifications 8010-81D-05, in accordance with color stipulated on the plans or as directed by the ENGINEER.

Paint shall be applied in two (2) equal thickness totaling the minimum required wet film thickness indicated in Subsection 310-5.6.5, “Traffic Stripes and Markings”, of the Standard Specifications.

A minimum period of 14 days shall be allowed between the two applications of striping or as directed by the ENGINEER.

Delete Paragraph 1 or Subsection 310-5.6.7, “Layout, Alignment and Spotting”, of the Standard Specifications for Public Works Construction, and add the Following.

The CONTRACTOR shall perform all layout, alignment, and spotting.

The CONTRACTOR shall be responsible for the completeness and accuracy of all layout alignment and spotting. Traffic striping shall not vary more than ½ inch in 50-feet from alignment shown on the plans.

Measurement of stripes and markings shall be based upon the square feet of painted area.

Raised Pavement Markers shall be per CALTRANS STANDARD SPECIFICATIONS Section 81-3 inclusive and these Special Provisions.

Raised Pavement markers shall be installed per the pavement delineation patterns of the current State Traffic Manual. Epoxy for Raised Pavement markers shall conform to provisions in Section 95, "Epoxy", of the CALTRANS STANDARD SPECIFICATIONS and Special Provisions.

Traffic signs, dimensions, and coloring shall conform to the latest California MUTCD Specifications. All signs are to be reflective.

All removed signs and posts in good condition shall be salvaged and delivered to the City yard.

All signs shall be new (other than those shown to be relocated). All new and relocated signs shall be mounted on new posts with new hardware unless noted otherwise. Signs designed for installation of existing street light poles shall be mounted with new hardware.

PAYMENT for this items is at a Linear Foot (LF), or Each (EA), bid shall be considered as full compensation for all necessary removal, striping, pavement marking, raised pavement markers, retroreflective pavement markers and road sandblasting, including signing, as shown on the Plan and for furnishing all labor, materials, tools, equipment, time, and incidentals for doing all work involved in construction of this items, and no additional compensation will be allowed therefore.

BID SCHEDULE "D":

Each respective bid item and bid schedule as shown on the proposal form shall comply with all respective sections of the 2018 Edition of the Standard Specifications for Public Works Construction (Green Book), its supplements, and any other publications as specified, except as modified herein. If there is a conflict between these inclusions and the Standard Specifications, these inclusions shall have precedence.

1. Remove and Relocate Existing Water Meter and Box per Water Company Standards, Contractor to Coordinate with South Mesa Water Company:

Contractor shall remove and relocate existing water meter box as shown on the construction plans, conforming to South Mesa Water Company Standard W-4A as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of the water meter box with

South Mesa Water Company as directed by the Engineer. Water meters shall be protected and accessible at all times during construction. Water meter box shall be located behind the sidewalk and adjusted to final finished grade as shown on the construction drawings and conforming to South Mesa Water Company Standard W-4A.

All meter boxes for relocations shall be replaced per Water Company Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for "Remove and Relocate Existing Water Meter and Box per Water Company Standards, Contractor to Coordinate with South Mesa Water Company" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing water meter box, including but not limited to, installation of new pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.

2. Remove and Relocate Existing Back Flow Device per Water Company Standards, Contractor to Coordinate with South Mesa Water Company:

Contractor shall remove and relocate existing Back Flow Preventer as shown on the construction plans, conforming to South Mesa Water Company Standard W-4, W-4A, W-5 as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of the Back Flow Preventer with South Mesa Water Company as directed by the Engineer. Back Flow Preventer shall be protected and accessible at all times during construction. Back Flow Preventer shall be located behind the sidewalk and adjusted to final finished grade as shown on the construction drawings and conforming to South Mesa Water Company Standard W-4, W-4A, W-5.

All Back Flow Preventers for relocations shall be replaced per Water Company Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for "Remove and Relocate Existing Back Flow Device per Water Company Standards, Contractor to Coordinate with South Mesa Water Company" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing Back Flow Preventer, including but not limited to, new pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.

3. Remove and Relocate Existing Fire Hydrant per Water Company Standards, Contractor to Coordinate with South Mesa Water Company:

Contractor shall remove and relocate existing Fire Hydrant, AV/AR or Blow-Off Valve as shown on the construction plans, conforming to South Mesa Water Company Standard W-6 as directed by the Engineer and/or Water Company representative.

Contractor shall coordinate the removal and relocation of Fire Hydrant with South Mesa Water Company as directed by the Engineer. Fire Hydrant shall be protected and accessible at all times during construction. Fire Hydrant shall be located behind the Curb and adjusted to final finished grade as shown on the construction drawings and conforming to South Mesa Water Company Standard W-6.

All Fire Hydrants for relocations shall be replaced per Water Company Standards and Specifications and shall be included in this item of work and no additional compensation will be allowed therefore.

Payment for "Remove and Relocate Existing Fire Hydrant per Water Company Standards, Contractor to Coordinate with South Mesa Water Company" shall be per the contract unit price bid per each (EA) and shall include full compensation for furnishing all labor, materials, tools, time, equipment, and incidentals, and for doing all work involved in the removal and relocation of the existing Fire Hydrant, including but not limited to, new pipe, fittings, appurtenances, excavation, backfill, and compaction as specified in these special provisions and/or as directed by the Engineer and/or Water Company representative.