# CONTRACT DOCUMENTS SPECIFICATIONS AND STANDARD DRAWINGS

for the construction of

#### GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT

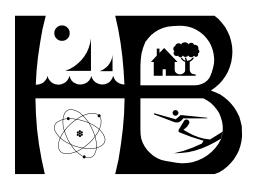
at the frontage medians of the Glen Mar development at

#### MAGNOLIA STREET, BUSHARD STREET AND ADAMS AVENUE

**CC No. 1688** 

in the

### CITY OF HUNTINGTON BEACH



2000 MAIN STREET HUNTINGTON BEACH, CALIFORNIA 92648 (714) 536-5431

> BIDS DUE: DECEMBER, 22, 2022 NO LATER THAN 2 PM

SEAN CRUMBY, DIRECTOR DEPARTMENT OF PUBLIC WORKS

### **CITY OF HUNTINGTON BEACH**

# PLANS SPECIFICATIONS AND CONTRACT DOCUMENTS

for the construction of

#### GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT

at the frontage medians of the Glen Mar development at

### MAGNOLIA STREET, BUSHARD STREET AND ADAMS AVENUE

CC No. 1688

Prepared by:	
Brian Polivka, Contract Administrator Date	
Approved by:	
Thomas M. Herbel, P.E., City Engineer, No. 53300	Date

**NOTE:** If there are any questions relative to this project, please contact Brian Polivka at: brian.polivka@surfcity-hb.org

# CITY OF HUNTINGTON BEACH DEPARTMENT OF PUBLIC WORKS

2000 MAIN STREET HUNTINGTON BEACH, CALIFORNIA 92648 (714) 536-5431

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APPENDIX B	DOWNLOAD ADDITIONAL COPIES OF PROJECT PLANS AND SPECIFICATIONS (https://www.planetbids.com/portal/portal.cfm?CompanyID=15340)
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APPENDIX D	CONTRACTOR BUSINESS LICENSE APPLICATION
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### SECTION A

#### NOTICE INVITING ELECTRONIC BIDS

for the construction of

#### GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT

**CC No. 1688** 

in the

#### CITY OF HUNTINGTON BEACH

PUBLIC NOTICE IS HEREBY GIVEN that the CITY OF HUNTINGTON BEACH, as AGENCY, invites electronic bids for the above stated project and will receive such bids prior to 2 PM on THURSDAY, DECEMBER 22, 2022, on the City's PlanetBids System Vendor Portal, at which time or thereafter bids will be opened and made available online. Bids received after this time will be considered non-responsive. Prospective bidders must first register as a vendor and then bid on this project via the City's PlanetBids System Vendor Portal website at: https://www.planetbids.com/portal/portal.cfm?CompanyID=15340

Copies of the bid documents, including instructions to bidders, bidder proposal form, and specifications may be downloaded free at:

https://www.planetbids.com/portal/portal.cfm?CompanyID=15340. Bidders must first register as a vendor on the City of Huntington Beach PlanetBids system to view and download the Contract Documents, to be added to the prospective bidders list, and to receive addendum notifications when issued.

Any contract entered into pursuant to this notice will incorporate the provisions of the State Labor Code. Pursuant to the provisions of the Labor Code of the State of California, the minimum prevailing rate of per diem wages for each craft, classification or type of workman needed to execute the contract shall be those determined by the Director of Industrial Relations of the State of California, which are available online at <a href="www.dir.ca.gov/DLSR">www.dir.ca.gov/DLSR</a> and also on file at the Office of the Director of Public Works, 2000 Main Street, Huntington Beach, CA 92648.

The AGENCY will deduct 5% retention from all progress payments. The Contractor may substitute an escrow holder surety of equal value to the retention in accordance with the provisions of the Public Contract Code, Section 10263. The Contractor shall be beneficial owner of the surety and shall receive any interest thereon.

The AGENCY 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.

No bid shall be considered unless it is prepared on the approved Proposal forms in conformance with the Instructions to Bidders as determined by the AGENCY. The bid must be accompanied by a certified check, cashier's check, or bidder's bond made payable to the AGENCY for an amount no less than 10% of the amount bid. For electronic submittal of bids, the bid security must be received at the City of Huntington Beach Public Works Office, 2000 Main Street, no later than the bid opening date and time. The bid security must be submitted in a sealed envelope bearing the name and address of the bidder, and the outside of the envelope must read as follows:

#### **OFFICIAL BID SECURITY - DO NOT OPEN**

Project Name: GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT

CC #: 1688

Bid Opening Date: DECEMBER 22, 2022 at 2 PM.

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, either self performed or subcontracted with a Class C-13 Fencing and C-28 Masonry at the time of the bid opening.

The successful Contractor and his subcontractors will be required to possess business licenses from the AGENCY. All extension of unit prices will be subject to verification by the AGENCY. In case of a variation between the unit price and the extension, the unit price will govern.

#### **Project Description:**

The WORK of this Contract will consist primarily of frontage road beautification at the Glen Mar tract including removal, repair and/or replacement of the tract frontage fence, street tree removal and replacement, landscaping and irrigation.

Project scope area includes frontage road medians along Magnolia Street (south of Yorktown Ave. and north of Adams Ave.), Bushard Street (south of Yorktown Ave. and north of Adams Ave.) and Adams Ave. (east of Magnolia Street and west of Bushard Street.

The contract shall allow the Contractor **60** working days to complete Schedule A contract work. If additive alternative work is awarded, the City will consider additional days, not to exceed 30 additional working days, included in the contract.

The engineer's estimate of probable construction cost for the work included in the basis of award is \$800,000.

A non-mandatory pre-bid meeting will be held to inspect the site and discuss the work to be done and the Contractor's responsibilities. The City's representatives will be available to address questions. The meeting will be held at 19711 Bushard Street in Huntington Beach, CA 92648 on WEDNESDAY, DECEMBER 14, 2022 at 2 PM.

All questions related to this bid solicitation must be submitted through the City's PlanetBids System Vendor Portal per the information provided in the Instructions to Bidders. Any other contact to City staff regarding this bid solicitation will be referred back to the PlanetBids system.

The AGENCY reserves the right to reject any or all bids, to waive any irregularity and to take all bids under advisement for a maximum period of **60** days.

the <u>7th</u> day of June <u>2022</u> , by I	Resolution No. <u>2022-28</u> .	,
Attest:		
	/s/ Robin Estanislau	

CITY CLERK OF THE CITY OF HUNTINGTON BEACH

BY ORDER of the CITY COUNCIL of the CITY OF HUNTINGTON BEACH, CALIFORNIA,

### SECTION B

#### INSTRUCTIONS TO BIDDERS

#### 1. Proposal Forms

Contract documents may be downloaded, at no cost, from the City's PlanetBids System Vendor Portal website at: <a href="https://www.planetbids.com/portal/portal.cfm?CompanyID=15340">https://www.planetbids.com/portal/portal.cfm?CompanyID=15340</a>. Bidders must first register as a vendor on the City of Huntington Beach PlanetBids system to view and download the Contract Documents, to be added to the prospective bidders list, and to receive addendum notifications when issued.

Bids will only be received electronically through the City's PlanetBids System Vendor Portal website at: <a href="https://www.planetbids.com/portal/portal.cfm?CompanyID=15340">https://www.planetbids.com/portal/portal.cfm?CompanyID=15340</a>. Bids will not be accepted after the specified Bid Opening date and time. The bidder shall have the sole exclusive responsibility for ensuring that the bid is received by the specified bid opening date and time. For technical support with the electronic bidding system, please click the Help Center icon from any PlanetBids screen to be directed to the technical support help desk.

Electronic bids shall be submitted and uploaded on the Proposal forms provided by the AGENCY. All information requested therein must be clearly and legibly set forth in the manner and form indicated. The AGENCY may reject any proposal not meeting these requirements. Unauthorized conditions, limitations, or provisions attached to a proposal will render it informal and may cause its rejection. The complete proposal forms shall be without interlineations, alterations or erasures. Alternative proposals will not be considered unless requested. No oral, telegraphic, or telephonic proposals or modifications will be considered. Any bidder may personally withdraws his bid from the City's PlanetBids system prior to the bid opening date and time stated in the Notice Inviting Bids. Any request to withdraw a bid after bid opening shall meet all requirements of Public Contract Code section 5100 et seq. and must be submitted in writing within five (5) working days, excluding Saturdays, Sundays and State holidays, specifying in detail the mistake.

#### 2. Proposal Guarantee

Proposals must be accompanied by a proposal guarantee consisting of a certified or cashier's check or bid bond payable to the AGENCY in the amount not less than 10% of the total amount named in the proposal. Any proposal not accompanied by such a guarantee will not be considered. Said check or bond shall be made payable to the AGENCY, and shall be given as a guarantee that the bidder, if awarded the Work, will enter into a contract within 10 working days after the award and will furnish the necessary bonds as hereinafter provided. In the case of refusal or failure to enter into said contract, the check or bond, as the case may be, shall be forfeited to the AGENCY.

For electronic submittal of proposals, the certified cashier's check or bid bond (bid security), must be received at the City of Huntington Beach Public Works office, 2000 Main Street, Huntington Beach, CA 92648 no later than the bid opening date and time. The bid security must be submitted in a sealed envelope bearing the name and address of the bidder, and the outside envelope must read as follows:

**OFFICIAL BID SECURITY - DO NOT OPEN** 

Project Name: GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT

CC #: 1688

Bid Opening Date: DECEMBER 22, 2022 at 2 PM.

#### 3. Proposal Signature

If the proposal is made by an individual, it shall be signed and his full name with his address shall be given; if it is made by a firm, it shall be signed with the co partnership name by a member of the firm who shall sign his own name and the name and address of each member shall be given; and if it is made by a corporation, the name of the corporation shall be signed by its duly authorized officer or officers attested by the corporate seal, and the names and titles of all officers of the corporation shall be given.

#### 4. Delivery Of Proposal

Bids will only be received electronically through the City's PlanetBids System Vendor Portal website at: <a href="https://www.planetbids.com/portal/portal.cfm?CompanyID=15340">https://www.planetbids.com/portal/portal.cfm?CompanyID=15340</a>. Bids will not be accepted after the specified Bid Opening date and time. The bidder shall have the sole exclusive responsibility for ensuring that the bid is received by the specified bid opening date and time. For technical support with the electronic bidding system, please click the Help Center icon from any PlanetBids screen to be directed to the technical support help desk.

Any bidder may personally withdraws his bid from the City's PlanetBids system prior to the bid opening date and time stated in the Notice Inviting Bids. Any request to withdraw a bid after bid opening shall meet all requirements of Public Contract Code section 5100 et seq. and must be submitted in writing within five (5) working days, excluding Saturdays, Sundays and State holidays, specifying in detail the mistake.

#### 5. Return Of Proposal Guarantees

The proposal guarantees of the second and third lowest bidders will be held until the awarded bidder has properly executed all contract documents. Within 10 working days after the award of contract, the remaining proposal guarantees accompanying all other proposals will become null and void and returned to the unsuccessful bidders.

#### 6. 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.

#### 7. 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.

#### 8. Contractor's License Requirement

This project requires the Contractor to possess a valid State of California contractor's license of the proper classification in accordance with the provisions of Public Contract Code Section 10164.

#### 9. References

All reference information called for in the bid proposal must be submitted with the bid proposal. Failure to provide reference information of history of similar work and experience with the bid proposal at the time of bid opening may lead to rejection of such proposal as non-responsive.

#### 10. Listing Of Subcontractors

Bidders shall list in the bid proposal the name and place of business of each subcontractor who will perform work or labor or render services for the Contractor in an amount in excess of one-half of one percent of the Contractor's total bid or \$10,000, whichever is greater.

#### 11. 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. Should a bidder find any errors, omissions, or discrepancies in the plans, specifications, and other contract documents or should he be in doubt as to their meaning, he shall notify the AGENCY. Such notification must be submitted, if any, must be submitted no later than 2PM ON THURSDAY, DECEMBER 22, 2022. Any inquiries received after this deadline will not be accepted. Questions must be submitted electronically through the City's PlanetBids system. Emails, phone calls, and faxes will not be accepted. Questions submitted to City staff will not be addressed and bidder will be directed to the PlanetBids system.

If the City determines that the point in question is substantive and is not clearly and fully set forth in the Contract Documents, the City will issue a written addendum clarifying the matter which will be posted on the City's PlanetBids System Vendor Portal website at:

https://www.planetbids.com/portal/portal.cfm?CompanyID=15340. Any interpretation of the Contract Documents will be made only by written addenda on the City's PlanetBids system. City will not be responsible for any explanations or interpretations provided in any other manner. No person is authorized to make any oral interpretation of any provision in the Contract Documents to any bidder, and no bidder should rely on any such oral interpretation. Any addenda issued during the bidding period shall form a part of the contract and shall be included with the proposal.

#### 12. Equivalent Materials

Requests for the use of equivalents to those specified, must be submitted to the AGENCY 10 working days prior to the need of such materials unless otherwise specified in the Special Provisions. Within that time, the AGENCY will issue a written response indicating approval or disapproval of such request. It is the sole responsibility of the successful bidder to prove to the AGENCY that such a material is truly an equivalent.

#### 13. 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, and to full compliance therewith. 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. of the labor code for each craft, classification or type of workman required as set forth by the Director of Industrial Relations of the State of California.

#### 14. Award Of Contract

The award of contract, if made, will be to the lowest responsive and responsible bidder as determined solely by the AGENCY. The AGENCY reserves the right to reject any or all proposals, to waive any irregularity, and to take the bids under advisement for a maximum period of 60 days. 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.

#### 15. Material Guarantee

The successful bidder may be required to furnish a written guarantee covering certain items of work for varying periods of time from the date of acceptance of the work by the AGENCY. The work to be guaranteed, the form, and the time limit of the guarantee will be specified in the special provisions. Said guarantee shall be signed and delivered to the AGENCY before acceptance of the contract by the AGENCY. Upon completion of the contract, the amounts of the two contract bonds required in Section 2-4, "CONTRACT BONDS," of the Standard Specifications for Public Works Construction, may be reduced to conform to the total amount of the contract bid prices for the items of work to guaranteed, and this amount shall continue in full force and effect for the duration of the guarantee period. However, the Labor and Material Bond can not be reduced until the expiration of 35 days after the date of recordation of the Notice of Completion.

#### 16. Execution Of Contract

The successful bidder shall execute a written contract with the AGENCY on the form of agreement provided, and shall secure all insurance and bonds required by the Specifications within 10 working days from the date of the award. Failure to enter into a contract shall be just cause for the annulment of the award and the forfeiture of the proposal guarantee. If the successful bidder fails to execute the contract, the AGENCY may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder fails to execute the contract, the AGENCY may award the contract to the third lowest bidder. On the failure of such second or third lowest responsible bidder to execute the contract, such bidder's guarantees shall be likewise forfeited to the AGENCY. The work may then be re-advertised.

#### 17. Submission Of Bonds And Insurance

The successful bidder will be required to furnish the necessary bonds and insurance to the AGENCY within 10 working days from the award of contract. See **Appendix F** for the City approved Payment and Performance Bond Forms. The Contractor may use any standard form for the Bid Bond. The successful bidder shall provide a certificate stating that the bonding company

is admitted to do business in the State of California. This certification may be obtained from the Executive Officer and Clerk of the Superior Court at the following address & phone:

Orange County Superior Court Probate Court Operations 341 The City Drive P.O. Box 14171 Orange, CA 92613-1571 (714) 935-6061, Contact Linda C. Wallace

Prior to the issuance of the Notice to Proceed, the AGENCY must be furnished with a *Policy Endorsement*, from the successful bidder's insurance company, naming the AGENCY as an additional insured.

#### 18. Addenda

Substantive City changes to the requirements contained herein will be made by written addendum to this Invitation for Bids. Any written addenda issued pertaining to this Invitation for Bids will be posted on the City's PlanetBids System Vendor Portal website at:

https://www.planetbids.com/portal/portal.cfm?CompanyID=15340, and will be incorporated into the terms and conditions of any resulting Purchase Order and/or Contract as appropriate. The City shall not be bound to any modifications to or deviations from the requirements set forth in this Instructions to Bidders as the result of oral instruction or communication.

The effect of all addenda to the contract documents shall be considered in the bid package and said addenda shall be made part of the contract documents and shall be returned with the bid package. Failure to submit any such addenda with the bid package may render the bid irregular and may result in its rejection by the AGENCY.

#### 19. Bid Protest

To be considered timely, a bid protest must be filed within the following time limits:

- (a) Protests based upon alleged defects or improprieties in the bid documents shall be filed prior to the date of bid opening.
- (b) All other protests must be filed within five calendar days after the protester knew or should have known the basis of the protest, but no later than five calendar days after the date of when the Bids were due to the AGENCY.

#### 20. Questions to the Engineer

Questions regarding the bid documents (i.e. plans, specifications, contract documents, bid forms, etc.) will be received by the Engineer up to five working days prior to the bid opening as specified in SECTION A. Questions asked of the Engineer after this time will not be addressed.

### SECTION C

#### PROPOSAL

for the construction of

GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT at the Glen Mar development frontage road medians at MAGNOLIA STREET, BUSHARD STREET AND ADAMS AVENUE CC No. 1688

in the

#### CITY OF HUNTINGTON BEACH

# TO THE HONORABLE MAYOR AND MEMBERS OF THE COUNCIL OF HUNTINGTON BEACH:

In compliance with the Notice Inviting Electronic Bids, the undersigned hereby proposes and agrees to perform all the work therein described, and to furnish all labor, material, equipment and incident insurance necessary therefor, in accordance with the plans and specifications on file in the office of the City Engineer of the City of Huntington Beach. The undersigned agrees to perform the work therein to the satisfaction of and under the supervision of the City Engineer of the City of Huntington Beach, and to enter into a contract at the following prices. The undersigned agrees to complete the work within <u>60</u> working days for all bid schedules, starting from the date of the Notice to Proceed.

BIDDER declares that this proposal is based upon careful examination of the work site, plans, specifications, Instructions to Bidders and all other contract documents. If this proposal is accepted for award, BIDDER agrees to enter into a contract with AGENCY at the unit and/or lump sum prices set forth in the following Bid Schedule. BIDDER understands that failure to enter into a contract in the manner and time prescribed will result in forfeiture to AGENCY of the guaranty 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 AGENCY RESERVES THE RIGHT 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, fees, etc., and will be guaranteed for a period of sixty days from the bid opening date. If at such time the contract is not awarded, the AGENCY will reject all bids and will readvertise the project. 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 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 AGENCY'S notice of award of contract to the BIDDER, the
proceeds of the security accompanying this bid shall become the property of the AGENCY and
this bid and the acceptance hereof may, at the AGENCY'S option, be considered null and void.

Accompanying this proposal of bid, find	in the amount of	which
said amount is not less than 10% of the aggregate of	the total bid price, as required by	the Notice
Inviting Electronic Bids, payable to the AGENCY.	(Please insert the words "Cash",	"Certified
Check", or "Bidder's Bond for%", as the case may	be) Any standard Surety Bid Bo	ond form is
acceptable.		

Bidder shall signify receipt of all Addenda here, if any:

Addenda No.	Date Received	Bidder's Signature

### **SECTION C**

### PROJECT BID SCHEDULE

### Glen Mar Frontage Road Improvements – C.C No 1688

### **PROJECT BASE BID:**

Description	Total Cost
TOTAL BID AMOUNT - SCHEDULE A	\$
TOTAL BID AMOUNT - SCHEDULE B - Additive Alternative Bid Item No. 1	\$
TOTAL BID AMOUNT - SCHEDULE C - Additive Alternative Bid Item No. 2	\$
TOTAL BID AMOUNT - SCHEDULE D - Additive Alternative Bid Item No. 3	\$
BASE BID (TOTAL LUMP SUM BID) - Total for Schedule A, B, C and D	\$BASIS OF AWARD

Note: Refer to Section 7, Measurement and Payment.

All extensions of unit prices will be subject to verification by Owner. In case verification is required between the unit price and the extension, the unit price will govern. The City reserves the right to reject any or all proposals and bid items, including the deletion of bid schedules B through D without any change in the unit prices. Section 2-7 of the Greenbook does not apply for the deletion of bid schedules B through D prior to award.

## PROJECT BID SCHEDULE A

# **Glen Mar Frontage Road Improvements – C.C No 1688**

# **BID ITEMS**

Item No.	Description	Quantity	Unit	Unit Cost	Total Cost (Extension)
1	Mobilization	1	LS	\$	\$
2	Traffic Control	1	LS	\$	\$
3	Preparation of Project Specific Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP)	1	LS	\$	\$
4	Installation and Maintenance of BMP's per the approved SWPPP and WPCP	1	LS	\$	\$
5	Tree Removal with Stump, Root and Backfill	4	EA	\$	\$
6	Furnish and Install 24" Box Tree	7	EA	\$	\$
7	Trim Existing Vegetation	1	LS	\$	\$
8	Construct Mow Strip	1	LS	\$	\$
9	Remove and Construct New Pilaster	13	EA	\$	\$
10	Renovate Existing Pilaster	24	EA	\$	\$
11	Demo and Remove Existing Pony Wall	13	EA	\$	\$
12	Not applicable				
13	Complete Renovation to Existing Pilaster Previously Renovated	2	EA	\$	\$
14	Remove Existing Fencing and Construct New Fencing Structure	624	LF	\$	\$
15	Demo and Permanently Remove Existing Pilaster, Footing and Fence. Backfill as Necessary	1	LS	\$	\$

16	Demo and Remove Existing Asphalt Pavement	32,865	SF	\$	\$				
17	Provide and Install ES-2 Mulch	5,553	SF	\$	\$				
19	Construct Concrete Sidewalk	1,330	SF	\$	\$				
20	Monument Entrance Sign Renovation/Completion	1	LS	\$	\$				
21	Not Applicable								
22	Not Applicable								
23	Not Applicable								
24	Not Applicable								
25	Not Applicable								
26	Not Applicable								
27	90 Day Maintenance	1	LS	\$	\$				
28	Pothole for Utilities Not Shown on Plans	5	EA	\$	\$				
29	As-Built Plans	1	LS	\$	\$				
ТОТА	TOTAL BID AMOUNT - SCHEDULE A \$								

$\Gamma \cap T \wedge I$	BID	AMOUNT	IN WORDS:

Note: Refer to Section 7, Measurement and Payment.

All extensions of unit prices will be subject to verification by Owner. In case verification is required between the unit price and the extension, the unit price will govern. The City reserves the right to reject any or all proposals and bid items, including the deletion of bid schedules B through D without any change in the unit prices. Section 2-7 of the Greenbook does not apply for the deletion of bid schedules B through D prior to award.

## PROJECT BID SCHEDULE B

# **Glen Mar Frontage Road Improvements – C.C No 1688**

# ADDITIVE ALTERNATIVE BID ITEMS NO. 1

Item No.	Description	Quantity	Unit	Unit Cost	Total Cost (Extension)
1	Mobilization	1	LS	\$	\$
2	Traffic Control	1	LS	\$	\$
3	Preparation of Project Specific Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP)	1	LS	\$	\$
4	Installation and Maintenance of BMP's per the approved SWPPP and WPCP	1	LS	\$	\$
5	Tree Removal with Stump, Root and Backfill	7	EA	\$	\$
6	Furnish and Install 24" Box Tree	14	LS	\$	\$
7	Not Applicable				
8	Construct Mow Strip	1	LS	\$	\$
9	Remove and Construct New Pilaster	11	EA	\$	\$
10	Renovate Existing Pilaster	54	EA	\$	\$
11	Demo and Remove Existing Pony Wall	25	EA	\$	\$
12	Construct New Pilaster (not previously existing)	1	EA	\$	\$
13	Not Applicable				
14	Remove Existing Fencing and Construct New Fencing Structure	1,020	LF	\$	\$
15	Demo and Permanently Remove Existing Pilaster, Footing and Fence. Backfill as Necessary	1	LS	\$	\$

16	Demo and Remove Existing Asphalt Pavement	13,590	SF	\$ \$
17	Provide and Install ES-2 Mulch	10,128	SF	\$ \$
18	Provide and Install Kurapia Sod Ground Cover	3,465	SF	\$ \$
19	Not Applicable			
20	Not Applicable			
21	Demo and Remove Existing Backflow & Reconnect Line to Tie In	1	LS	\$ \$
22	Demo and Remove Existing Irrigation Controller Cabinet and Construct New Footing with New CS3000 Controller Cabinet	1	LS	\$ \$
23	Irrigation Supply Line with Tee Connection and Tie Ins	1	LS	\$ \$
24	Install New Master Valve, Backflow Device & Flow Sensor	1	LS	\$ \$
25	Install New Irrigation Lateral Lines, Control Valves & Sprinkler Heads	1	LS	\$ \$
26	Electrical Control Wiring and Appurtenances for Frontage and Median	1	LS	\$ \$
27	90 Day Maintenance	1	LS	\$ \$
24	Pothole for Utilities Not Shown on Plans	5	EA	\$ \$
25	As-Built Plans	1	LS	\$ \$
	AL BID AMOUNT - SCHEDULE B (ADDI RNATIVE BID ITEM NO. 1)	ITIVE		\$ 

1	7	)	ΓΔ	I	1	R	$\Pi$	Δ (	1	<b>\</b> /	[(	)		JΠ	Γ ]	IN	J	W	V	$\overline{C}$	Æ	?	D.	C	•

Note: Refer to Section 7, Measurement and Payment.

All extensions of unit prices will be subject to verification by Owner. In case verification is required between the unit price and the extension, the unit price will govern. The City reserves the right to reject any or all proposals and bid items, including the deletion of bid schedules B through D without any change in the unit prices. Section 2-7 of the Greenbook does not apply for the deletion of bid schedules B through D prior to award.

## PROJECT BID SCHEDULE C

# **Glen Mar Frontage Road Improvements – C.C No 1688**

## ADDITIVE ALTERNATIVE BID ITEMS NO. 2

Item No.	Description	Quantity	Unit	Unit Cost	Total Cost (Extension)
1	Mobilization	1	LS	\$	\$
2	Traffic Control	1	LS	\$	\$
3	Preparation of Project Specific Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP)	1	LS	\$	\$
4	Installation and Maintenance of BMP's per the approved SWPPP and WPCP	1	LS	\$	\$
5	Tree Removal with Stump, Root and Backfill	1	EA	\$	\$
6	Furnish and Install 24" Box Tree	14	EA	\$	\$
7	Not Applicable				
8	Not Applicable				
9	Remove and Construct New Pilaster	6	EA	\$	\$
10	Renovate Existing Pilaster	61	EA	\$	\$
11	Demo and Remove Existing Pony Wall	28	EA	\$	\$
12	Construct New Pilaster (not previously existing)	1	EA	\$	\$
13	Not Applicable				
14	Remove Existing Fencing and Construct New Fencing Structure	1,098	LF	\$	\$
15	Not Applicable				

16	Demo and Remove Existing Asphalt Pavement	10,515	SF	\$	\$			
17	Provide and Install ES-2 Mulch	10,515	SF	\$	\$			
18	Not Applicable							
19	Not Applicable							
20	Not Applicable							
21	Not Applicable							
22	Not Applicable							
23	Not Applicable							
24	Not Applicable							
25	Not Applicable							
26	Not Applicable							
27	90 Day Maintenance	1	LS	\$	\$			
28	Pothole for Utilities Not Shown on Plans	5	EA	\$	\$			
29	As-Built Plans	1	LS	\$	\$			
	TOTAL BID AMOUNT - SCHEDULE C (ADDITIVE ALTERNATIVE BID ITEM NO. 2)							

TOTAL	RID	AMO	TINI	IN	WORD	2

Note: Refer to Section 7, Measurement and Payment.

All extensions of unit prices will be subject to verification by Owner. In case verification is required between the unit price and the extension, the unit price will govern. The City reserves the right to reject any or all proposals and bid items, including the deletion of bid schedules B through D without any change in the unit prices. Section 2-7 of the Greenbook does not apply for the deletion of bid schedules B through D prior to award.

## PROJECT BID SCHEDULE D

# **Glen Mar Frontage Road Improvements – C.C No 1688**

# ADDITIVE ALTERNATIVE BID ITEMS NO. 3

Item No.	Description	Quantity	Unit	Unit Cost	Total Cost (Extension)
1	Mobilization	1	LS	\$	\$
2	Traffic Control	1	LS	\$	\$
3	Preparation of Project Specific Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP)	1	LS	\$	\$
4	Installation and Maintenance of BMP's per the approved SWPPP and WPCP	1	LS	\$	\$
5	Tree Removal with Stump, Root and Backfill	1	EA	\$	\$
6	Furnish and Install 24" Box Tree	1	EA	\$	\$
7	Not Applicable				
8	Not Applicable				
9	Not Applicable				
10	Renovate Existing Pilaster	11	EA	\$	\$
11	Demo and Remove Existing Pony Wall	3	EA	\$	\$
12	Not Applicable				
13	Not Applicable				
14	Remove Existing Fencing and Construct New Fencing Structure	143	LF	\$	\$
15	Not Applicable				

16	Demo and Remove Existing Asphalt Pavement	1,874	SF	\$	\$			
17	Provide and Install ES-2 Mulch	1,874	SF	\$	\$			
18	Not Applicable							
19	Not Applicable							
20	Not Applicable							
21	Not Applicable							
22	Not Applicable							
23	Not Applicable							
24	Not Applicable							
25	Not Applicable							
26	Not Applicable							
27	90 Day Maintenance	1	LS	\$	\$			
28	Pothole for Utilities Not Shown on Plans	5	EA	\$	\$			
29	As-Built Plans	1	LS	\$	\$			
	TOTAL BID AMOUNT - SCHEDULE D (ADDITIVE ALTERNATIVE BID ITEM NO. 3)  \$							

TC	TAI	RID	AMC	TUII	IN V	WORDS	•

Note: Refer to Section 7, Measurement and Payment.

All extensions of unit prices will be subject to verification by Owner. In case verification is required between the unit price and the extension, the unit price will govern. The City reserves the right to reject any or all proposals and bid items, including the deletion of bid schedules B through D without any change in the unit prices. Section 2-7 of the Greenbook does not apply for the deletion of bid schedules B through D prior to award.

#### LIST OF SUBCONTRACTORS

In accordance with Government Code Section 4104, the Bidder shall set forth the name and business address of each subcontractor who will perform work or render service to the bidder on said contract in an amount in excess of one-half of one percent of the total bid or \$10,000, whichever is greater, and the portion of the work to be done by such subcontractor.

Bid Item(s)	Name and Address of Subcontractor	State License Number	Class	DIR PWC Registration #	Dollar Amount	% of Contract

By submission of this proposal, the Bidder certifies:

- 1. That he is able to and will perform the balance of all work which is not covered in the above subcontractors listing.
- 2. That the AGENCY will be furnished copies of all subcontracts entered into and bonds furnished by subcontractor for this project.

# NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

I declare under penalty of perjury under the laws true and correct and that this declaration is execut			
and correct and that this declaration is execut	Date , at	City	, <del></del> State
, being first	duly sworn, depo	ses and says that	he or she is
foregoing bid that the bid is not made in the interest partnership, company, association, organization, collusive or sham; that the bidder has not directly of to put in a false or sham bid, and has not directly agreed with any bidder or anyone else to put in bidding; that the bidder has not in any manner communication, or conference with anyone to fix secure any advantage against the public body as proposed contract; that all statements contained in not, directly or indirectly, submitted his or her bid thereof, or divulged information or data relative corporation, partnership, company association, or agent thereof to effectuate a collusive or sham bid	or corporation; the or indirectly induced or indirectly induced or indirectly colling a sham bid, or the fide price, or evarding the contraint the bid are true; and price or any breaker thereto, or paid, reganization, bid de	at the bid is gened or solicited any uded, conspired, nat anyone shall rectly, sought by that of any other ct of anyone intend, further, that the sdown thereof, or and will not pa	uine and not other bidder connived, or refrain from y agreement, bidder, or to brested in the the bidder has the contents by fee to any
	Name of Bidde	r	
	Signature of Bi	dder	
	Address of Bid	der	

#### **UTILITY AGREEMENT**

# HONORABLE MAYOR AND CITY COUNCIL CITY OF HUNTINGTON BEACH, CALIFORNIA

#### Gentlemen:

The undersigned hereby promises and agrees that in the performance of the work specified in the contract, known as the **GLEN MAR FRONTAGE ROAD IMPROVEMENTS PROJECT**, (I)(we)(it) will employ and utilize only qualified persons, as hereinafter defined, to work in proximity to any electrical secondary or transmission facilities. The term "Qualified Person" is defined in Title 8, California Administrative Code, Section 2700, as follows:

"Qualified Person: A person who, by reason of experience or instruction, is familiar with the operation to be performed and the hazards involved."

The undersigned also promised and agrees that all such work shall be performed in accordance with all applicable electrical utility company's requirements, Public Utility Commission orders, and State of California Cal-OSHA requirements.

The undersigned further promises and agrees that the provisions herein shall be and are binding upon any subcontractor or subcontractors that may be retained or employed by the undersigned, and that the undersigned shall take steps as are necessary to assure compliance by any said subcontractor or subcontractors with the requirements contained herein.

	Contractor	
	Ву	
	Tr'.d	_
	Title	
Date:		

### **DISQUALIFICATION QUESTIONNAIRE**

In accordance with Government Code Section 10162, 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 Bidder ever been disqualified, removed or otherwise prevented from bidding on or completing a Federal, State or local government project because of a violation of law or a safety regulation?

		☐ Yes	□ No
If the an	swer is yes, explain the circ	umstances in the	space provided.
-			
Note:	This questionnaire constitute Proposal shall constitute significant to the constitute of the constitut		ne Proposal, and a signature portion of the uestionnaire.

#### 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.

I am aware of the provisions of Section 3700 of the 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 will comply with such provisions before commencing the performance of the work of this contract.

	Contractor	
	By	
	Title	
Date:		

## **BIDDER'S INFORMATION**

BIDDER certifies that the following information is true and correct:

	Bidder Name			
	Business Address			
	City,		State	Zip
	( )			_
	Telephone Number		Email Ad	dress
	State Contractor's Li	icense No. and	Class	
	Original Date Issued			
	Expiration Date			
The work site was i	nspected by	of o	ur office on	, 202
		- - - -		
financially or other	prepared to satisfy the crise, to perform the criterian and specification	ontract for the		
	Company Name			
	Signature of Bidder			
	Printed or Typed Sig	gnature		

## **NOTARY CERTIFICATE**

Subscribed and sworn	to before me this da	ay of	, 202
individual who sign		which this	icate verifies only the identity of the certificate is attached, and not the
State of	)		
County of	)		
On	before n	ne.	
Month, Day, ar	before n	Ins	sert Name and Title of Notary
personally appeared			
7 11 —		Name(s) of S	Signer(s)
subscribed to the within his/her/their authoriz	in instrument and acknowled capacity(ies), and the	owledged to a at by his/her/	be the person(s) whose name(s) is/are me that he/she/they executed the same /their signature(s) on the instrument the acted, executed the instrument.
I certify under PENA foregoing paragraph is		nder the lav	ws of the State of California that the
WITNESS my hand ar	nd official seal.		
Signature			
	Signature of Notary	Public	(PLACE NOTARY SEAL ABOVE)

### **Bidder's Project History**

For the purposes of this project, the bidder shall provide project history of similar work, specifically referencing the construction of {Describe specific work and experience necessary for project. For example, "Sanitary sewer line installation of at least of 1,000 of 8-inch and greater in public right-of-way. Sanitary sewer lift stations of similar size, project work within public streets, an area containing high ground water and pipeline construction in high ground water regions with trench depths of 8-feet to the invert."}. Bidders are encouraged to submit supplemental relevant project history in addition to the projects listed herein.

Listed below are the names, address and telephone numbers for three public agencies for which the bidder has performed similar work within the past five years:

	65	
Name and Telephone No. o	of Project Manager:	
Contract Amount	Type of Work	Date Complete
Provide additional project o	description to show similar work:	
Name and Address of Publ	ic Agency	
Name and Telephone No. o	of Project Manager:	
Contract Amount	Type of Work	Date Complete
Provide additional project of	description to show similar work:	
Name and Address of Publ	ic Agency	
Name and Telephone No. o	of Project Manager:	
	Type of Work	Date Complete
Contract Amount	Type of World	

# **Bidder's Critical Staff**

Listed below are the names of the bidders proposed Construction Project Manager, and Superintendent. For each of these critical positions, please list at least three projects for which the critical staff has performed similar work within the last five years. These projects do not have to be under the employment of the bidder of this project. Bidders are encouraged submit supplemental relevant project history in addition to the projects listed herein.

Name of proposed Project Manager		
Telephone No. of proposed Project	Manager:	
Project Name & Contract Amount	Type of Work	Date Completed
Project Name & Contract Amount	Type of Work	Date Completed
Project Name & Contract Amount	Type of Work	Date Completed
Name of proposed Superintendent		
Telephone No. of proposed Superin	tendent:	
Project Name & Contract Amount	Type of Work	Date Completed
Project Name & Contract Amount	Type of Work	Date Completed
Project Name & Contract Amount	Type of Work	Date Completed

# CONTRACTOR REGISTRATION WITH CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) CERTIFICATE

Pursuant to SB 854 (citing Labor Code Section 1771.1(a)), passed by the California State Senate on June 20, 2014, established a new public works Contractor Registration Program, which requires all contractors and subcontractors bidding and performing work on Public Works Projects to register on an annual basis (each July 1 through June 30 state fiscal year) with the California Department of Industrial Relations (DIR). Currently the annual non-refundable registration fee for Contractors is \$300. Each contractor to whom a public works contract has been awarded shall sign the following certificate.

DIR FACT SHEET on SB 854 http://www.dir.ca.gov/DLSE/PublicWorks/SB854FactSheet\_6.30.14.pdf

DIR's Contractor Registration Link – Call (844) 522-6734 https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm

DIR's Contractor Registration searchable database: https://efiling.dir.ca.gov/PWCR/Search.action

I am aware and will comply with the provisions of Labor Code Section 1771.1(a) which states:

"A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded."

I furthermore will comply by providing proof of registration with DIR as the primary contractor, as well as for ALL subcontractors at the time of submitting the bid.

	Contractor
	By
	Email
Date:	Title
PWC Registration #:	

# **SECTION D**

SAMPLE CONTRACT

# **INSERT SAMPLE CONTRACT**

# SECTION E

# SPECIAL PROVISIONS

All the Work to be done under this contract shall be in accordance with these Special Provisions and the "GREENBOOK" Standard Specifications for Public Works Construction, 2021 edition, as written and promulgated by the Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and the Southern California District of Associated General Contractors of California. Copies of the Standard Specifications are available from the publisher:

BNi Publications, Inc. 990 Park Center Drive, Suite E Vista, CA 92081 760-734-1113

or

1612 S. Clementine St. Anaheim, CA 92802 714-517-0971

The Standard Specifications set forth above, referred hereinafter as Standard Specifications, 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 section numbers of these Special Provisions coincide with those of the said Standard Specifications. Only those sections requiring amendment, elaboration, or specifying options, are called out.

# PART 1 GENERAL PROVISIONS

## **SECTION 1 – GENERAL**

## 1-2 TERMS AND DEFINITIONS.

[Add the following:].

**AGENCY.....** The City of Huntington Beach.

**Board.....** The City Council of the City of Huntington Beach.

**County.....** The County of Orange.

Engineer..... The City Engineer of the City of Huntington Beach or his authorized

representative.

Specifications . . Includes the Greenbook Standard Specifications, Special Provisions,

Addenda, and other contract documents, collectively.

# 1-7 AWARD AND EXECUTION OF THE CONTRACT.

#### **1-7.1** General.

[Replace with the following:].

Within 10 working days after the date the AGENCY'S award of contract, the Contractor shall execute and return all contract documents required by the AGENCY. The AGENCY reserves the right to terminate the award if the above requirement is not met. Such termination will result in the forfeiture of the Proposal Guarantee.

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

A corporation to which an award is made may be required, before the Contract Agreement is executed by the AGENCY, 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.

### 1-7.2 CONTRACT BONDS.

[Add the following:].

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

In conformance with the State of California Government Code, Chapter 13, Section 4590, the Contractor may substitute securities for any monies withheld by the City to endurance under the contract.

At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the AGENCY, or with a state or federally chartered bank as the escrow agent, who shall pay such monies to the Contractor upon notification by AGENCY of Contractor's satisfactory completion of the contract.

The type of securities deposited and the method of release shall be approved by AGENCY.

# **SECTION 2 - SCOPE OF THE WORK**

## 2-2 PERMITS.

[Delete the entire subsection and replace with the following:].

Prior to the start of any work, the CONTRACTOR shall acquire applicable AGENCY permits and arrange for AGENCY inspections. The AGENCY will issue the permits at no charge to the CONTRACTOR. The CONTRACTOR and all subcontractors shall each obtain an AGENCY business license, and shall be licensed in accordance with State Business and Professions Code. The Contractor, at no additional cost to the AGENCY, shall also obtain any and all other permits, licenses, inspections, certificates, or authorizations required by any governing body or entity.

The CONTRACTOR may also be required to be permitted by (Other) AGENCY'S (Not City) to perform work in and around their facilities or is within their reviewing authority (ex. OCFCD, CF&G, ACE). The City (AGENCY) will be required to secure the permit from these (Other) AGENCY'S, however, the Contractor shall not be responsible for the initial permit fees, but, the Contractor shall be responsible for any additional fees assessed to that permit specific to its usage.

The CONTRACTOR and all subcontractors shall each obtain an AGENCY (City) business license, and shall be licensed in accordance with State Business and Professions Code.

At the discretion of the AGENCY, the CONTRACTOR may be required to submit a project specific SWPPP (CONTRACTOR can submit a Water Pollution Control Program (WPCP) in-lieu of a SWPPP). This requirement is applicable to projects that are under an acre but meet the definition of construction activity as defined by Order No. 2009-0009-DWQ, NPDES No. CAS000002. These projects involve the disturbance of soil, clearing or grubbing of vegetation, and/or use of cementitious products. The CONTRACTOR shall submit a project specific SWPPP/WPCP for AGENCY approval prior to issuance of Notice to Proceed. For projects that are not required to submit a SWPPP/WPCP, CONTRACTOR shall implement adequate Minimum Best Management Practices (BMPs) to prevent the discharge of pollutants to the storm drain system.

Storm Water Quality Requirements for this project are as follows:

The CONTRACTOR is responsible for managing the construction site in accordance with the City's NPDES Permit and Municipal Code Chapter 14.25 - Stormwater and Urban Runoff Management ordinance and the Project Specific SWPPP. The purpose of the NPDES permit and ordinance is the improvement of water quality through the control of pollutants. Without exception, discharges of stormwater from a construction site into the storm drain system (gutter)

or a receiving waterbody are prohibited if the discharge contains pollutants that have not been reduced to the maximum extent practicable through the implementation of BMPs. It is the CONTRACTOR's responsibility to implement a combination of BMPs to control erosion and sediment transport, and pollutants from materials and waste management storage and other construction related activities.

When the contract does not include a pay item for the full compensation for obtaining and conforming to the requirements of this section, the requirements of this section shall be included in other items of work and no additional compensation will be made therefor. No separate or additional compensation will be made for AGENCY permit and inspections, nor permits, licenses, inspections, certificates, or authorizations required by any other governing body or entity.

# 2-5 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

# **2-5.1 General.**

[Add the following:].

A noise level limit of 95 dB. at a distance of 50' shall apply to all construction equipment on or related to the job whether owned by the Contractor or not. This requirement in no way relieves the Contractor from responsibility for complying with local ordinances regulating noise level.

Contractor shall comply with the California Air Resource Board's regulations for off-road diesel vehicles, including but not limited to its idling policies.

# SECTION 3 – CONTROL OF THE WORK

# 3-4 AUTHORITY OF BOARD AND THE ENGINEER.

[Add the following].

The Contractor shall give at least 24 hours advance notice when he or his subcontractor will start or resume the work.

The above notice is to be given during working hours, exclusive of Saturday, Sunday or AGENCY holidays for the purpose of permitting the Engineer to make necessary assignments of his representatives.

## 3-7 CONTRACT DOCUMENTS.

## **3-7.1 General.**

[Add the following:].

Only written authorization from the AGENCY shall be binding over any deviation or change in the Plans and Specifications. Please refer to Sections 2-6 to 2-10 for further explanation. 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 Engineer. Final payment will not be made until this requirement is met. Reference in the Special Provisions to "State Standard Specifications" shall mean the Standard Specifications, latest edition, of the State of California, Department of Transportation. Copies of these specifications may be obtained from:

State of California - Department of General Services Publications Distribution Unit P.O. Box 1015 North Highlands, California 95660

Reference in the Special Provisions to Standard Plans shall mean the Standard Plans of the City of Huntington Beach, and where applicable, the following:

"Greenbook" Standard Plans for Public Works Construction, published by the American Public Works Association, 2021 edition.

**Standard Plans**, published by the Orange County Public Works, latest edition.

**Standard Plans**, published by the "Caltrans" California Department of Transportation, **latest edition**.

Applicable Standard Plans for this project are contained in  $\underline{\textbf{Appendix J}}$  of these Special Provisions.

# 3-7.1.1.1 Agency Supplied Plans and Specifications.

[Add the following:].

The City shall supply no more than 5 sets of plans and specifications for the Contractor's use. Additional copies are the responsibility of the Contractor. The Contractor may elect to reproduce existing sets, or purchase additional sets directly through the City's reprographics company.

# 3-8 SUBMITTALS.

[Add the following:].

The contractor shall submit the names and addresses of all suppliers of mineral construction materials, and the mine from which the materials were obtained, along with a copy of the Office of Mine Reclamation AB3098 List showing that the mining operation is listed, prior to delivering any mineral construction materials to the project site. This documentation regarding the AB3098 List shall be made a part of every submittal required on the project that includes mineral construction materials. Failure to identify the supplier and the mine may result in rejection of the submittal.

# 3-8.4 Supporting Information.

[Add the following:].

- 14.) The Contractor shall submit at the Pre-construction meeting, prior to notice-to proceed, the following lists with information to be reviewed and accepted by the City;
  - a. List of all Construction Technical Equipment (ex. pumps, generators, temporary electrical).
  - b. List of all Contractors' Manpower (by category, including hourly rates).
  - c. List of all Contractors' Equipment (ex. Description and Model -backhoe, loader, truck etc.).

The Contractor is responsible for keeping these lists current throughout the duration of the project.

# 3-10 SURVEYING.

# **3-10.1** General.

[Add the following:].

When the contract does not include a pay item for the adjustment of monuments to finished grade and unless otherwise provided for by Agency in the specifications, full compensation for said adjusting shall be included in the price bid for other items of work and no additional compensation will be allowed therefor.

# 3-10.1.1 Survey Service.

Except for private contracts, the Contractor will be responsible for the accuracy of surveying adequate for construction, in addition the task of surveying itself shall be performed under the direction of a licensed Land Surveyor or Professional Engineer, whom is authorized to practice land surveying, retained or provided for by the Contractor.

All construction surveying will be performed by or under the direction of a licensed Land Surveyor or Professional Engineer, whom is authorized to practice land surveying, retained or provided for by the Contractor. Monument preservation surveying necessary to complete the work shown on the plans and provided for in these contract documents and specifications shall be accomplished by the AGENCY. The AGENCY reserves the right to direct additional monumentation preservation tasks to be performed by or under the direction of a licensed Land Surveyor or Professional Engineer, whom is authorized to practice land surveying, retained or provided for by the Contractor when it feels it is required to adequately construct the work and comply with applicable state laws regarding monument preservation pursuant to Sections 8700 to 8806 of the Business and Professions Code, of the State of California (LS Act).

### 3-11 CONTRACT INFORMATIONAL SIGNS.

[Replace first paragraph with the following:].

Contractor shall install City furnished project informational signs. Solar changeable message boards shall be furnished by the contractor on either side of arterial highway projects. The placement of these signs will be determined by City Staff at the pre-construction meeting, and shall be placed at this location prior to the start of work.

For all project work, doorknob notification explaining the work location, scope of work, tree removal and replacements, and AGENCY contact information will be posted at all residential and business addresses adjacent to the project area no later than two weeks prior to commencement of any work.

Doorknob notification of residents and business owners directly affected by construction and the posting of "No Parking" notification signs shall occur a minimum of 48 hours prior to construction. If the work is rescheduled Door Hangers AND "No Parking" signs shall be re-issued, 48 hours in advance of the work, reflecting the revised dates.

Full compensation for these items and placement thereof shall be included in the contract price for mobilization, and no other compensation will be allowed there for.

### 3-12 WORK SITE MAINTENANCE.

#### **3-12.1** General.

[Replace the first and second paragraphs with the following:].

The City of Huntington Beach Municipal Code Section 8.21.020 specifies that the collection of refuse and recyclable waste material shall be performed exclusively by the City Refuse Collector. The AGENCY has granted exclusive franchise for solid waste removal to Republic Disposal Co., Inc. Republic Disposal (714-847-3581) is the only refuse hauling company authorized to provide trash bins, drop-off boxes, and roll-off containers for construction and demolition disposal in Huntington Beach.

The construction companies that generate construction and demolition waste and have their own manpower and equipment to safely convey it to a permitted and approved landfill or recycling site and all hazardous waste are excluded from this provision. Any such companies providing their

own manpower and equipment for construction and demolition waste removal must clearly mark the equipment used in Huntington Beach with their company name and telephone number.

Unless directed otherwise by the Engineer, the Contractor shall furnish and operate a self-loading motor sweeper with spray nozzles at least once each working day to keep paved areas acceptably clean wherever construction, including restoration, is incomplete.

# 3-12.5.3 Spill Prevention and Emergency Response Plan.

[Add the following:].

Secondary containment shall be provided with portable toilets.

## 3-14 CLAIM RESOLUTION.

[Add the following:].

This project shall incorporate Claim Resolution procedures as prescribed by the Public Contract Code Section 9204 (AB-626).

# **SECTION 4 - CONTROL OF MATERIALS**

## 4-1 General.

[Add the following:].

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 AGENCY, shall make any repairs or replacements made necessary by defects in materials, equipment, or workmanship that become evident within one year after the date of recordation of the Notice of Completion. Within this one 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 AGENCY harmless from claims of any kind arising from damages due to said defects or noncompliance.

Security of this guarantee shall be in the form of a Maintenance Bond furnished to the AGENCY by the Contractor. There shall be specific wording in the Maintenance Bond that includes the guarantee or warranty of the labor and materials for a one year period, commencing from the recording date of the Notice of Completion by the County Recorder. The guaranteed amount shall be for 100 percent of the total amount earned to date as indicated on the final progress payment. The AGENCY reserves the right to withhold the retention until the Maintenance Bond has been accepted by the AGENCY.

The Contractor shall make all repairs, replacements, and restorations covered by the Maintenance Bond within 10 working days after the date of the Engineer's written notice. Failure to comply with such notice will cause the AGENCY to file claim against the bond.

Excepted from the Maintenance Bond will be defects caused by acts of God, acts of the AGENCY, acts of vandals, or by acts of others outside or beyond the control of the Contractor.

## 4-3 INSPECTION.

## **4-3.1** General.

[Add the following.]

The Contractor shall notify the Engineer 48 hrs before inspection is required. If the Contractor requests to work under this contract more than 8 hrs. /day or more than 40 hrs. /week, Saturday, Sunday, or AGENCY holidays, then the following will apply. The inspector's hourly overtime rate will vary depending on if the work is on a weekend or a holiday. The Contractor shall arrange requested overtime inspection services, 24 hours in advance, with the Public Works Inspector and Contract Administrator. The Contractor will fill out and submit the "Request For After Hours Inspection" form along with a check. The check payment amount shall be based on 4-hour increments of \$484, which reflects time and a half.

If the Contractor is directed by the AGENCY to work under this contract more than 8 hrs. /day or more than 40 hrs. /week, the Special Inspection fee requirements will be waived.

# 4-4 TESTING.

[Replace the third sentence of the first paragraph with the following:].

Unless otherwise provided, all testing shall be performed under the direction of the Engineer and the AGENCY will bear the cost of initial testing of material and workmanship which are required by 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.

#### 4-6 TRADE NAMES.

[Replace the last two sentences of the first paragraph with the following:].

Approval of equipment and materials offered as equivalents to those specified must be obtained as set forth in the Instructions to Bidders.

# SECTION 5 – LEGAL RELATIONS AND RESPONSIBILITIES

## 5-3 LABOR.

# 5-3.2 Prevailing Wages.

[Add the following:].

The Contractor, and all subcontractors, suppliers and vendors, shall comply with all AGENCY, 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.

### 5-4 INSURANCE.

[Delete the entire subsection and replace with the following:].

Contractor shall, prior to execution of an Agreement with the AGENCY, comply with the provisions of AGENCY's Resolution Number 2008-63 and any amendments thereto, contained in **Appendix E** of these Special Provisions and incorporated herein as if fully set forth.

Except as provided in 6-10, Contractor hereby agrees to protect, defend indemnify and hold harmless AGENCY, its officers, elected or appointed officials, employees, agents, and volunteers from and against any and all, claims, damages, losses, expenses, judgments, demands defense costs, and consequential damage or liability of any kind or nature, however caused, including those resulting from death or injury to Contractor's employees and damage to Contractor's property, arising directly or indirectly out of the obligations or operations herein undertaken by Contractor, caused in whole or in part by any negligent act or omission of the Contractor, any subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, including but not limited to concurrent active or passive negligence, except where caused by the active negligence, sole negligence, or willful misconduct of the AGENCY. Contractor will conduct all defense at its sole cost and expense and AGENCY shall approve selection of Contractor's counsel. City shall be reimbursed for all costs and attorney's fees incurred by the AGENCY in enforcing this obligation. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by Contractor. The AGENCY will not be liable for any accident, loss or damage to the Work prior to its completion and acceptance, except as provided in 6-10.

The cost of this insurance shall be included in the Contractor's Bid.

- **SAFETY.** [Add the following Subsection:].
- 5-7.7 Security and Protective Devices.
- **5-7.7.1 General.** [Add the following:].

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, the Engineer may provide suitable protection to said interests by causing such work to be done and material to be furnished as may be 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 AGENCY for emergency repairs will be deducted from the progress payments and the final payment due to the Contractor. However, if the AGENCY does not take such remedial measures, the Contractor is not relieved of the full responsibility for public safety.

# **5-7.9 Work Area Traffic Control.** [Add the following section:].

## **5-7.9.1** General.

All traffic control shall be in accordance with the following documentation: Caltrans California Manual on Uniform Traffic Control Devices (MUTCD), latest edition; California Coded Sign Specifications, 2010 edition; Caltrans Standard Plans, latest edition; Caltrans Standard Specifications, latest edition; American Public Works Association Southern California Chapter – Work Area Traffic Control Handbook, latest edition (i.e. WATCH Manual).

Within 30 calendar days after notification of award, the Contractor shall submit, for review and approval by the Engineer, a Traffic Control Plan. The Traffic Control Plan shall be signed and stamped by a civil engineer familiar with the preparation of traffic control plans and licensed by the State of California. The plans shall incorporate, as a minimum, the following requirements of Section 7-10.3.

Upon approval of the Traffic Control Plan by the City, approval of the Contractor's schedule by the City and execution of the Contract documents by both parties, the City will issue a Notice to Proceed specifying the Contract start date (first day of work).

Full compensation for conforming to this requirement shall be included in the lump sum price bid for Construction Traffic Control Plan and no additional compensation will be allowed therefor.

The Contractor shall provide, to the Engineer, a telephone number at which the Contractor's representatives can be reached, at any hour, should an emergency occur requiring replacement or relocation of the required traffic control devices.

Prior to the start of construction, the Contractor shall inform the AGENCY's Police and Fire departments of the project location, approximate starting date, completion date, and the name and telephone number of contractor representatives who may be contacted at any hour in the event of an emergency.

**POLICE DEPARTMENT**: Watch Commander at (714) 960-8809

**FIRE DEPARTMENT**: *at (714) 536-5411* 

**ORANGE COUNTY TRANSPORTATION AUTHORITY**: Operations Division Stops and Zones, Mr. Kyle Poff at (714) 560-5816

**ORANGE COUNTY SANITATION DISTRICT**: Daniel Lee at (714) 593-7176, for other questions contact: Quynh Nguyen at (714) 593-7333

The Contractor shall contact the Orange County Transportation Authority (O.C.T.A.) 10 working days prior to the start of construction. The Contractor shall also coordinate with Orange County Sanitation District's construction inspector prior to adjusting O.C.S.D. manholes to grade.

Information signs shall be required on all arterial streets one week prior to beginning of roadway construction projects.

The Contractor shall adhere to applicable sections of California Administrative Code, Title 8, concerning electrical and construction safety standards and practices.

Contractor shall require that an approved safety vest be worn by all personnel who are working at this project site. Any worker without a vest may be ordered off the job by the Inspector until such apparel is acquired. Questions as to approved vests shall be directed to the Engineer.

Prior to the beginning of work, the Contractor shall execute the provided construction traffic control plan prepared per current AGENCY guidelines to safely prosecute the construction work involved with a minimum of inconvenience to the motoring public.

Any relocation of travel lanes longer than three calendar days shall be delineated by removing the existing striping and legends by wet sandblasting and placing new striping and legends as required. Upon completion of the work and the restoration of the road surface to its final condition, the Contractor shall remove temporary striping by wet sandblasting.

If the traffic cones or portable delineators are damaged, displaced or are not in an upright position, for any reason, the contractor shall immediately replace or restore to their original location, in an upright position, the cones or portable delineators.

The Contractor shall provide and maintain all signs, barricades, flashers, delineators, temporary fencing and other necessary facilities for the protection of the motoring public and pedestrians within the limits of the construction area including removing graffiti from the material and equipment. He shall also post proper signs to notify the public regarding detours and conditions of the roadway, all in accordance with the provisions of the current State of California Department of Transportation "Manual of Traffic Controls for Construction and Maintenance Work Zones", latest edition; and the State of California Department of Transportation Standard Plans, latest edition; and the Work Area Traffic Control Handbook (a.k.a the WATCH Manual), latest edition.

The Contractor shall furnish such flagmen and equipment as are necessary to give adequate warning to traffic or to the public of any dangerous conditions in accordance with the current Department of Transportation "Instructions to Flagmen".

All existing traffic signs and street signs shall be maintained in visible locations during construction. Signs designated for removal shall be salvaged and delivered to the AGENCY Yard or disposed of as directed by the AGENCY.

## **Warning Signs**

Adequate warning signs for motorists shall be placed and maintained throughout all applicable phases of the work including speed limit reduction, loose gravel, fresh oil, and open

trench. Signs shall be 36" X 36" in size; shall be on site ready for placement prior to start of the applicable phase of work and shall be placed in advance on all streets approaching the work zone.

# 5-7.9.2 Traffic Control Plan (TCP)

[Add the following:].

Traffic Control Plans shall be prepared in accordance with the AGENCY's Traffic Control Plan Preparation Guidelines, **2005 edition** and shall be reviewed and approved by the Engineer. The Contractor shall submit the plans to the Engineer for approval or correction at least 10 working days before approved plans will be required for commencing the work.

The Traffic Control Plans (TCP) shall be prepared under the supervision of a registered professional Civil Engineer licensed to practice in the State of California. Each sheet of the TCP shall have the name, address, and telephone number of the engineer or engineering firm that prepared the TCP, and the professional engineer's stamp and expiration date, and the professional engineer's signature and signature date.

Approval of the plans by the Engineer shall not relieve the Contractor from the responsibility for errors or omissions in the plans or from deviations from the Contract Documents. This traffic control plan shall provide pedestrian access throughout the construction area. The appropriate signing, barricades, etc., shall be included on the plan. This pedestrian access shall comply with the accessibility requirements contained within the American with Disabilities Act (ADA).

The contractor shall install a barricade mounted 18" x 36" C42 sign "SIDEWALK CLOSED CROSS HERE" at the nearest crossings leading to the closure when the sidewalk width is reduced to less than 36" or at the discretion of the Engineer.

The Contractor shall be responsible for the correctness of the plans and for the results obtained by the use of such plans.

Full compensation for Construction Traffic Control Plan and furnishing Traffic Control shall be paid for on a lump sum bid price under each of their respective lump sum bid items and no additional compensation will be allowed therefor.

Street closures will not be allowed except as permitted by the Engineer. The following minimum lane requirements shall be provided at all times, subject to time of day restrictions as established by Section 6-7.2.

# **Arterials**

Magnolia Street, Bushard Street and Adams Avenue are all considered arterials. Maintain one through travel lane in each direction during work hours, with all travel lanes being opened to traffic outside of working hours. Vehicular traffic may be restricted to one lane in each direction for up to five continuous days once during the duration of the construction contract.

<u>Local Streets (all streets not identified above as arterials)</u> Maintain one two-way travel lane with flagger control.

# 5-7.9.3 Shoring Plan.

[Replace the fourth sentence with the following:].

No excavation shall start until the Agency has accepted the shoring plan and the Contractor has obtained a permit from the Division of Occupational Safety and Health (DOSH).

# SECTION 6 – PROSECUTION AND PROGRESS OF THE WORK

# 6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK.

## 6-1.1 Construction Schedule.

[Replace the first sentence of the first paragraph with the following:].

The Contractor's proposed construction schedule shall be submitted to the Engineer within 10 working days after the City awards the contract to the Contractor. 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. Prior to issuing the Notice to Proceed, 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 construction schedule shall be prepared to the satisfaction of the Engineer and revisions will be made at no cost to the AGENCY. The Contractor shall submit progress reports to the Engineer by the tenth 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.

# 6-2 PROSECUTION OF THE WORK.

[Add the following].

The Contractor shall provide the Engineer with a written explanation, at least 24 hours in advance of any working day(s) when the Work will not be performed at the Project site. The written notice shall also state when the Contractor or his subcontractor will start or resume the Work.

The above notice is to be given to the Engineer during working hours, exclusive of Saturday, Sunday or AGENCY holidays, for the purpose of permitting the Engineer to make necessary assignments of his representatives.

## 6-3 TIME OF COMPLETION.

# 6-3.1 General.

[Add the following:].

The time within which the Schedule A Work must be completed by the Contractor is fixed at <u>60</u> working days, including material procurement starting from and after the date in the Notice to Proceed with the Work, issued by the AGENCY to the Contractor, exclusive of maintenance periods. If additive alternative work is awarded, the City will consider additional days, not to exceed 30 additional working days, included in the contract

The Contractor's activities shall be confined to the hours between 7:00 A.M. to 4:00 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.

Parking prohibitions on all roadways, where parking is currently permitted, shall be confined to the hours between 7:00 AM and 5:00 PM.

Lane closures on all arterial roadways will be confined to the hours between 9:00 AM and 4:00 PM, Monday through Friday, except holidays and any exceptions listed in Section 7-10.3.

The following roadways are considered arterials for purposes of this project:

- Magnolia Street
- Bushard Street
- Adams Avenue
- Yorktown Avenue

## 6-9 LIOUIDATED DAMAGES

[Replace the liquidated damage amount to the following:].

\$800.00 per calendar days.

## **SECTION 7 - MEASUREMENT AND PAYMENT**

# 7-3 PAYMENT.

# **7-3.1** General.

[Replace the last paragraph with the following:].

Compensation for items of work not specifically identified in these Special Provisions shall include all labor, materials, tools, equipment, safety measures, and supervision required to complete the work to grades and dimensions shown on the Plans or staked in the field. There shall be no compensation except for the bid items specified in the Proposal. The cost of all work shown in the Plans and Specifications but not specifically identified as a bid item or described within a bid item shall be included in related bid items, and no additional compensation shall become due the Contractor by nature of compliance with the Plans and Specifications except as provided in Sections 2-6 to 2-10 of the Greenbook, as modified in these Special Provisions.

At the expiration of 35 days from the filing and recording of the Notice of Completion of the Work, the amount deducted from the final estimate and retained by the AGENCY will be paid to the Contractor except such amounts as required to be withheld by properly executed and filed to stop payment, or as may be authorized by the contract.

# 7-3.2 Partial and Final Payment.

[Replace the first and second paragraphs with the following:].

The closure date for the purpose of making partial progress payments will be the last day of each month. The Contractor may request, in writing, that such monthly closure date be changed. The Engineer may approve such request when it is compatible with the AGENCY'S payment procedure.

Each month, the Contractor shall meet with the Engineer, a minimum of three working days prior to the submittal of the progress payment to the AGENCY, to finalize and receive approval regarding the measurement of the Work performed through the closure date and the estimated value of the progress payment based on the contract Unit Prices or as provided for in Section 9-2. Any progress payment submitted without such approval will be considered incomplete and returned to the Contractor and no payment shall be considered until such approval is obtained.

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 specifications and plans indicating the as-built conditions.

At the request and expense of the Contractor, who shall retain beneficial ownership and receive interest, if any thereon, the AGENCY shall permit the substitution and deposit therewith of securities equivalent to the amount of any monies withheld by the AGENCY.

# 7-3.3 Payment Bid Items

# **Bid Item No. 1 - Mobilization**

Mobilization shall consist of preparatory work and operations 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 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 on the project site. Mobilization is deemed to include all aspects of demobilization work occurring at project completion.

Mobilization shall also include the time 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 for all non-working days during the course of construction. Contractor is responsible for securing an adequate storage site for equipment and materials outside the City right-of-way.

The Contractor shall have on the work site at all times, as its agent, a competent English speaking superintendent capable of reading and thoroughly understanding the plans, specifications, other related documents, and directions from the Engineer.

## **PAYMENT**

Payment for Mobilization shall be per the Lump Sum price bid, as shown on Bid schedule and shall include obtaining and paying for all permits and business licenses as required from the City of Huntington Beach. The Contractor shall comply with the requirements specified. Progress payments for this item shall be paid in accordance with the completion percentage of the project

to the Contractor, and shall include the costs of such mobilization and administration for the entire contract period.

# Bid Item No. 2 - Traffic Control

The Contractor shall provide and maintain all construction area traffic controls in accordance with Section 7-10 of the Standard Specifications and the latest edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD), and all current supplements, and as noted herein.

The Contractor shall be responsible for providing temporary access to all driveways at the end of each workday.

The Contractor shall provide and maintain all other signs, barricades, pedestals, flashers, delineators and other necessary facilities for the protection of the public within the limits of the construction area. The Contractor shall also post proper signs to notify the public regarding detours and the condition of the roadway, all in accordance with the provisions of the Vehicle Code and the Manual on Uniform Traffic Control Devices.

Special emphasis shall be placed on use of "CONSTRUCTION ZONE AHEAD" (C18R) signs at the beginning, end, and any access and/or intersection streets with roads under construction.

Contractor shall notify the following entities at least forty-eight (48) hours in advance of any street closure or restriction to access.

- 1. Fire Department
- 2. Police Department
- 3. Schools and School Bus Organizations
- 4. Disposal Company
- 5. Post Office
- 6. Orange County Transportation Authority

The Contractor shall provide sufficient written notice to all affected property owners of the proposed construction schedule a minimum of forty-eight (48) hours, but not more than seventy-two (72) hours, in advance of any limitation or closure of access to their property. The Contractor shall submit a sample notification letter, which shall contain the date and time of the closure, to the Engineer for review and approval prior to distribution. Damages to any such properties or utilities caused by Contractor's operations shall be corrected by the Contractor at no cost to the City. In the event of delay, whether beyond the control of the Contractor or not, the Contractor shall notify all affected property owners as to the extent of the delay and his revised schedule. In the event of delay over seventy-two (72) hours, the Contractor shall re-notify the property owners as described above. Payment for notification and coordination as per Section 7-10 as modified herein shall be included in the compensation paid for the various items of work, and no additional compensation will be allowed therefor. The "Notices" will be furnished by the Contractor.

# Flashing Arrow Signs

Each flashing arrow sign shall be mounted on a truck or on a trailer and shall be capable of operating while the vehicle is moving or as directed by the Engineer.

Signs mounted on the cab of a truck shall be mounted to provide a minimum of seven (7) feet between the bottom of the sign and the roadway. Signs mounted on a trailer, or on anything other than the cab of a truck, shall be mounted to provide a minimum of eight (8) feet between the bottom of the sign and the roadway.

The total weight of trailer mounted flashing arrow sign including the trailer, sign, power source and other components shall not exceed one-thousand five-hundred (1,500) pounds and the height of the level trailer bed shall be no higher than twenty-one (21) inches above the roadway. The trailer shall be equipped with a minimum of three (3) leveling jacks.

Electrical energy, to operate the sign, shall be obtained from the vehicle on which the sign is mounted. The supply of electrical energy shall be capable of operating the sign in the manner specified. The electronic circuitry shall provide between thirty (30) and forty-five (45) complete operating cycles of the sign per minute in each of the modes specified.

Alternative types of lamps may be used in flashing arrow signs if visibility is equal to the specified lamps. Each type AX flashing arrow sign shall be a minimum of two (2) feet high and four (4) feet wide, and shall be finished with flat black enamel. A minimum of thirteen (13) No.4414AX twelve (12) volt, yellow or amber lamps shall be installed in the panel. The lamp configuration shall be for three (3) arrowheads or an arrow shaft with two (2) arrowheads, one pointing in each direction on the face of the sign with a minimum of five (5) lamps forming each arrowhead. Each lamp shall be provided with a visor.

The lamp shall be activated by a switch on a control panel and shall be controlled by electronic circuitry to provide a minimum of four (4) selectable modes of operation as follows:

- 1. Pass Left Mode, Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the left or a flashing left arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.
- 2. Pass Right Mode, Sequencing of lighted arrowheads or sequencing the lamps forming the arrow shaft and arrowhead to the right or a flashing right arrow with the lamps in the arrow shaft and arrowhead flashing on and off simultaneously.
- 3. Simultaneous Mode, Either the outside arrowheads pointing in opposite directions are continuously illuminated, except for the center lamp forming each arrowhead, while the arrow shaft lamps flash on and off simultaneously or the outside arrowhead pointing in opposite directions and the arrow shaft lamps all flash simultaneously to indicate passing on either side.
- 4. Travel Mode, Travel or caution mode shall flash in a manner not resembling any other mode.

## **Delineators**

Portable delineators which conform to current CA MUTCD standards shall be spaced as necessary for proper delineation of the travel way. The spacing between delineators shall not exceed fifty feet (50') on tangents or twenty-five feet (25') on curves except when used for lane closure.

When used for lane closures, the fluorescent traffic cones or portable delineators shall be placed at intervals not to exceed the following:

Tapers twenty-five feet (25')

Edge of closed lanes:

Tangents one hundred feet (100')

Curves fifty feet (50')

If the traffic cones or portable delineators are damaged, displaced or not in an upright position, from any cause, said cones or portable delineators shall immediately be replaced or restored to their original location, in an upright position, by the Contractor.

Lane transitions shall not be sharper than a thirty (30) to one (1) taper.

If the portable delineators are damaged, displaced or are not in an upright position, from any cause, said portable delineators shall immediately be replaced or restored to their original location, in an upright position, by the Contractor.

Where construction detours and signing conflict with existing signing, the Contractor shall cover existing signs in a manner approved by the Engineer. The Contractor shall also provide temporary traffic restriping at the conclusion of each working day, if not sooner as directed by the Engineer, for any centerline, painted median or lane line which is obliterated by construction.

The Contractor shall provide temporary delineation as directed/approved. Temporary delineation shall include sandblasting of conflicting markings; installation and removal of temporary centerlines or lane lines, detour signing, barricading; and replacement of traffic lines and markings in their proper locations upon termination of the detour. Conflicting existing and temporary striping, as required for traffic control during construction, shall be removed by the Contractor by using wet nozzle sandblasting methods with immediate cleanup of residues. Blacking out the pavement will not be allowed. Temporary reflective striping tape may be used, except that it shall not be applied to final asphalt surfaces. Said tape shall be removed from temporary surfaces prior to placement of additional asphalt.

## Lane Requirements

The Contractor shall conduct work and provide the necessary traffic control to provide the following:

A minimum of one (1) ten foot (10') wide travel lane in each direction shall be maintained at all times during construction to provide local and through traffic access through the construction area. There shall be a minimum of five foot (5') clearance from open excavations and two feet (2') from other obstructions (curbs, k-rail, etc.).

The Contractor shall be required to use flashing arrow signs to direct travel and appropriate detour signing to control traffic through and/or around the construction area.

### Maintenance:

All existing stop signs, street name signs and regulatory signs shall be maintained in visible locations during construction and permanently relocated or removed as directed by the Engineer.

Signs, which need not be maintained during construction or permanently removed, shall be salvaged to the Agency.

The Contractor shall maintain a twenty-four (24)-hour emergency service to remove, install, relocate, and maintain warning devices and shall furnish to the Engineer, names, and telephone numbers of three persons responsible for this emergency service. In the event these persons do not promptly respond when notified, or it becomes necessary to call other forces to accomplish emergency service, the Contractor will be responsible for any cost incurred.

Prior to the start of each work day, the Contractor shall perform all necessary work incidental to and commensurate with the proper signing, detouring, barricading, etc., heretofore and hereinafter specified that is required for that particular day's schedule of operations. No construction shall be permitted until such signing and detouring operations have been completed.

Personal vehicles of the Contractor's employees shall only be parked in an allowed area as delineated by the Engineer, and shall not be parked on the traveled way at any time, including any section closed to public traffic.

# <u>Flagmen</u>

The Contractor shall furnish such competent flagmen as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered. Flagmen, while on duty and assigned to give warning to the public that the highway is under construction and of any dangerous conditions to be encountered as a result thereof, shall perform their duties and shall be provided with the necessary equipment in accordance with the WATCH manual. The equipment shall be furnished and kept clean and in good repair by the Contractor, at its expense.

Should the Contractor appear to be neglectful or negligent in furnishing warning and protective measures as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor, at his/her expense. Should the Engineer point out the inadequacy of warning and protective measures, such action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate its obligation to furnish and pay for these devices.

Temporary traffic loop detectors shall be required as necessary such that no traffic signal loop is out of operation for more than five (5) days of their disruption. The cost for providing all temporary traffic signal loop detectors shall be absorbed into the various related items of work and no additional compensation will be allowed.

### **PAYMENT**

The contract Lump Sum price bid for Furnish Traffic Control, as shown on the bid schedule shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the traffic control related work involving placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of traffic control system as specified in the Standard Specifications and these specifications, and as directed by the Engineer. The lump sum price shall also include steel plates and temporary AC including installation and removal; all associated temporary signing and striping; written notifications, flashing arrow signs; flagging and/or flagmen costs; and project notifications where no additional compensation will be

made therefor. Payment shall be on a lump sum basis of the percentage of total contract work performed.

# <u>Bid Item No. 3 – Preparation of Project Specific Storm Water Pollution Prevention Plan</u> (SWPPP)

The Contractor shall submit a Specific Storm Water Pollution Prevention Plan (SWPPP) which outlines specific BMP's to be used during construction to ensure that sediment from storm runoff and construction activities does not enter storm drains. Some of the primary water pollution control measures anticipated for this project include, but are not limited to, covering all storm drain inlets in the project vicinity with water permeable fabric and gravel bags prior to performing any removal or paving operations; properly fueling and cleaning all equipment/vehicles; maintaining an ample supply of gravel/sand bags on-hand when excavating new PCC access ramp/curb/gutter improvements in the event of rain; properly containing chemicals required to install the detectable warning mats; properly covering all incoming material trucks and all out going debris hauling vehicles; providing restroom facilities for workers; and regular street sweeping of the Work Area and Haul Routes to the satisfaction of the Engineer.

The requirements of all of the following agencies shall be met and maintained and where there is a conflict between requirements, the most stringent requirement shall govern.

- 1. Regional Water Quality Control Board
- 2. County of Orange Drainage Area Manual Plan (DAMP)

The Contractor shall confirm that all of the BMP's have been adequately detailed to addresses his anticipated construction operations. The proposed SWPPP, shall be submitted to the City within five (5) calendar days after the Notice to Proceed. No work will be allowed to begin without a City approved SWPPP.

## **PAYMENT**

Full compensation for Preparation of Specific Storm Water Pollution Prevention Plan (SWPPP) shall be per the Lump Sum price bid, as shown on the bid schedule, and shall provide full compensation for all costs incurred during the preparation of the SWPPP. Payment shall be on a lump sum basis of the percentage of total contract work performed.

# Bid Item No. 4 - Installation and Maintenance of BMP's per the approved SWPPP

The Contractor shall install and maintain specific BMP's outlined in the Specific Storm Water Pollution Prevention Plan (SWPPP) throughout the duration of construction.

## **PAYMENT**

Full compensation for Installation and Maintenance of BMP's per the approved SWPPP shall be per the Lump Sum price bid, as shown on the bid schedule, and shall provide full compensation for all costs incurred by the Contractor for implementation of best management practices and the cost of any required permits and no additional compensation will be made therefor. Payment shall be on a lump sum basis of the percentage of total contract work performed.

# Bid Item No. 5 – Tree Removal with Stump, Root and Backfill

Contractor shall remove trees as identified per plan including removal of tree, stump, roots to depth of 24" with grubbing, backfill and fine grade as necessary to return grade to 3" below adjacent curb accounting for relative slope. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

#### **PAYMENT**

Full compensation for Tree Removal with Stump, Root and Backfill shall be made at the bid item price paid per each bid item and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 6 – Furnish and Install 24" box Trees

Contractor shall Furnish and Install 24" box Trees as identified per plan including associated excavation, tree stakes, tree ties, backfill amendment and fertilization to install 24" box tree complete. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

### **PAYMENT**

Full compensation for Furnish and Install 24" box Trees shall be made at the bid item price paid per each bid item and shall constitute full payment for furnishing all labor, materials, tools, equipment and incidentals required and no additional compensation shall be allowed therefore.

# Bid Item No. 7 – Trim Existing Vegetation

Contractor shall Trim Existing Vegetation at the identified location to allow for ADA code compliance and safe and complete removal of asphalt and all associated work for replacement with concrete sidewalk as noted per plan. Vegetation removal shall include foliage, branch, stump, root, grubbing, fine grading and clean up as necessary. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

### **PAYMENT**

Full compensation to Trim Existing Vegetation shall be per Lump Sum price bid, as shown on the bid schedule, shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 8 – Construct Mow Strip

Contractor shall Construct Mow Strip at identified locations per plan with a 6" x 6"concrete mow strip including #4 reinforcement and scoring at 5' separation. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

## **PAYMENT**

Full compensation to Construct Mow Strip shall be per Lump Sum price bid as shown on the bid schedule, shall constitute full payment for furnishing all labor, materials, tools, equipment, and incidentals required for the installation of concrete mow strip, associated reinforcement, grading, compaction, or forming to install item complete. No additional compensation shall be allowed therefore.

# Bid Item No. 9 – Remove and Construct New Pilaster

Contractor shall Remove and Construct New Pilaster at identified locations of existing pilasters per plan. Work to include removal of the existing pilaster and footing. If relocation is necessary, contractor is to add backfill and fine grade as required to match the finished grade at 3" below adjacent curb and any relative slope. Contractor shall construct the new pilaster per the typical new pilaster detail per plan and specification detailed in Exhibit A, and matching the existing previously restored pilasters on site with new exterior finish, cap stone and structural supports for new fencing.

### **PAYMENT**

Full compensation to Remove and Construct New Pilaster shall be made at the bid item price paid per each bid item and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

## Bid Item No. 10 – Renovate Existing Pilaster

Contractor shall Renovate Existing Pilaster at identified locations of existing pilasters per plan. Work to include construction and necessary modification to the existing pilaster per the typical new pilaster detail per plan and specification detailed in Exhibit A, and matching the existing previously restored pilasters on site with new exterior finish, cap stone and structural supports for new fencing.

## **PAYMENT**

Full compensation to Renovate Existing Pilaster shall be made at the bid item price paid per each bid item and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore

# Bid Item No. 11 – Demo and Remove Existing Pony wall

Contractor shall Demo and Remove Existing Pony Wall at identified locations of existing pilasters per plan. Work to include removal of the existing pony wall and associated footing. Contractor is to add backfill and fine grade as required to match the finished grade at 3" below adjacent curb and any relative slope.

## **PAYMENT**

Full compensation to Demo and Remove Existing Pony Wall shall be made at the bid item price paid per each bid item and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore

# **Bid Item No. 12 – Construct New Pilaster (not previously existing)**

Contractor shall Construct New Pilaster at identified locations per plan. Work to include construction of the new pilaster per the typical new pilaster detail per plan and specification detailed in Exhibit A, and matching the existing previously restored pilasters on site with new exterior finish, cap stone and structural supports for new fencing.

## **PAYMENT**

Full compensation Construct New Pilaster shall be made at the bid item price paid per each bid item and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore

# Bid Item No. 13 – Complete Renovation to Existing Pilaster Previously Renovated

Contractor shall Complete Renovation to Existing Pilasters Previously Renovated at identified locations of existing pilasters per plan. Work to include completion of the construct the existing pilaster per the typical new pilaster detail per plan and specification detailed in Exhibit A, and matching the existing previously restored pilasters on site with new exterior finish, cap stone and structural supports for new fencing.

## **PAYMENT**

Full compensation to Complete Renovation to Existing Pilasters Previously Renovated shall be made at the bid item price paid per each bid item and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 14 – Remove Existing Fencing and Construct New Fencing Structure

Contractor shall Remove Existing Fencing and Construct New Fencing Structure at identified locations per plan. Work to include removal, clean up and disposal of the existing fencing material and construction of the new fencing structure between the renovated pilasters per plan. Contractor shall construct the fencing structure per the typical new fencing detail per plan and specification, and matching material in both color and sizing to the existing previously renovated fencing on site.

### **PAYMENT**

Full compensation to Remove Existing Fencing and Construct New Fencing Structure shall be made at the bid item price paid per linear foot and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# <u>Bid Item No. 15 – Demo and Permanently Remove Existing Pilaster, Footing and Fence.</u> <u>Backfill as Necessary</u>

Contractor shall Demo and Permanently Remove Existing Pilaster, Footing and Fence and Backfill as Necessary at identified locations per plan. Work to include removal, clean up and disposal of the existing pilaster, pony wall, footing and fencing and to add backfill and fine grade as required to match the finished grade at 3" below adjacent curb and any relative slope.

## **PAYMENT**

Full compensation to Demo and Permanently Remove Existing Pilaster, Footing and Fence and Backfill as Necessary shall be made per the Lump Sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 16 - Demo and Remove Existing Asphalt Pavement

Contractor shall Demo and Remove Existing Asphalt Pavement at identified locations per plan. Work to include removal of existing asphalt and footings, associated reinforcement, add backfill in the voids left by the removal of the asphalt and fine grade as required to set the finished grade at 3" below adjacent curb and account for any relative slope. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

### **PAYMENT**

Full compensation to Demo and Remove Existing Asphalt Pavement shall be made at the bid item price paid per square foot and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 17 – Provide and Install ES-2 Mulch

Contractor shall Provide and Install ES-2 Mulch, or approved equal, at identified locations per plan. Work to include installation of 2-1/2' layer of mulch material in the identified landscape areas to a height of 1/2" below adjacent curb and sidewalk. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

## **PAYMENT**

Full compensation to Demo and Remove Existing Asphalt Pavement shall be made at the bid item price paid per square foot and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 18 - Provide and Install Kurapia Sod Ground Cover

Contractor shall Provide and Install Kurapia Sod Ground Cover at identified locations per plan. Work to include installation kurapia sod ground cover material in the identified landscaped areas per manufacture/provider specifications including all necessary requirements for establishment and maintenance. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans..

# **PAYMENT**

Full compensation Provide and Install Kurapia Sod Ground Cover shall be made at the bid item price paid per square foot and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 19 - Construct Concrete Sidewalk

Contractor shall Construct Concrete Sidewalk at the identified locations per plan. Work to include installation of sidewalk, associated reinforcement, any necessary infill, grading, compaction, forming and surface texturing to install item complete. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

### **PAYMENT**

Full compensation to Construct Concrete Sidewalk shall be made at the bid item price paid per square foot and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 20 - Monument Entrance Sign Renovation/Completion

Contractor shall construct and complete Monument Entrance Sign Renovations at the two identified locations per plan. Work to include all necessary efforts to complete the renovations to the existing incomplete monument signs including any repairs to C. M. U. block structure, pressure washing, bonder, stucco, texture, stone fascia, cap stone, planter space, lettering with final finish, paint and all other associated work as necessary to match the existing completed monument entrance signs on site and specification detailed in Exhibit A.

# **PAYMENT**

Full compensation to construct and complete Monument Entrance Sign Renovations shall be per the Lump Sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 21 – Demo and Remove Existing Backflow and Reconnect Line to Tie In

Contractor shall Demo and Remove Existing Backflow and Reconnect Line to Tie In at the identified location per plan. Work to include removal, clean up and disposal of the existing backflow and any footing if existing, add backfill and fine grade as required to match the finished grade at 3" below adjacent curb and any relative slope, install replacement irrigation line in place to tie back in to existing line with associated components as necessary. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

## **PAYMENT**

Full compensation to Demo and Remove Existing Backflow and Reconnect Line to Tie In shall be made at the Lump Sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# <u>Bid Item No. 22 – Demo and Remove Existing Irrigation Controller Cabinet and Construct New Footing with New CS3000 Controller Cabinet</u>

Contractor shall Demo and Remove Existing Irrigation Controller Cabinet and Construct New Footing with New CS3000 Controller Cabinet at the identified location per plan. Work to include demo and removal of the existing irrigation controller, cabinet and pedestal/foundation and provide the existing controller and cabinet to City if City desires. Contractor shall install the new CS3000 irrigation controller with cabinet and construct foundation complete, as indicated on plans and located by City staff. Contractor shall furnish and install all required irrigation infrastructure, including but not limited to power lines with ground wire, controller wire, all necessary conduit, wire nuts, miscellaneous bolts, hardware and electrical components as necessary for proper and complete relocation and installation of the new controller and cabinet on the new foundation. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

Foundations shall conform to the provisions in Section 87-1.03E(3), "Concrete Pads, Foundations, and Pedestals", of the State Standard Specifications and these Special Provisions. Any existing cabinet and cabinet foundations shall be removed completely and backfilled to match existing surface.

New foundations shall be constructed for the CS3000 Controller cabinet. Portland cement concrete shall conform to Section 90-2, "Minor Concrete", of the State Standard Specifications. Concrete shall be 560-C-3250 for all foundations; and shall contain not less than 564 pounds of cement per cubic yard. Foundation concrete shall be vibrated to eliminate air pockets.

The Contractor shall pothole as necessary to define exact location of all utilities in the vicinity of the new foundations, by hand digging if necessary. After all utilities are established, Contractor shall contact the Engineer for authorization of specific foundation location. Foundations shall be hand-dug until clear of obstructions.

The exact location of all foundations for the controller cabinets shall be subject to approval by the Engineer prior to the start of any excavation work.

## **PAYMENT**

Full compensation for Demo and Remove Existing Irrigation Controller Cabinet and Construct New Footing with New CS3000 Controller Cabinet on new foundation (as shown per plans) complete including POC electrical connection, conduit, fitting and electrical leads with ground as necessary shall be made at the lump sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 23 – Irrigation Supply Line with Tee Connection and Tie Ins

Contractor shall install New Irrigation Supply Line with Tee connection and Tie Ins at the identified locations per plan. Work to include demo of an existing portion of irrigation supply line adjacent to an existing water meter, construction of new supply line and tie in to existing water meter. Work also to include installation of irrigation main supply line with in-line Tee for dual zone service and tie in to existing irrigation line. This work include irrigation lines along frontage road and tie in to existing along Adams. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

## **PAYMENT**

Full compensation to install New Irrigation Supply Line with Tee connection and Tie Ins shall be made per the Lump Sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 24 –Install New Master Valve, Backflow Device and Flow Sensor

Contractor shall Install New Master Valve, Backflow Device and Flow Sensor at the identified locations per plan. Work to include master valve, flow sensor, all necessary appurtenances, provide and install new backflow, cage and associated components as necessary with verification per City Landscape Supervisor. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

## **PAYMENT**

Full compensation to Install New Master Valve, Backflow Device and Flow Sensor shall be made per the Lump Sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# <u>Bid Item No. 25 – Install New Irrigation Lateral Lines, Control Valves and Sprinkler</u> Heads

Contractor shall Install New Irrigation Lateral Lines, Control Valves and Sprinkler Heads at identified locations per plan. Work to include locating existing irrigation system lines, installation of a complete irrigation system with associated irrigation infrastructure, including but not limited to all laterals, couplings, joints, controller wire, heads and bodies. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

### **PAYMENT**

Full compensation to Install New Irrigation Lateral Lines, Control Valves and Sprinkler Heads shall be made per the Lump Sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# <u>Bid Item No. 26 – Electrical Control Wiring and Appurtenances for Frontage Road and Median</u>

Contractor shall revise and install all Electrical Control Wiring and Appurtenances for Frontage Road and Median at identified locations per plan. Work to include revisions and new wiring for power and control lines to all devices required for a complete and fully functional dual-zone operation along frontage and median. Unless otherwise noted per plan or specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

# **PAYMENT**

Full compensation to revise and install all Electrical Control Wiring and Appurtenances for Frontage Road and Median shall be made at the lump sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

## Bid Item No. 27 – 90 Day Maintenance

Contractor shall provide 90 Day Maintenance as specified per plans at identified landscape locations per plan. Unless otherwise noted per manufacturer/provider specification, plan or project specifications, work to conform to City Landscape Maintenance Standards, Public Works Standard Plans, Water Division Standard Plans and Landscape Standard Plans.

### **PAYMENT**

Full compensation to provide 90 Day Maintenance shall be made at the lump sum price bid, as shown on the bid schedule, and shall constitute full payment for all labor, materials, tools, equipment and incidentals, and no additional compensation shall be allowed therefore.

# Bid Item No. 28 – Pothole for Utilities (Not Shown on Plans)

The utilities shown on the plans are based on available record research and coordination with utility companies and as-built plans provided by the City. Additional utilities not shown on the plans may be marked by Underground Service Alert (USA) or the Contractor finds them in the field.

This bid item is provided to cover these unforeseen or additional potholes. All utility crossings that are not shown on plans, shall be exposed using a hydro-excavation, hand excavation or other approved method (potholing) to confirm depth of each utility.

In order to use this bid item, the Contractor shall coordinate with the City for review and approval prior to conducting the work. If the number of additional potholes (units) exceed the contract amount, the Contractor shall notify the City prior to conducting the work for City approval. If the number of potholes (units) is less than the contract amount, a credit will be administered by the City.

## **PAYMENT**

Payment for potholing for utilities not shown on plans shall be considered in the unit contract price paid per each bid item including full compensation for furnishing all labor, material, equipment and incidentals necessary to perform the items of work and no additional compensation will be allowed therefor.

The provisions of Section 2-7.1 of the Greenbook are deleted for this bid item.

# Bid Item No. 29 – As-Built Plans

The Contractor shall maintain on the job site, a set of full-size red-line prints (half-sized may be used as well), to which the Engineer shall have access at all times.

The Plans, Specifications, and other Contract Documents will govern the project. The Contract Documents are intended to be complementary and cooperative and to describe and provide for a complete project. Anything in the Specifications and not on the Plans, or on the Plans and not in the Specifications, shall be as though shown or mentioned in both.

While it is believed that much of the project will be shown on the Plans or indicated in the Specifications, this does not warrant the completeness or accuracy of such information. The Contractor is required to submit to the Engineer "as-built" prints, prior to the City's accepting the installations. The prints shall indicate in red all deviations from the contract plans such as location number of fiber optic cable, pull boxes and runs, depths of conduit, number of conductors and other appurtenant work for future references.

The Contractor shall ascertain the existence of any conditions affecting the cost of the project which would have been disclosed by a reasonable examination of the site.

On these plans the Contractor shall mark all as-built conditions, locations, configurations, and other details which may vary from the details represented on the original drawings. This master

record of as-built conditions, including all revisions made necessary by Addenda, Change Orders, and the like, shall be maintained up to date during the progress of the work.

In the case of those drawings which are superseded by final shop drawings, the as-built drawings shall be updated by indicating how those portions are superseded.

Upon completion of the work and prior to final acceptance, legible, as-built drawings shall be turned over to the Engineer.

## **PAYMENT**

Payment for As-Built Plans shall be considered in the lump sum contract price paid for including full compensation for furnishing all labor, material, equipment and incidentals to provide a complete set of As-Built Plans as required in these Special Provisions, and as directed by the Engineer, and no additional compensation will be made therefor.

# 7-4 PAYMENT FOR EXTRA WORK.

# 7-4.2 Basis for Establishing Costs.

[Add the Following:]

No Markups are permitted for sales tax paid on materials and equipment.

### 7-4.2.1 Labor.

[Add the Following:]

AGENCY must approve in advance all straight-time and overtime wages or salaries for employees employed in the performance of Extra Work.

Labor data shall in accordance with each craft and classification consistent with <u>California</u> <u>Department of Industrial Relations</u> wage rates applicable for the construction period of the Extra Work.

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

# 7-4.2.3 Tool and Equipment Rental.

[Replace entire subsection with the following:]

Equipment rental rates shall be per Section 9, Sub-section 9-1.04D "Equipment Rental", of Caltrans Standard Specifications (latest edition), using the Caltrans <u>current</u> "Labor Surcharge and **Equipment Rental Rates**" book at the time the Extra Work is being performed.

The link to the latest "Labor Surcharge and **Equipment Rental Rates**" is as follows: http://www.dot.ca.gov/hq/construc/equipmnt.html

# **7-4.3 Markup.**

[Replace 7-4.3.1 Work by the Contractor and 7-4.3.2 Work by a

Subcontractor with the following:]

The <u>maximum</u> Markup to the Contractor, its Subcontractors, their Sub-Subcontractors, or additional tiers of subcontracting shall be compensated per the table below pertaining to labor, materials, tools and equipment, and other item costs directly allocable to the Extra Work. <u>Compounding</u> of Markup shall not be allowed. See <u>Appendix G</u> for AGENCY approved forms to calculate Extra Work.

	Labor	Materials	Tool & Equipment Rental	Other Items
Contractor Self-Performing (Prime)	20%	15%	15%	15%
Contractor Subcontracting	5%	5%	5%	5%
Subcontractor (Tier 1) *	20%	15%	15%	15%
Sub-Subcontractor (Tier 2 and	2070	1370	1570	1570
Subordinate Level)	*	*	*	*

<sup>\*</sup> Tier 2 and Subordinate Level Subcontractors shall share and not exceed allowed markup with Tier 1 Subcontractor

# **SECTION 8 - FACILITIES FOR AGENCY PERSONNEL**

## 8-1 GENERAL.

[Add the following:].

No field offices for AGENCY personnel will be required, however, the AGENCY personnel shall have the right to enter upon the project at all times and shall be admitted to the offices of the Contractor, at any time during the operation of the Work.

# PART 2 CONSTRUCTION MATERIALS

# **SECTION 200 - ROCK MATERIALS**

#### 200-1 ROCK PRODUCTS.

#### **200-1.1** General.

[Add the following:].

Aggregates shall conform to the provisions in Section 200-1 and shall be approved by the Engineer prior to use.

In accordance with the provisions of Section 20676 of the State of California Public Contract Code, it shall be mandatory upon the Contractor to whom the Contract is awarded, and upon all subcontractors and suppliers under him, to obtain all construction aggregate, sand, gravel, crushed stone, road base, fill materials, and any other mineral materials, including those used in other construction materials such as asphalt concrete and Portland cement concrete, from a supplier that is included on the most current Office of Mine Reclamation AB3098 List. Failure to identify the supplier and the mine may result in rejection of the submittal, and any work completed using materials from an unlisted mine will be SUBJECT TO REJECTION.

#### 200-2 UNTREATED BASE MATERIALS.

#### **200-2.1** General.

[Add the Following:].

Untreated Base Material to be used under asphalt concrete pavement shall be Crushed Miscellaneous Base.

Payment for Untreated Base will be made at the contract unit price per ton which shall include full compensation for furnishing all material required under untreated base in accordance with the plans and these special provisions and no additional compensation will be allowed therefor.

# SECTION 201- CONCRETE, MORTAR, AND RELATED MATERIALS

# 201-1 PORTLAND CEMENT CONCRETE.

**201-1.2** Materials.

# 201-1.2.4 Chemical Admixtures.

[Replace Subsection in total with the following:].

Admixtures will not be permitted.

# **SECTION 203 - BITUMINOUS MATERIALS**

#### 203-6 ASPHALT CONCRETE.

#### **203-6.1** General.

[Add the following:].

Asphalt concrete Base course shall be Class B-PG 70-10 (3/4") and shall conform to the requirements of Section 203-6.4. The composition and grading shall conform to the requirements of Table 203-6.4.4. The asphalt binder shall comply with the Performance Grade specifications of Section 203-1.

# SECTION 214 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

# 214-5 THERMOPLASTIC MATERIAL FOR TRAFFIC STRIPING AND MARKINGS.

#### **214-5.1** General.

[Add the following:].

All final street striping, pavement markers, and signage shall be furnished and installed by the Contractor. The Contractor shall notify the AGENCY's Traffic Signs and Markings Maintenance section, at (714) 536-5428 a minimum of four working days prior to final pavement surfacing or patching to arrange for inspection.

# **Equipment**

All equipment required to perform the work shall be approved by AGENCY's Traffic Signs and Marking Maintenance Section at (714) 536-5428. The Contractor shall furnish all equipment, materials, labor and supervision necessary for installing traffic lanes, directional arrows, guidelines, curbs, parking lines, crosswalks, and other designated markings in accordance with the Plans, or for approved temporary detours essential for safe control of traffic through and around the construction site.

Equipment for applying material when the Plans require molten thermoplastic markings shall readily extrude the material between 400 °F and 425 °F to produce a continuous line 1/16 inch to 3/16 inch thick, of uniform cross section, and having clear, sharp dimensions. The minimum application thickness shall be 1/16-inch for longitudinal lane lines and yellow lines separating traffic in opposite directions. All other stripes, lines, and pavement legends shall be applied at a minimum thickness of 1/10-inch.

Equipment for applying material when the Plans require <u>paint</u> markings shall be an approved spray-type marking machine suitable for applying traffic paint. All paint shall be applied in two coats with a minimum of seven days between the application of the first coat and the second coat.

#### Removal of Traffic Stripes, Pavement Markings, and Raised Pavement Markers:

Traffic stripes shall be removed before any change is made in the traffic pattern, and before applying molten thermoplastic or painting new stripes, markings, and installing new RPMs.

Traffic stripes, pavement markings, and raised pavement markers shall be removed to the fullest extent possible from the pavement/concrete and by any method that does not damage the surface or texture of the pavement. Sand or other material deposited on the pavement or sidewalk because of removing traffic stripes and markings shall be removed as the work progresses. Accumulations of sand or other material which might interfere with drainage or might constitute a hazard to traffic will not be permitted.

Where sandblasting is used for the removal of traffic stripes and pavement markings or for removal of objectionably material, and such removal operation is being performed within ten feet of the traveled way, the residue, including dust, shall be removed immediately after contact between the sand and the surface being treated. Such removal shall be by a vacuum attachment operating concurrently with the blast cleaning operations. Pavement surface shall be "Fog-Sealed" after striping removal.

Grinding shall not be permitted.

Contractor will not be required to use a vacuum attachment under the following conditions

- 1. When approved by AGENCY.
- 2. When the blasting sand will be confined by mechanical means to a small area.
- 3. When a sweeper (mechanical type) will immediately follow the blasting operation or when traffic can be safely routed around the sand until it is swept up.

#### **Temporary Striping, Signing, Raised Pavement Markers**:

The Contractor shall be responsible for the placement of all required temporary signing, striping, and markings and the removal of existing stripes and markings in the installation of required temporary striping.

Traffic striping and markings shall be removed before any change is made in the traffic pattern. Removal shall be coordinated with the installation of new pavement markings to provide continuous, non-conflicting guidance to public traffic.

Should temporary striping be required on the finished asphalt surface, the method and configuration must be approved by the AGENCY's Traffic Engineer for approval prior to placement.

Temporary centerline or median stripes for traffic control shall be placed at the completion of each day's work to provide for night delineation for traffic separation.

At no time shall the street be open to traffic without delineation to separate opposing traffic. Temporary delineation type shall be at the inspector's discretion.

In general, temporary reflectorized markers are the preferred type of temporary delineation.

Temporary striping is required if final striping has not been placed 10 working days after the installation of final pavement.

#### **Pavement Delineations Standards**

All pavement delineations shall conform to the standards of applicable portions of the current California Manual on Uniform Traffic Control Devices (MUTCD), <u>2014 edition</u>, Caltrans Standard Plans, <u>2018 edition</u> A20A-C and A24A-D, and the City of Huntington Beach Standard Plans, current edition.

# **Measure and Payment**

Payment for final street striping, temporary street striping, removals, pavement markers, and signage will be made at the contract lump sum price which shall include full compensation for furnishing all labor and materials required in accordance with the Plans and these Special Provisions and no additional compensation will be allowed therefor.

# PART 3 CONSTRUCTION METHODS

# **SECTION 300 - EARTHWORK**

# 300-1 CLEARING AND GRUBBING.

#### **300-1.1** General.

[Add the following:].

No burning will be permitted.

No accumulation of flammable material shall remain on or adjacent to the right-of-way. The roadway and adjacent areas shall be left with a neat and finished appearance.

In order to protect the public streets from deterioration due to hauling of materials, the Contractor shall submit, prior to the pre-job meeting, for approval a proposed route for hauling of materials for disposal. Upon approval, the Contractor shall strictly adhere to that route, unless written permission from the Engineer is obtained to change the route.

The use of a "Stomper" is prohibited for any use unless directed otherwise by the Engineer.

#### **300-1.4** Payment.

[Add the following:].

Full compensation for any necessary clearing and grubbing required to perform the construction operations specified shall be included in the price bid for other items of work and no additional compensation will be allowed therefor.

#### 300-2 UNCLASSIFIED EXCAVATION.

#### **300-2.1** General.

[Add the following:].

Unclassified excavation shall include excavating, removing, hauling, and disposal of all material including asphalt concrete pavement **and pavement fabric**, **if present**, to the subgrade elevations indicated on the plans as required to construct the new improvements.

Removal of asphalt concrete, aggregate base and native soil shall be made at the locations shown on the plans, or as specified in the field by the Engineer. Asphalt pavement shall be removed to clean straight lines by saw cutting.

The areas and quantities shown on the plans are given only for the Contractor's aid in planning the Work and preparing bids. The Engineer shall designate the limits to be removed and these designated areas shall be considered to take precedent over the areas shown on the plans. No guarantee is made that areas or quantities shown will equal the areas or quantities designated by the Engineer.

# **300-2.9** Payment.

[Add the following:].

Unless directed otherwise by the Engineer, stockpiling of any material will not be allowed in or around the project site.

Said payment shall also include full compensation for all required saw cutting of removal areas.

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

#### 301-1 SUBGRADE PREPARATION

#### **300-1.1** General

[Add the following:].

Said payment for Subgrade preparation shall be included in the bid item for sawcut and excavate existing A.C. and A.B. and shall be considered full compensation for all required material and labor and miscellaneous materials.

# SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION

- 303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS.
- **303-5.5** Finishing.

#### 303-5.5.2 Curb.

[Delete second to the last sentence in second paragraph and add the following:].

When curb is constructed and no markings are on the existing curb, the Agency will mark sewer locations in the street and the Contractor will add a chiseled "S" on the curb for this sewer location. The Contractor will add a chiseled "S" and "W" to new curb at locations that have an existing chiseled "S" and "W" for these sewer and water locations. Also new curb construction shall include replacement of existing curb lot drains and the repainting of curb addresses per agency standards.

#### 303-5.5.4 Gutter

[Add the following:].

When gutter is constructed at a rate of grade less than 0.30% it shall be water tested. If any portion of the newly constructed gutter is shown to pond water, that portion, including curb if applicable, shall be removed, reconstructed, and retested by the Contractor at no additional cost to the AGENCY. The exact limits of removal will be determined based on a survey conducted by AGENCY, unless otherwise directed by the Engineer.

### 303-5.5.5 Alley Intersections, Access Ramps, and Driveways.

# [Add the following subsection 303-5.5.5.1:].

#### **303-5.5.5.1** Truncated Domes.

ADA-compliant curb access ramps shall be constructed per Caltrans Standard Plan A88A/A88B. Truncated domes shall be cast in place for new ramp construction and surface applied for existing ramp with domes applied to dry concrete utilizing the "Access Tile" or "Armor-Tile Tactile Systems" or AGENCY approved equal. The truncated domes shall be dark gray in color, unless otherwise specified by Caltrans for State Highways or federally funded projects. If applied over stamped concrete, dark gray traffic paint shall be applied. All products must carry a minimum 5-year warranty.

# 303-5.9 Measurement and Payment.

[Add the following:].

Payment for the construction or removal, respectively, of concrete curbs, gutters, curb ramps, cross gutters, v-gutters, driveway approaches, alley approaches, and sidewalk shall be made as shown on the Bid. Such price shall constitute full compensation for all equipment, materials, labor, and incidentals necessary for the construction or removal of said item, and shall include, but not be limited to: slot paving, any required saw cutting, removal and disposal of said items, the reconstruction of curb drains, the removal of any interfering tree roots, repainting curb addresses, the replacement of water meter boxes damaged during the removal of existing improvements and/or the construction of proposed improvements, and the adjustment of existing utilities and other improvements located within the area of work in order to match the proposed finished surfaces and grades as indicated in the Project Plans and/or Specifications. Additionally, all depressed curb and gutter, and concrete sidewalk located within the limits of the new curb ramp, cross gutter, or driveway/alley approach shall be considered as part of said ramp, cross gutter, or approach and shall be paid for at the contract unit price bid for each item, respectively.

# SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION

#### 306-3 TRENCH EXCAVATION

### **306-3.1** General.

[Add the following:].

Upon approval by the Engineer, when backfilling operation of an excavation in the travel way, whether transverse or longitudinal cannot be properly completed within a work day, steel plate bridging with a nonskid surface and shoring may be required to preserve unobstructed traffic flow. In such cases, the following shall apply:

- 1. Steel plate used for bridging must extend a minimum of twelve (12) inches (300 mm) beyond the edge of the trench.
- 2. Steel plate bridging shall be installed to operate with minimum noise.
- 3. The trench shall be adequate to support the bridging and the traffic load. Contractor shall be responsible for determining whether shoring is necessary.

- 4. Temporary paving with cold asphalt concrete shall be used to feather the edges of the plate.
- 5. Bridging shall be secured against displacement by adjustable cleats, shims, or other devices.

Approaches plate and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of two (2) dowels pre-drilled into the corners of the plate and drilled two (2) inches (53 mm) into the pavement. Subsequent plates are butted to each other. Fine graded asphalt concrete shall be compacted to form ramps, maximum slope of 8.5% with a minimum of twelve (12) inches (300 mm) taper to cover all edges of the steel plates. When steel plates are removed, the dowel holes in the pavement shall be backfilled with either fines of asphalt concrete mix, concrete slurry or equivalent slurry satisfactory to the Engineer.

The Contractor shall be responsible for maintenance of the steel plates, shoring, and asphalt concrete ramps.

Unless specified, use of steel plate bridging at any given location should not exceed four (4) consecutive working days in any given week. Trench plates need to be set flush with pavement and secured in place as noted above for any durations over (4) days upon approval of the engineer. Backfilling of excavation shall be covered with a minimum of three (3") inches (78 mm) of temporary layer of cold asphalt concrete.

The following table shows the required minimal thickness of steel plate bridging for a given trench width:

Trench Width	Minimum Plate Thickness	
1.0 foot (300 mm)	1/2	inch (13 mm)
1.5 foot (450 mm)	3/4	inch (19 mm)
2.0 feet (600 mm)	7/8	inch (22 mm)
3.0 feet (900 mm)	1	inch (27 mm)
4.0 feet (1200 mm)	1 1/4	inch (35 mm)

For spans greater than four (4) feet (1200 mm), a structural design for the steel plate bridging shall be prepared by a registered civil engineer and approved by the Engineer. Steel plate bridging shall be designed for HS20-44 truck loading per Caltrans Bridge Design Specifications Manual. The Contractor shall maintain steel plates with a non-skid surface having a minimum coefficient of friction equivalent to 0.35 as determined by California Test Method 342. The Contractor may use standard steel plate with known coefficient of friction equal or exceeding 0.35.

Payment for steel plate bridging shall be included in the other items of work involved and no additional payment will be allowed therefore.

#### 306-4 SHORING AND BRACING.

[Add the following:].

Payment for trench shoring shall be considered to be included in the other items of work, which shall include full payment for furnishing shop drawings, all labor and materials, and performing

all work as specified to brace excavations or provide an equivalent method for protection of workers per Section 6707 of the California Labor Code, and in accordance with these Plans and Special Provisions and no other measurement or additional compensation will be allowed therefor.

#### 306-5 DEWATERING.

[Add the following:]

If groundwater is encountered, the Contractor shall dispose of it by any method acceptable to the Engineer. The trench shall be dewatered to a minimum depth of 12 inches below trench bottom. The cost of any dewatering shall be included in the cost of pipe construction and no additional compensation will be allowed therefor.

#### **306-6 BEDDING.**

# **306-6.1** General.

[Add to the last sentence of the fourth paragraph with the following:].

Additional bedding ordered by the Engineer, over the amount indicated on the plans due to unsuitable material, shall be paid for per Subsection 3-3.

[Add the following:].

Bedding for pipe, including sewer main and/or storm drain pipe, shall conform to AGENCY Standard Plans, edition 2008.

One or two foot standard lengths of pipe shall be used for inlet and outlet connection to the manhole assemblies.

#### 306-6.5 Placement and Compaction.

#### 306-6.5.1 General.

[Replace entire subsection with the following:].

The material in the bedding zone shall be placed and compacted mechanically. Water densified backfill will not be permitted. Unless the sheeting or shoring is to be cut off and left in place, compaction of bedding material for pipe shall be performed after the sheeting or shoring has been removed from the bedding zone, and prior to the placement of backfill.

Mechanical compaction shall conform to 306-12.3.

#### **306-15 PAYMENT.**

#### **306-15.1** General.

[Replace entire subsection with the following:].

Payment for pipe and conduit will be made at the Contract Unit Price per linear foot (m). The Contract unit price shall include payment for

- a) all wyes, tees, bends, monolithic catch basin connections, and specials shown on the Plans;
- b) the removals of interfering portions of existing pipelines, sewers, storm drains, and improvements;
  - c) the closing or removing of abandoned conduit and structures;

- d) the excavation of the trench;
- e) the control of ground and surface water;
- f) the preparation of subgrade;
- g) placing and joining pipe;
- h) pressure testing;
- i) video inspection;
- j) disinfection sample collection and delivery;
- k) backfilling the trench;
- 1) temporary and permanent resurfacing;
- m) and all other work necessary to install the pipe or conduit, complete in place.

No additional compensation will be allowed therefor.

In addition, no separate or additional payment will be made for additional bedding or higher strength of pipe necessitated by the Contractor exceeding the maximum trench width.

# PART 4 EXISTING IMPROVEMENTS

# SECTION 400 -PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

#### **400-1 General.**

[Replace the second and last paragraphs 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, gutters, sidewalks, driveways, fences, walls, sprinkler systems, signs, utility installations, pavements, and structures.) which are damaged or removed as a result of his operations.

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 equal to the existing improvements and shall match such improvements in finish and dimensions unless otherwise specified.

All cost to the Contractor for protecting, removing, restoring, repairing, replacing, or reestablishing existing improvements shall be included in the bid in other items of work unless otherwise specified.

# **SECTION 402 – UTILITIES**

#### 402-1 LOCATION.

[Add the following:].

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 location of underground utilities or substructures of every nature and to protect them from damage.

The Contractor shall pothole all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by the Work.

The Contractor is required to pothole utility conduit crossings at all water mains and required to coordinate with the City's Water Utility Locator staff to verify and visualize that the utility conduit has a minimum 12" separation from the existing water main and that the water main is backfilled with minimum of 12" of sand. Water Utility Locator must be onsite to visualize the

horizontal boring clearance of the water main and verify backfill material. If a pothole needs to be closed and reopened for the horizontal boring, it is the Contractor's responsibility to reopen the crossing for separation clearance and backfill. Full compensation for pothole work shall be included in the price bid for other items of work and no additional compensation will be allowed.

#### 402-2 PROTECTION.

[Replace the last sentence of the third paragraph with the following:].

Payment support or protection of such utility shall be considered as included in the bid for other items of work.

# 402-4 RELOCATION.

[Replace the second sentence of the last paragraph 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.

# 402-5 DELAYS DUE TO UTILITY CONFLICTS

[Add the following paragraph:].

All notification to utility companies insofar as the relocation or removal of a utility shall be made by the Engineer based on Contractor's request as submitted to the Engineer at least 48 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 excepting thereof any delay cost incurred as a result of the utility company not responding at their agreed time.

# PART 8 LANDSCAPING AND IRRIGATION

# **SECTION 800 – MATERIALS**

#### 800-1 LANDSCAPING MATERIALS.

[Add the following:].

Unless otherwise indicated on the Plans, the landscape and maintenance *requirements* contained in <u>Appendix I</u>, and the following requirements of these Special Provisions shall govern this section. In the case of any discrepancy, the more stringent requirement shall apply as determined by the Engineer.

Due to the scale of drawings, it is not possible to indicate all offsets, fittings, sleeves, etc. which may be required. The contractor shall carefully investigate the structural and finished conditions affecting all of his work and plan his work accordingly, furnishing such fittings, etc., as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting, and architectural features.

The Contractor shall not willfully install the irrigation systems as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences or discrepancies in area dimensions exist that might not have been considered in engineering. Such obstructions or differences should be brought to the attention of the AGENCY's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revision necessary.

The Contractor shall obtain and pay for any and all permits and all inspections as required.

Permission to shut off any water lines must be obtained from the AGENCY Inspector, who will make the necessary arrangements with the AGENCY. Disruption of existing systems shall be kept to a minimum.

Any disruptions in irrigation for periods longer than 7 days will require the contractor to provide manual watering.

The Contractor shall verify and be familiar with the location, size and detail of stubouts, provided as the source of water supply to the sprinkler system, as shown on plans.

The Contractor shall provide Submittals and follow the material list below:

- 1. The Contractor shall furnish the articles, equipment, materials, or processes specified by name in the drawings and specifications. No substitution will be allowed without prior written approval by the AGENCY.
- 2. Complete material list shall be submitted prior to performing any work. Material list shall include the manufacturer, model number and description of all materials and equipment to be used.

- 3. Equipment or materials installed or furnished without prior approval of the AGENCY may be rejected and the Contractor required to remove such materials from the site at his own expenses.
- 4. Approval of any item, alternate or substitute indicates only that the product or products apparently meet the requirements of the drawings and specifications on the basis of the information or samples submitted.
- 5. Manufacturer's warranties shall not relieve the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.

#### 800-1.1.1 General.

[Add the following:].

The following shall be added follow paragraph 1:

Topsoil material unless otherwise designated shall be Class C.

Prior to amending the areas where severe compaction exists, the subsurface soil should be ripped or tilled to a 9 inch depth. Uniformly broadcast and blend the materials and quantities listed below with existing soil to a 6 inch depth in all planting and turf areas. Remove all existing weeds from the surface. Remove all roots and nodes or nuts of Bermuda-Johnson Grass, Nut Grass and dispose off site. Initial irrigations should be especially thorough to provide some additional leaching.

The Contractor shall have a soil analysis made after completion of the rough grading. Site to be rough graded by Landscape Contractor to within 0.1 foot plus or minus by the City based upon Plans. The materials and quantities listed below are provided for bidding purposes only. Soil test (Agronomy Report) recommendations shall supersede the following required applications, ratios, and materials as approved by the AGENCY:

# AMOUNT PER 1000 SQ. FT. OF PLANTING OR TURF AREA

4 cu. yds. nitrogen fortified organic amendment (compost\* or redwood or fir sawdust)
15 lbs. 6-20-20 XB<sup>®</sup> w/ micronutrients

20 lbs. soil sulfur

100 lbs. agricultural gypsum

\*Rates and fertilizers may have to be adjusted depending on analysis of the selected compost.

Shape mounds as shown on plans. Contractor to import soil as necessary and have approval by City prior to delivery to the site. Any import will have a City Approved Agricultural Suitability Report to attain design grades and berms. All import shall be free of weeds and debris. Contractor shall dispose of buried debris and deleterious materials found upon any excavation, to any convenient dump or off site location at no expense to City.

# **800-1.1.2** Class A Topsoil..

[Paragraph 2 shall be deleted and the following paragraphs inserted in the place thereof]

At least 15 days before scheduled use, the proposed source of import soil must be submitted to the Soils Engineer for approval. The Contractor shall submit a written request for approval, which shall be accompanied by a written report of a testing agency registered by the State for

agricultural soil evaluation, which states that the proposed source complies with these specifications. Class A import soil shall consist of a natural, fertile, friable, sandy loam soil possessing the characteristics of representative soils in the vicinity which produce heavy growth of crops, grasses, or other vegetation and shall be obtained from a natural, well-drained area. Before removal of the topsoil, the surface at the source of supply is to be stripped to a depth of two inches in order to remove weed seeds, roots, etc. The source of the imported soil shall be free from Bermuda grass, crab grass, and all noxious weeds, sticks, brush, litter, and other deleterious substances. In no case shall there be more than five percent by volume of the following: stones smaller than one inch, course sand, and small clay lumps. It shall not be infested with nematodes or other undesirable insects or plant disease organisms.

The soil shall be free from insoluble carbonates and shall have the following analysis, which shall be verified by a soil analysis made by the City.

pH - maximum of 7.0; minimum of 6.0

ECo - zero to three maximum (electrical conductivity)

ESp - zero to twelve maximum (exchangeable sodium percentage)

The soil shall be subject to inspection at the source of supply prior to delivery.

# 800-1.2 Soil Fertilizing and Conditioning Materials.

# 800-1.2.1 General.

[Add the following:].

For maintenance fertilization of all turf, groundcover, and mass planting areas, uniformly broadcast sulfur coated urea at the rate of 5 lbs. per 1000 sq. ft. The first application should occur approximately 30 days after planting, with repeat applications every 60-90 days or as growth and color dictate. In early fall and spring, substitute a complete fertilizer such as 16-6-8, or equal, for the sulfur coated urea at the rate of 6 lbs. per 1000 sq. ft. to ensure continuing supplies of phosphorus and potassium. Tree and shrub plantings can be maintained with the above fertilizers; however, the frequency between applications should be every 120 days, with the first application 90 days after planting. Follow each fertilization with a thorough irrigation. When plants have become well established, fertilizer applications can be less frequent.

Apply systemic weed killer 'Round-up' to all planting areas per manufacturer's specifications as required for weed control/removal.

#### 800-1.21 General.

[The following paragraphs shall be added following paragraph 2]

Organic Fertilizers and Soil Conditioners shall comprise decomposed animal and vegetable matter having been processed and composed to support bacterial culture. A bacterial stimulator shall be included. A guaranteed analysis shall contain 5% Nitrogen, 3% Phosphate. 1% Potash, 50% Humus, 15% Humic Acid. No fertilizer or conditioner, etc., shall contain any unprocessed poultry, animal or human waste.

### 800-1.2.3 Commercial Fertilizer

[Add the following paragraphs]

Commercial Fertilizers shall be delivered in sacks with the manufacturer's label showing weight and analysis attached to each sack.

The following commercial fertilizer shall be used for bidding purposes only. Exact quantities and recommendations shall be determined by the soil fertility and agricultural suitability test to be prepared by Waypoint Analytical, Inc. (714) 282-8777. Contractor shall conduct an agronomic soil report on all imported soil at no additional cost to the City, and shall be included in the base bid. Contractor shall obtain city approval of imported soil prior to delivery.

Uniformly spread and cultivate amendments thoroughly by means of mechanical tiller into top 6@ of soil in all planting areas. Application rate per 1,000 square feet:

Commercial Fertilizer 15-15-15 20 pounds

Soil Sulphur 100 pounds Zinc Chelates 4 ounces Granular Gypsum 100 pounds

Nitrogen stabilized organic amendment 6 cubic yards (see Subsection 212-1.2.4 Organic Soil Amendment)

The soils analysis report shall be submitted to the City of Huntington Beach as part of the Certificate of Completion. Soils testing shall be performed after final grading has been completed and approved by the City. The cost of soils testing shall be included in the base bid and shall be provided by the Contractor at no additional cost to the City.

All areas to be landscaped shall be cross-ripped or otherwise tilled to a depth of 9 to 12 inches. Uniformly spread and cultivate amendments thoroughly by means of mechanical tiller into top 6" of soil in all planting areas. Application rate per 1,000 square feet:

Commercial Fertilizer 6-20-20 20 pounds Soil Sulfur 10 pounds Nitrogen stabilized sawdust (derived from 6 cubic yards

Redwood, fir or cedar)

Planting Tablets: Provide slow-release type with potential acidity of not more than 5 percent by weight containing the following percents by weight of nutrients listed; 20-nitrogen, 10-phosphoric acid, 5-potash, 2.6 combined calcium, 1.6-combined sulphur 0.35-iron (elemental) from ferrous sulfate. Provide in 21 gram tablets manufactured by Agriform, or other approved.

# 800-1.2.4 Organic Soil Amendment.

[Paragraph 1 shall be deleted and replaced with the following]

Organic Soil amendment material shall conform to Type 1 unless otherwise designated. Delete paragraph references to Type 2 and Type 3 soil amendments.

#### 800-1.2.5 Mulch.

[Sentence one of paragraph one shall be deleted and replaced with the following]

Mulch material shall be Type 5 mulch and replaced with the following:

Mulch: Provide medium grind bark such as supplied by Blue Ribbon Landscape Supplies,

(714) 633-3666, consisting of fibrous, woody bark mixture of varied particle size such that 90 to 100 percent passes 1 inch sieve, 80 to 100 percent passes 1/2 inch sieve, and 20 to 60 percent passes 1/4 inch sieve, or approved equal. Submit sample for review.

[The following subsection shall be added]

#### 800-1.2.6 Soil Herbicide.

A commercially manufactured non-selective herbicide for total control of vegetation products shall meet all federal and state regulations pertaining to the use of such substances. Application and rate of application shall follow manufacturer's recommendation. Application shall not be made until obtaining written approval from the City. Following City approval of Contractor herbicide, Contractor shall apply herbicide to all landscape areas. Such application shall be performed in consideration of overall construction schedule and operation so as not to disrupt or interfere with the project schedule and time line.

#### **800-1.4** Plants

#### 800-1.4.1 General.

[Subsection 800-1.4.1 shall be deleted and replaced with the following]

A representative number of plants shall be inspected and approved at the nursery by the Engineer prior to shipment to the planting site. Prior to such visit, Contractor shall submit 3" x 5" color photographs of all proposed tree and shrub material for City's review. Photos shall be submitted seven (7) calendar days prior to specified plant material review at nursery site. Plants shall be inspected for size and condition of root growth, insects, injuries and latent defects. The City reserves the right to reject entire lots for plants represented by defective samples. Plant condition shall be in accordance with the California State Department of Agriculture's regulations for nursery inspections, rules and grading. All plants shall have a growth habit normal to the species and shall be sound, healthy, vigorous and free from insect pest, plant diseases, sunscalds, fresh bark abrasions, excessive abrasions, or other objectionable disfigurements. Tree trunks shall be sturdy and well hardened off. All plants shall have normal well-developed branch systems, and vigorous and fibrous root systems which are neither root nor pot-bound and are free of kinked or girdling roots. Other than the normal side pruning during the growth period, no pruning shall be done prior to inspection at the nursery. The size of the plants will correspond with that normally expected for species and variety of commercially available nursery stock, or as specified in the drawings. The minimum acceptable size of all plants, measured before pruning with the branches in normal position, shall conform with the measurements, if any, specified on the drawings in the list of plants to be furnished. Plants larger in size than specified may be used with the approval of the City, but the use of larger plants will make no change in contract price. Bare root plantings in publicly maintained areas shall be done only with special approval of City.

Quantities and Types. Plant materials shall be furnished in the quantities and/or spacing as shown or noted for each location, and shall be of the species, kinds, sizes, etc., as symbolized, and/or described in the Plant Legend, as indicated on the drawings. The landscape contractor is to verify all sizes and quantities on plans. Installation and use of substitute items shall not be made until the Contractor is in receipt of written approval from the City. Substitution Proposals for plant material must be accompanied by substantive written proof of non-availability of material originally specified prior to bid opening.

#### 800-1.4.2.1.9 Fertilizer.

- A. Root Growth Stimulant: Stimulant shall be Vitamin B-l as manufactured by Cal-Liquid, Cooke, Chican, Otiho, or other approved equal.
- B. Fertilizer will not be used at time of planting. After four months, use a light application of 20:10:5 approximately 1/2 lb. nitrogen per tree cultivated into soil.

#### **800-1.5.3** Tree Stakes.

[The first paragraph shall be replaced with the following]

Tree stakes shall be sharpened 2" diameter lodgepole pine, treated in accordance with Section 204-2.2. Stake shall be free from splits.

[The third paragraph shall be replaced with the following]

Deadman stakes shall be duckbills or 2x4 inch redwood 18 inches long. Covers for wire shall be 3/4-inch Class 200 PVC pipe - 3 feet long.

[The following paragraph shall be added at the end of the subsection]

A minimum of two (2) supporting tree ties or three (3) guy anchors shall be used for each tree. Tree ties shall be V.I.T. "Twist Brace" Model TB24.

#### **800-1.5.5 Root Barriers**

Root barriers shall be 36" deep and as provided by DeepRoot Corp. (800) 458-7668, or approved equal. Installation shall be per manufacturer's specifications.

# 800-2 IRRIGATION SYSTEM MAINTENANCE

#### 800-2.1.1 General.

[The following paragraph shall be added at the end of the subsection]

The manufacturer's directions and detail drawings shall be followed unless directed by the City Representative or shown differently in the plans and specifications.

# **800-2.1.3** Plastic Pipe for Use With Solvent Weld Socket or Threaded Fillings. [Add the following before the first paragraph]

General. Use only new materials of brands and types noted on drawings specified herein, or approved equals.

[Paragraph 2 shall be deleted and replaced with the following]

PVC Pressure Main Line Pipe and Fittings shall be Class 315 PVC with bell and gasket-type pipe for pressure main pipes 2 inches and larger.

PVC schedule 40 with solvent welded joints for pressure main piping of lesser diameter. PVC schedule 40 solvent welded piping shall be used for all non-pressure lateral line piping.

The following paragraphs shall be added at the end of the subsection:

All PVC pipe must bear the following markings:

- 1. Manufacturer's name
- 2. Nominal pipe size
- 3. Schedule or class
- 4. Pressure rating in P.S.I.
- 5. NSF (National Sanitation Foundation) approval
- 6. Date extrusion
- 7. U.P.C. shield logo (IAPMO approval)

All fittings shall bear the manufacturer's name or trademark, material designation, size, applicable I.P.S. schedule and NSF seal of approval

Solvent cement and primer for PVC solvent-weld pipe and fittings shall be of type recommended by the manufacturer, and shall follow installation methods prescribed by the pipe manufacturer.

#### **800-2.2.2** Gate Valves.

[The text of this subsection shall be deleted and replaced with the following]

All valves shall be as identified on the Construction Documents and per City review and approval.

#### 800-2.2.4 Remote Control Valves.

[Add the following after paragraph number one:]

Remote control valve manufacturer and sizes shall be as indicated in plans and legend.

#### 800-2.2.6 Quick-Coupling Valves and Assemblies.

[The text of this subsection shall be deleted and replaced with the following Paragraph]

Quick-coupling valves shall have a brass two-piece body designed for working pressure of 150 PSI. The quick-coupling valve shall have a built-in flow control and self-closing valve and shall be supplied in 3/4-inch (19) size unless otherwise required. The valve shall be equipped with a locking rubber or vinyl cover. When a quick-coupler assembly is specified, it shall consist of the valve, quick-coupler connection, and hose swivel.

#### **800-2.2.7** Valve Boxes.

[Delete the first paragraph and replace with the following]

Valve boxes and lids shall be as detailed on the Plans. The boxes shall be covered with an etched polyethylene face with an ultraviolet inhibitor. The lid shall be plastic, lockable, and embossed with the valve station number on its topside. Sizes and manufacturer of the valve boxes and lids shall be as indicated on the Standard Drawings.

#### 800-2.2.8 Master Control Valves.

The master control valve manufacturer and size shall be as indicated on plan and legend.

# 800-2.3.1 Backflow Preventer Assembly

[Add the following after paragraph number one]

Unless otherwise instructed by the City Inspector, backflow assemblies shall consist of a brass reduced pressure/backflow prevention device with "Wye" strainer and 60 mesh screen as detailed and called out on the Project Plans.

# 800-2.4 Sprinkler Equipment

[The text of this subsection shall be deleted and replaced with the following]

Irrigation bodies and nozzles shall be as indicated on plan and legend. Substitutions shall not be allowed unless by written authorization from the City.

Irrigation bodies and nozzles shall feature low head drainage, pressure regulating, and pressure compensating features. Unless otherwise approved, all pop-ups and fixed riser assemblies shall consist of plastic and stainless steel materials.

Smaller radii turf irrigation equipment shall consist of 6-inch pop-ups. All smaller radii shrub and groundcover irrigation equipment shall consist of 12-inch pop-ups, unless otherwise approved by the City. Smaller radii equipment are those components which irrigate within and under a radius of 22 feet.

# 800-3 ELECTRICAL INSTALLATION

#### 800-3.2.1 Conduit.

[Replace paragraph with the following]

Conduit shall be Schedule 40 PVC pipe as called out on the plans. Install per plans. Conduit shall conform to the applicable provisions of subsection 800-2.1.3.

#### **800-3.2.2** Conductors

[Add the following paragraph]

The electrical system shall be installed in accordance with the National Electrical Code most recently adopted by the City. Connections between the automatic controllers and the electric control valves shall be made with direct burial copper wire AWG-U.F. 600 volt. Pilot wires shall

be a different color wire for each automatic controller. Common wires shall be white with a different color stripe for each automatic controller. Install in accordance with valve manufacture's specifications and wire chart. In no case shall wire size be less than #14.

Wiring shall occupy the same trench and shall be installed along the same route as pressure supply or lateral lines wherever possible. Install wires inside Schedule 40 Conduit anywhere it is not possible to place in pipe trench, or where wires must go under pavement. Conduit size shall be large enough to contain all necessary wires. Minimum conduit size shall be 2".

Where more than one (1) wire is placed in a trench, the wiring shall be taped together at intervals of ten (10) feet.

An expansion curl should be provided within three (3) feet of each wire connection and at least every one hundred (100) feet of wire length on runs more than one hundred (100) feet in length and also at each change of direction. Expansion curls shall be formed by wrapping at least five (5) ruins of wire around a one-inch diameter pipe, then withdrawing the pipe.

All splices shall be made with 3M - DBY wire connector, or approved equal. Use one splice per connector sealing pack.

Field splices between the automatic controller and electrical control valves will not be allowed without prior approval of the City.

# SECTION 801 - LANDSCAPE & IRRIGATION INSTALLATION

#### 801-1 GENERAL

[The following paragraphs shall be added at the end of the subsection:]

Inspection will be required for the following parts of the work:

- a. At completion of rough grade prior to incorporation of soil amendments.
- b. Irrigation coverage test prior to initiating planting operations.
- c. At completion of incorporation of soil amendments and fine grading.
- d. Prior to digging plant pits for trees and shrubs.
- e. During backfilling of plant pits with amended backfill.
- f. Maintenance period shall not begin until final installation inspection is made, and establishment is verified. City inspector shall approve commencement date of maintenance prior to the commencement of said maintenance.
  - g. Final review and acceptance at the end of the maintenance period.

#### 801-2 EARTHWORK AND TOPSOIL PLACEMENT

# **801-2.1** General.

[The following paragraph shall be added at the end of the subsection:]

The Contractor shall apply water as necessary to provide ideal moisture content for tillingand for planting as, herein specified.

#### 801-2.2 Trench Excavation and Backfill.

[The second and last paragraph shall be deleted and the following added:]

The depth of cover over pipelines and conduits shall be per Drawings.

The trenches shall not be backfilled until all required tests are performed. A fine granular material used for bedding and backfill will be placed on all lines. Trenches shall be carefully backfilled with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand, or other approved materials, free from large clods of earth or stones.

The finished surface shall be restored to the grade established prior to excavation. All mounding and divots shall be graded smooth to the satisfaction of the City Representative.

If settlement occurs, and subsequent adjustments in pipe, valves, valve/utility boxes, sprinkler heads, lawn or planting, or other construction are necessary, the Contractor shall make all required adjustments.

# 801-2.2.1 Trenching and Backfilling Under Paving.

[The following subsection shall be added:]

Where irrigation lines are called for on the plans to be placed within a sleeve the PVC sleeve to be provided for such work shall be Schedule 40 PVC sleeve.

# 801-2.2.2 Trenching Adjacent to Existing Trees.

[The following subsection shall be added:]

Where it is necessary to excavate adjacent to existing trees, the Contractor shall use all possible care to avoid injury to trees and tree roots. Excavation in areas where two (2) inch and larger roots occur shall be done by hand. All roots two (2) inches and larger in diameter, except directly in the path of pipe or conduit, shall be tunneled under and shall be heavily wrapped with burlap, to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than two (2) inches in diameter the wall of the trench adjacent to the tree shall be hand trimmed, making clean cuts through. Trenches adjacent to trees should be closed within twenty-four(24) hours; and where this is not possible, the side of the trench adjacent to the free shall be kept shaded with burlap or canvas.

# 801-2.3 Topsoil Preparation and Conditioning

# 801-2.3.2 Fertilizing and Conditioning Procedures.

[The first paragraph of the subsection shall be deleted and replaced with the following:]

The planting areas shall be brought to rough grade whereupon Fertilizer and Soil Conditioning required for the native soils for the intended landscape planting shall be added based upon the recommendations of Soils Fertility and Agricultural Suitability Report. (See Section 212)

The Contractor, at no additional cost to the City, shall make two additional soils tests for agricultural fertility and suitability and fertilizer and amendment recommendations of all planting areas upon completion of excavation, topsoil backfilling, and grading. The Contractor shall amend it as necessary to comply with the soils test report at no additional cost to the City.

### **801-2.3.3** Weed Control.

[The following subsection shall be added:]

Kill and remove all existing weeds from site areas utilizing post-emergent herbicide.

Upon completion of the irrigation system and after all designated shrub and ground covers, existing weeds and growth have been removed from the planting areas, the Contractor shall apply by spray a mixture of Commercial Fertilizer 12-12-12 to be applied at a rate of 400 lbs/per acre.

Thereafter, all areas shall be watered four (4) times daily until weed seeds have germinated, approximately 21 days or unless otherwise directed by the Engineer. Thereafter, watering shall cease for three (3) days to be followed by the spraying of a systemic herbicide containing the active ingredient glyphosate (Roundup-Pro, or approved equal). Spraying shall be at the labeled rate compatible with the eradication rate for the target weed species and shall be performed under the direction of a registered pest control advisor. After allowing sufficient time for the herbicide to kill all remaining weeds (2 weeks minimum), the areas to be landscaped shall be raked or hoed as directed by the Engineer to remove any remaining weed stubble. All areas shall be watered for an additional 14 (fourteen) day period and then an additional application of the systemic herbicide per manufacturer's recommendation.

# 801-2.4 Finish Grading.

[The following shall be added to the last sentence of the second paragraph.]

...except where water is designed to flow over the same.

[The following paragraphs shall be added following paragraph two:]

Finish grades shall be those indicated on the drawings or as may be controlled by existing installations. Grades not otherwise indicated shall be uniform, and straight graded between points where elevations are noted. Minor modeling of the ground surface may be required.

Grading shall provide for the natural run-off of water without low spots or pockets. Flow lines shall be set by instrument and shall be the maximum gradient possible.

# 801-3 HEADER INSTALLATION

[The following subsection shall be added:]

#### 801-3.1 Concrete Headers.

Concrete headers shall be constructed where shown on the plans and specifications. All concrete work shall conform to the requirements of subsections 201-1 and 301-1 and per Project Plans.

#### 801-4 PLANTING.

#### **801-4.1** General.

[Add the following:].

City may request inspection of delivery slips for planting materials to verify specified quantities of bulk deliveries. Close supervision of these items will be strictly adhered to.

Substitutions for the indicated plant materials will be permitted provided the substitute materials are approved in advance by the AGENCY and the substitutions made at no additional cost. Except for the variations so authorized, all substitute plant materials shall conform to the requirements of these specifications. If accepted substitute materials are of less value than those indicated or specified, the contract price will adjusted in accordance with provisions of contract.

All plants shall have a habit of growth that is normal to the species, be sound, healthy, vigorous, and free from weeds, insect pests, plant diseases, sun scalds, fresh abrasions of the bark, excessive abrasions or other objectionable disfigurements. Tree trunks shall be sturdy and well "hardened off". The plants shall have normally well-developed branch systems and vigorous and fibrous root systems which are not root or pot bound. Plants shall be grown in nurseries which have been inspected by the State Department of Agriculture and have complied with its regulations. AGENCY shall have the right to reject plants which do not meet the specified conditions or accepted standards of the trade.

# 801-1.4.5 Tree and Shrub Planting

[Replace the fifth item in fifth paragraph with the following.]

5) A circular water basin slightly larger than the planting hole, 4 inches high for trees and 2 inches high for shrubs, shall be left around the plant. The bottom of the basin shall be at approximate finish grade or slightly lower. Engineered Wood Fiber (EWF) Manufactured softwoods and /or hardwoods blunt or soft chopped ends, controlled size average 1"to 2" in length containing a maximum 15% fine pine needles to aid in knitting, non-toxic free of paint, chemicals, additives or metals or AGENCY approved equal shall be spread at least 3 inches thick in the basin.

[Add the following to fifth paragraph.]

- h) The top of the shrub root ball should be at or slightly above final grade, and trees 1½" above finish grade.
- i) To improve soil chemistry, uniformly blend 2 lbs. of iron sulfate and agricultural gypsum per cubic yard of backfill soil. Handle iron sulfate with caution since it will severely stain moist concrete.
- j) Organic material is not required in the backfill; however, the amended surface soil or a soil blend consisting of no more than 10% by volume organic matter can be placed in the upper 12 inches of backfill only. Soil below this depth should not contain any added organic matter because of the threat of plant disease and/or anaerobic soil conditions developing.

- k) Place slow release fertilizer tablets in the upper 12 inches of backfill at manufacturer's recommended rates. If fertilizer amended soil is used as a backfill the addition of slow release fertilizer tablets is not necessary.
- l) Do not cover the original root ball with other soil. A temporary soil berm shall be constructed around the outer edge of the root ball to help channel water into the root ball and then into surrounding soil until roots are established in the backfill and the root ball is no longer the sole source of water for the plant.
- m) A weed and turf free zone, 3 feet in diameter, shall be maintained just around the tree. A 3 inch deep layer of Engineered Wood Fiber (EWF) Manufactured softwoods and /or hardwoods blunt or soft chopped ends, controlled size average 1"to 2" in length containing a maximum 15% fine pine needles to aid in knitting, non-toxic free of paint, chemicals, additives or metals or agency approved equal shall be placed around the tree or shrub; mulch shall be kept a minimum 4-6 inches from the trunk.
- n) Planting shall not commence until all construction work, grading, soil improvements, and irrigation except for tree irrigation laterals has been completed.

# 801-4.6 Plant Staking and Guying.

**801-4.6.1 Method** "A" **Tree Staking.** [Delete Subsection in total].

801-4.6.2 Method "B" Tree Staking.

[Replace entire Subsection with the following:].

801-4.6.2 Method "C" Tree Staking. The tree shall be staked with 2 inch diameter lodge pole pine, copper napthenate treated 10 feet long driven 36 inches into the ground. The stakes shall be 18 inches from each side of the tree trunk, and stakes and tree shall be in a plane parallel to the street centerline. Ties shall be made of 1 inch or wider by 32 inches long (min) 'gro-straight' rubber type. Two tie locations shall be used; one at 2 inches from the top of each stake and one at 36 inches above the ground. Ties shall be loops secured to the stake on both ends and shall be long enough to provide for 3 inches of slack to permit the tree trunk limited movement in any direction. Anchor ties to stakes at both sides with 4D galvanized roofing nails bent over back of post. Pre Drill all holes. Refer to City Std. Plan No. 714.

#### 801-4.8 Sod.

Sod shall be laid with longer seams perpendicular to the slope, and in a staggered pattern to minimize erosion. Sod panels shall be a minimum of 24" wide.

#### **801-4.10 Wood Mulch Installation**

Mulch installation shall consist of placing 2-1/2" thick layer 'ES-2 Mulch' material equal to or supplied by Agromin, (800) 247-6646 over designated planter areas. See plans for areas of installation. Submit sample prior to purchase and/or placement for approval.

#### 801-5 IRRIGATION SYSTEM INSTALLATION.

#### 801-5.1 General.

[Add the following:].

The Contractor shall furnish all necessary materials, labor, and equipment required to complete the work of installing the irrigation system in accordance with the Plans and Specifications.

Trenches through paved areas shall be resurfaced in accordance with 306-1.5.

After completing the irrigation system, the Contractor shall submit drawings showing the location of pull boxes, pipe, valves, tubing, wiring, controllers, and electrical services as constructed. The drawings submitted shall be noted as "Record Drawings" and shall be completed on copy-pressed Mylar's (4 mil. min.). The Contractor shall indicate all irrigation equipment locations by dimension. Each valve, mainline pipe, sleeve, meter, backflow preventer, controller wire, automatic controller and electrical service shall be located and dimensioned from two points of architectural permanence, e.g., curbs, walls, or buildings. The record drawings shall be prepared by a competent draftsman using reproducible Mylar originals supplied by the City. Final record drawings will be approved by the AGENCY Representative prior to preparing the irrigation controller charts and Mylar's. Copy-pressed Mylar's (4 mil. min.) shall be provided as final record drawings in 24" x 36" and 11" x 17" formats. Record drawings shall be of the complete construction plan set.

Contractor shall provide all labor, materials, and equipment necessary to furnish and install the irrigation system as shown on the plans and as specified herein, including but not limited to irrigation materials and related appurtenances, water meter assembly(ies), connections to water and electrical utilities, excavation and backfill of pipe, trenches, temporary and permanent trench resurfacing and grinding, record drawings, guarantees, permits and licenses, testing and inspections and clean-up operations.

Controller Charts: The Contractor shall prepare an irrigation controller chart indicating the Record Drawing serviced by that particular controller. All valves shall be numbered to match the actual field operation schedules. Only those areas controlled by that controller shall be shown. This chart shall be made from the irrigation system record drawings, entire or partial, showing buildings, walks, roads, parking, and walls. A photo static print of this plan, reduced as necessary, and legible in all details, shall be made to a size as directed by the AGENCY. Do not prepare controller charts until record drawings have been approved by the AGENCY's representative. Provide one chart for each automatic controller installed. Identify the area of coverage of each remote control valve, using a distinctly different pastel color, drawn over the entire area of coverage. Charts must be completed and approved prior to final review and acceptance of the irrigation system. This chart shall be approved by the AGENCY representative and shall be hermetically sealed in 20 mil. plastic. This shall then be secured to the inside of each automatic controller. Show controller designation on each chart.

[The following paragraphs shall be added after paragraph three] Contractor shall be responsible to notify the City prior to start of construction to coordinate

on-site inspections.

Due to the scale of drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of his work and plan his work accordingly, furnishing such fittings, etc., as may be required to meet such conditions.

The work shall be installed in such a manner as to avoid conflicts between planting and architectural features, etc.

All work called for in the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences, or discrepancies in area dimensions exist that might not have been considered in engineering. Such obstructions or differences should be brought to the attention of the City Representative. In the event this notification is not performed, the Irrigation Contractor shall assume full responsibility for any revisions necessary and shall perform such at his own expense.

[The fourth paragraph shall be deleted and replaced with the following paragraphs:]

The location of connection points shown is approximate. The Contractor shall contact the utility companies and coordinate the installation of the required electrical and water services. Following coordination with the utility companies, the Contractor shall make all necessary provisions to make the service connections called for on the plans at the places indicated or to the nearest acceptable point thereto as approved by the utility companies and the City Representative. Verification of the point of connections with the utility companies and the City Representative shall be obtained by the Contractor prior to the start of work.

All costs for making the service connections shall be paid for by the Contractor, with the exception of any utility company fees and permit fees which are reimbursable by the City, as per Section 7-3 "Permits" of the General Provisions.

[The following paragraph shall be added at the end of the subsection]

Temporary Repairs. The City reserves the right to make temporary repairs as necessary to keep the irrigation system in operating condition. The exercise of this right by the City shall not relieve the Contractor of his responsibilities under the terms of the guarantee as herein specified.

#### 801-5.2 Trench Excavation and Backfill.

[Replace the second paragraph with the following:]

Unless otherwise specified, the minimum depth of cover over pipelines and conduit shall be as follows:

- a) Electrical conduit –36 inches (36 inches under roadways).
- b) Waterlines continuously pressurized –24 inches (36 inches under roadways).
- c) Lateral sprinkler lines –18 inches.

[Replace the fourth paragraph with the following:]

Trenches and excavations shall be backfilled so that the specified thickness of topsoil is restored to the upper part of the trench. Trenches for pipe shall be cut to required grade lines, and

compacted to provide an accurate grade and uniform bearing for the full length of the line.

Where it is necessary to excavate adjacent to existing trees, the Contractor shall use all possible care to avoid injury to trees and tree roots. Excavation in areas where 2 inch and larger roots occur, shall be done by hand. All roots 2 inches and larger in diameter, except directly in the path of pipe or conduit, shall be tunneled under and shall be heavily wrapped with burlap, to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than 2 inches in diameter, any exposed roots shall be protected and if any are damaged, they shall be trimmed clean with a hand pruning saw only. The walls of the trench adjacent to the tree shall be closed within 24-hours and where this is not possible the side of the trench adjacent to the tree shall be kept shaded with burlap or canvas.

# Backfilling:

- 1. Backfill shall not be placed until the installed sprinkler irrigation system has been inspected and approved by the AGENCY's representative.
- 2. Backfill material shall be approved soil. Unsuitable material, including clods and rocks over 1 inch in size, shall be removed from the premises and disposed of legally at no cost to the AGENCY.
- 3. All backfilling shall be done carefully and shall be properly tamped. Sandy soil only shall be tamped and inundated with water to eliminate any voids.
- 4. Surplus earth remaining after backfilling shall be disposed of on the premises as directed by the AGENCY's representative.
- 5. Where excavating or "jacking" is required under asphalt pavement, sidewalks, roads, etc. care shall be taken in backfilling with sand, tamping, and inundating with water.
- 6. Sand backfill, where required shall be per detail(s) on plan.

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# 801-5.3 Irrigation Pipeline Installation.

# 801-5.3.1 General.

[Add the following:].

Changes in pipeline size shall be accomplished with reducer fittings.

The AGENCY reserves the right to make temporary repairs as necessary to keep the sprinkler system equipment in operating condition. The exercise of this right by the AGENCY shall not relieve the Contractor of his responsibilities under the terms of the guarantee as herein specified.

[The following sentences shall be added at the end of paragraph four:

A minimum of twelve (12) inches clearance shall be maintained between "recycled" irrigation pipelines and non-irrigation pipelines/conduits.

[The following paragraphs shall be added at the end of the subsection]

PVC Sleeves shall be required under areas where all hardscape materials shall be installed. Sleeving shall be done per detail on Project Plans (Minimum sleeve dimension shall be twice the diameter of pipe size.

#### 801-5.2.3 Plastic Pipeline.

[The following shall be added to the end of paragraph one]

PVC to metal connections shall only be accomplished by PVC male adapters screwed into metal fittings. Teflon tape shall be used on all threaded PVC to PVC, and on all threaded PVC to metal joints.

[The following paragraph shall be added following paragraph four]

Handling of PVC Pipe and Fittings. The Contractor is cautioned to exercise care in handling, loading, unloading, and storing of PVC pipe and fittings. All PVC pipe are to lie flat and not to be subjected to undue bending or concentrated external load at any point. Any section of pipe that has been dented or damaged will be discarded and, if installed, shall be replaced with new piping. Pipe and fittings shall not be stored in direct sunlight.

# **801-5.4 Installation of Valves, Valve Boxes, and Special Equipment.** [Add the following:].

Thrust Blocking of main irrigation lines shall be provided at all directional changes when PSI exceeds 65 PSI.

All isolation valves 2 inches or larger shall be supplied with service handles and supported with 1 foot square depth concrete footing below waterline.

[Paragraphs three, four, five, and six shall be deleted.]

# 801-5.5 Sprinkler Head Installation and Adjustment.

# 801-5.5.2 Location, Elevation, and Spacing.

[The third paragraph shall be amended to read as follows]

Sprinkler heads shall be installed 6 inches from the adjacent vertical elements projecting above wade such as walls, planter boxes, curbs, and fences in shrub areas. Sprinkler heads shall be installed 4 inches from adjacent vertical elements projecting above grade such as walkways, walls, planter boxes, curbs, and fences in turf areas.

#### 801-5.6 Flushing and Testing.

#### 801-5.6.1 General.

[The following paragraph shall preface the subsection]

Flushing of the lines shall 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 towards the end of the line, with only one open port flushing at anyone time.

Amend the last sentence of the first paragraph by adding "and approved in writing" by the Senior Landscape Planner at the end of the sentence.

[Add the following paragraph to the end of the subsection]

When the irrigation system is completed, a coverage test shall be performed by City Staff to determine if the water coverage for planting areas is complete, adequate, and avoids overspray onto walks, roadways, and buildings as much as possible. The Contractor shall furnish all materials and perform all work required to correct any inadequacies of coverage due to deviations from the Drawings, or where the system has been willfully installed as indicated on the Drawings when it is obviously inadequate, without bringing this to the attention of the City inspector. This test shall be accomplished before any ground cover is planted.

The Contractor shall request the presence of the City in writing at least forty-eight (48) hours in advance of testing. The Contractor shall flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walks, roadways, and buildings as much as possible.

# 801-5.6.2 Mainline and Lateral Pipeline Pressure Test.

Pressure test at the end of the first paragraph shall be amended to read: Mains 6 hrs at 150 PSI. Laterals 2 hours at 100 PSI.

# 801-6 MAINTENANCE AND PLANT ESTABLISHMENT.

[Replace the first paragraph with the following:]

The Contractor shall maintain all planted areas on a continuous basis as they are completed during the progress of the work and for an additional 365 days after AGENCY acceptance.

[Add the following:]

Maintenance includes the following:

- A. At the completion of each day's work and prior to the check inspection, the Contractor shall legally dispose of trash, refuse, debris, containers, etc., off the premises. All scars, ruts, or mars in the area cause by Contractor's work shall be repaired at Contractor's expense.
- B. After all work indicated on the drawings or herein specified has been completed, inspected and approved by the AGENCY, the Contractor shall maintain all planted areas by means of continuous watering and weeding, following mowing, edging and/or other operations necessary for their care and upkeep for a period of not less than 365 days. At the end of the maintenance period, all plant materials shall be in a healthy, growing condition.
- C. All planted areas shall be fertilized as follows: Apply 16-20-0 commercial fertilizer at 10lbs/1000sq ft on the 28<sup>th</sup>, 58<sup>th</sup>, 88<sup>th</sup>, 118<sup>th</sup>, 148<sup>th</sup>, 178<sup>th</sup>, 208<sup>th</sup>, 238<sup>th</sup>, 268<sup>th</sup>, 298<sup>th</sup>, 328<sup>th</sup>, 358<sup>th</sup> day.
- D. At the end of the maintenance period, lawn area will be cut to specified height and neatly trimmed and edged; all sprinklers and appurtenances, risers, valves, etc.) in operating condition; controller programmed according to sprinkler plan: "As-Built" sprinkler drawings completed in a legible manner; and total plant counts verified.
- E. All paved areas shall be kept continuously clear of mud, debris, and puddles
- F. All seeded turf and/or slope areas must be fully germinated displaying a vigorous, healthy cover of specified varieties with no "bare" areas.
- G. Hoses, maintenance equipment and materials shall be neatly stored when not in use in an area authorized by the AGENCY.

- H. Maintenance foreman on the job shall be competent English-speaking supervisor, experienced in landscape and maintenance and capable of discussing matters with the Landscape Architect on the site.
- I. Workmen shall present a neat appearance at all times and shall conduct all work operations and dealings with the public in a diplomatic and courteous manner. Workmen shall be fully clothed at all times in a dress suitable for the job.
- J. The Contractor shall be responsible for notifying the City Public Works Department 48 hours (two working days) in advance for the following inspections:
  - a) Pre job meeting on site
  - b) Inspect Irrigation sleeving
  - c) Inspect forming, pouring, and finishing of concrete
  - d) Inspect rough grade
  - e) Inspect removal of street and base material
  - f) Inspect all delivery receipts @ time of delivery prior to acceptance
  - g) Inspect trees, shrubs, and groundcovers @ delivery
  - h) Inspect soil preparation
  - i) Inspect trenching for irrigation and drainage
  - j) Inspect valves, backflow device, quick couplers, controller and head locations
  - k) Inspect irrigation coverage
  - 1) Inspect planting process
  - m) Inspect herbicide, fertilization or pre-emergent applications
  - n) Inspect tree staking and tying
  - o) Inspect final installation
  - p) Monthly maintenance walk
  - K. In the event that the Contractor requests inspection of the work and it is substantially incomplete, the Contractor maybe responsible for inspection costs.

[The following paragraph shall be added following paragraph six]

The Contractor shall be responsible for detecting diseases and pests (including rabbits, gophers, groundhogs, rodents) as soon as they are present and shall take immediate action to identify, control, and remove the disease or pest. Pest control programs of all mammals shall be done without extermination and as approved by the City's Authorized Representative. Plants shall be maintained in a disease and pest free condition. A licensed pest control operator shall be maintained to recommend and apply pesticide, herbicides, and fungicides. Contractor shall be responsible for removal of gophers and moles from site and repair any and all damage attributed to their presence. Damaged plant material due to vertebrate pests (rabbits, gophers, groundhogs, etc.) shall be replaced immediately by Contractor at no cost to City. Dead dying and damaged plant material shall be removed at no cost to the City.

Maintain all planting starting with the planting operations and continuing for 90 calendar days after all planting is complete and approved by the City in writing. The maintenance period will not commence until all planting has been approved in writing by the City.

Maintenance shall include, but not be limited to, all watering, irrigation repair, weeding, mowing, edging, cultivating, spraying, and pruning necessary to keep the plant materials in a healthy growing condition and to keep the planted areas neat and attractive throughout the maintenance period

The lump sum price paid for the maintenance period shall include all costs for water (from the new water meter installed only), watering, irrigation repair, weeding, mowing, edging, cultivating, spraying, and pruning necessary to keep the plant materials in a healthy growing condition and to keep the plant areas neat and attractive throughout the maintenance period. Upon the 60th day or thereafter, dirt berms around trees and shrubs shall be leveled

Provide all equipment and means for proper application of water to those planted areas not equipped with an irrigation system.

Protect all planted areas against damage, including erosion and trespassing, by providing and maintaining proper safeguards.

During the maintenance period, all plants and planted areas shall be kept properly watered and weed-free at all times. Irrigation schedule shall comply with AB1881 and Certified Irrigation Auditor's parameters.

In order to expedite the plant establishment work, the Contractor shall maintain a sufficient number of men and adequate equipment to perform the work herein specified from the time any planting is done until the end of the final maintenance period.

The Contractor will be relieved from maintenance work when the plant establishment and maintenance work has been completed to the satisfaction of the City.

Damage to planting areas shall be replaced immediately when seen by Contractor. Damage observed by the City shall be replaced within 24 hours of notification to the Contractor.

Depressions caused by vehicles, bicycles, or foot traffic, are to be filled and leveled. Replant damaged areas.

Apply a pelletized fertilizer blend of 15-15-15 at the beginning and at every 30-day maintenance interval at the rate 350 lbs. per acre until the designated end of the maintenance period. A 90-day maintenance program shall consist of three fertilizer periods.

Apply 25 lbs Gro-Power Plus per 1,000 square feet at 25th and 55th day of 90 day maintenance period.

Contractor shall be responsible for removal of rodents, slugs, snails, and cutworms from site as required and repair damage as above.

All paved areas will be broom cleaned and/or washed and maintained in a neat and clean condition at all times, as directed by the City. AQMD and WQMP practices shall be observed. Air blowers shall not be allowed.

Replacements. At the end of the maintenance period, all plant material shall be in a healthy growing condition.

During the maintenance period, should the appearance of any plant indicate weakness and probability of dying, immediately replace that plant with a new and healthy plant of the same type and size without additional cost to the City.

All trees shall be guaranteed by the Contractor to live and grow in an acceptable upright position for a period of one year after completion and final acceptance by the City.

The Contractor, within ten (10) days of notification by the City, shall remove and replace all guaranteed plant materials which for any reason fail to meet the requirements of the guarantee. Replacement shall be made with plant materials as indicated or specified for the original planting,

and all such replacement materials shall be guaranteed as specified for the original guaranteed materials.

Clean-Up. Upon completion of the work in this section, the Contractor shall clean-up and remove from the area all unused materials and debris resulting from the performance of the work as directed by the City.

# 801.6.2 Charts, Manuals, and Drawings

[Subsection is hereby added to subsection 801-6 of the Standard Specifications as follows]

# 801-6.2.1 As-Built Drawings

Contractor shall provide City Representative with Landscape Architect signed project construction document plans, reflecting all "as-built" conditions for all project elements with two (2) sets of edge bound plots at the completion of the project at no additional cost to the City.

Contractor shall provide PDF set of electronic files, delivered to the City's Senior Landscape Planner for permanent recordkeeping purposes.

Contractor shall dimension from two (2) permanent points of reference, building corners, sidewalk or road intersections, etc., the location of the following items;

- 1. Gate valves
- 2. Sprinkler control valves
- 3. Routing of control wiring
- 4. Rain gauge
- 5. Quick coupling valves
- 6. Point of connection components (meters, backflow preventers, etc.)
- 7. Other related equipment as directed by the City
- 8. Significant changes in routing of lateral lines from those indicated on the plans

Delivery. On or before the date of the final inspection, the Contractor shall deliver the corrected and completed design documents to the City. Delivery will not relieve the Contractor of the responsibility of furnishing required information that maybe omitted from the prints.

#### 801-6.2.2 Controller Charts

As-built drawings shall be approved by the City before the Contractor prepares the controller charts.

Provide two (2) controller charts for each controller supplied. In the case that no controller is provided, the Contractor shall prepare a new controller chart utilizing any existing system that is being protected, as well as any new systems on line, for the existing controller(s)

The chart shall show the area controlled by the automatic controller and shall be the maximum size which the controller door will allow.

The chart is to be a reduced drawing of the actual "as-built" system. However, in the event the controlled sequence is not legible when the drawing is reduced, it shall be enlarged to a size that will be readable when reduced.

The chart shall be a blackline or blueline print and a different color shall be used to indicate the area of coverage for each station

When completed and approved, the Contractor shall hermetically seal the chart between two pieces of plastic, each piece being a minimum of 10 mils thick.

These charts shall be completed and approved prior to final inspection of the irrigation system.

# 801-6.2.3 Manuals of all Equipment and Certificate of Substantial Completion

Operation and Maintenance Manuals. Prepare and deliver to the City within ten calendar days after substantial completion of the project, three hard cover binders with three rings containing the following information:

- 1. Index sheet stating Contractor's and subcontractor's license numbers, address, and telephone number and list of equipment with name and address of al local supplier's and manufacturer's representatives.
- 2. Catalog and specification 'cut' sheets materials for all hardscape and softscape and equipment installed under this contract.
- 3. Guarantee statement. The guarantee for the sprinkler irrigation system shall be made in accordance with the enclosed form. The Contractor shall file a complete copy of all substantial completion forms and irrigation guarantee prior to the acceptance of project by the City.

The guarantee shall be included in the operations and maintenance manual of all equipment throughout the park.

The guarantee shall be typed onto the Contractor's letterhead.

4. Complete operating and maintenance instructions on all major equipment.

In addition to the above mentioned maintenance manuals, provide the City's maintenance personnel with instructions for major equipment and show evidence in writing to the City at the conclusion of the project that this service has been rendered.

# **801-6.3 EQUIPMENT**

# **801-6.3.1** Loose Equipment to be Furnished.

[The following subsection shall be added] (confirm each item with the City Inspector prior to actual turn-over):

The Contractor shall supply as a part of this contract the following tools:

- 1. Two (2) sets of special tools required for removing, disassembling and adjusting each type of sprinkler and valve supplied on this project.
- 2. Two (2) five foot valve keys for operation of gate valves.
- 3. One (1) quick coupler key and matching hose swivel for every five (5) of each type of quick coupling valve installed.
- 4. Six (6) spray nozzles of each type specified on the legend.
- 5. One case of spray bodies of each manufacturer specified on the legend.
- 6. One case of rotors of each manufacturer specified on the legend.
- 7. Two (2) gate valves line sized as specified on the legend.
- 8. Two (2) keys each for controller and controller enclosure doors.
  - a. One remote for each controller

The above-mentioned equipment shall be turned over to the City at the conclusion of the project. Before final inspection can occur, evidence that the City has received material must be shown to the City Representative.

#### **801-8 PAYMENT.**

[Replace the entire subsection with the following:]

The lump sum or unit prices shown in the Bid shall include full compensation to complete and maintain the landscape and irrigation work shown on the Plans or in the Specifications.

Payment for the furnishing and installation of the root barrier, weed control barrier, and the removal of soil to a depth of 36" below adjacent finished grade within six (6) feet of each side of the affected tree trunk for the full width of the planter shall be included in the price bid for the corresponding tree. Payment for the water system connection, record drawings, and controller charts shall be included in the price bid for the Mainline, Laterals and Heads. Payment for backflow certification shall be included in the price bid for the 2" backflow w/ cage. Unless otherwise specified, payment for all plant establishment and landscape maintenance work,

including the additional 1-year tree/palm guarantee period, shall be included in the lump sum price bid for Landscape Installation, and no additional compensation will be allowed therefor.

Payment for all items of the Bid Schedule whether lump sum or Unit Price shall include all compensation to be received by the CONTRACTOR for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidental appurtenant to the items of work being described, as necessary to complete the various items of the WORK all in accordance with the requirements of the Contract Documents, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).

No separate payment will be made for any item that is not specifically set forth in the Bid Schedule, and all costs shall be included in the prices named in the Bid Schedule for the various appurtenant items of work and no additional compensation will be allowed therefore.

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 2021 SSPWC, Section 7-1 "Measurement of Quantities for Unit Price Work" or as indicated in these Specifications. Payment for Lump Sum work shall be paid for in accordance with the Approved Schedule of Values per Section 00432, at the price indicated in the Bid, and in accordance with 2021 SSPWC, Section 7-2 "Lump Sum Work".

#### **801-9 GUARANTEE.**

[Add the entire subsection:]

The entire irrigation control system shall be guaranteed against defects in materials and workmanship for a period of 1 year from the date of acceptance. Contractor shall furnish a faithful performance bond in the amount specified in the Contract Documents to cover the guarantee. If, within one year from the date of acceptance, settlement occurs and adjustments in pipes, valves and sprinkler heads, sod or paving is necessary to bring the system, sod or paving to the proper level of the permanent grades, the Contractor, as part of the work under his contract, shall make all adjustments without extra cost to the AGENCY, including the complete restoration of all damaged planting, paving, or other improvements of any kind. Should any operational difficulties in connection with the sprinkler system develop within the specified guarantee period which in the opinion of the AGENCY may be due to inferior material and/or workmanship, said difficulties shall be immediately corrected by the Contractor to the satisfaction of the AGENCY at no additional cost to the AGENCY including any and all other damage caused by such defects. Guarantees include the following:

- A. The Contractor, in protecting his own interests, is obligated to periodically check work areas during his guarantee period to insure proper maintenance procedures are being implemented.
- B. In case of negligent or improper maintenance, the Contractor shall state in writing to the AGENCY his observations and recommendations. Any claims not in writing will not be considered.

- C. All cutting, sod, and container plants up to and including 15 gallon size shall be guaranteed by the Contractor as to growth and health for a period of ninety (90) days after completion of maintenance period and final acceptance.
- D. Boxed and field-grown trees shall be guaranteed by the Contractor to "live and grow" in an "Acceptable, upright position" for a period of one (1) year after completion of the specified maintenance period and/or final acceptance. Definition of "live and grow" and "Acceptable, upright position" shall mean that the tree must, during the guarantee period, sustain a healthy, vigorous appearance. It shall not defoliate more than 30% nor shall 30% of the foliage be dried and unhealthy in appearance. If the tree, during the guarantee period does not sustain this specified appearance, it shall be removed and replaced by a tree equal to the original specification. Any damage to contiguous planting, structure, lighting or sprinklers during replacement operations shall be replaced and/or repaired at the Contractor's expense.
- E. The Contractor shall, within fifteen (15) days of written notification by AGENCY, remove and replace all guaranteed plant materials which for any reason fail to meet the requirements of the guarantee. Replacement shall be made with plan materials originally specified and shall meet original guarantees.