

**DAISY – MYRTLE BICYCLE BOULEVARDS
CONTRACT DOCUMENTS
TABLE OF CONTENTS**

DIVISION A – NOTICE INVITING BIDS

Notice Inviting Bids

DIVISION B – INSTRUCTION TO BIDDERS

Instructions to Bidders

DIVISION C – BID DOCUMENTS

Bid Form

List of Subcontractors

Bidders Bond

Non-collusion Declaration

Workers Compensation Certification

Certification of Site Examination

Information To Comply With Labor Code Section 2810

Debarment, Suspension, Ineligibility Certification

HUD Section 3 Best Efforts Submittal Package

Certification of Compliance With The Equal Benefits Ordinance

Equal Benefits Ordinance Disclosure Form

Iran Contracting Act of 2010 Compliance Affidavit

DIVISION D – POST-BID DOCUMENTS

Specimen Contract

Bond for Faithful Performance

Labor and Materials Bond

Insurance Requirements/Sample Forms/Endorsement forms

Bid Protest Procedures

DIVISION E – FEDERAL, STATE AND LOCAL REQUIREMENTS

Federal: Not Used

State: Not Used

Local: Developer/Contractor HUD Section 3 Project Compliance Requirements

Local: Equal Benefits Ordinance Statement

Local: City of Long Beach Standard Plans – Available at

<http://www.longbeach.gov/pw/resources/engineering/standard-plans/>

DIVISION F – PERMITS AND ATTACHMENTS

Not Used

DIVISION G – BMP, BEST MANAGEMENT PRACTICES

Note: Divisions H and I include only sections of the Standard Specifications that have been modified. See the Standard Specifications for sections not included here.

DAISY – MYRTLE BICYCLE BOULEVARDS
DIVISION H – GENERAL REQUIREMENTS

Standard Specifications	H-1
-------------------------------	-----

PART 1 – GENERAL PROVISIONS

Section 1 – Terms, Definitions, Abbreviations, Units of Measure, and Symbols	H-2
1-2 Definitions	H-2
1-3 Abbreviations	H-3
1-4 Units of Measure	H-5
Section 2 – Scope and Control of the Work	H-5
2-3 Subcontracts	H-5
2-4 Contract Bonds	H-5
2-5 Plans and Specifications	H-5
2-5.3 Submittals	H-5
2-9 Surveying	H-7
2-10 Authority of Board and Engineer	H-8
Section 3 – Changes in Work	H-8
3-2 Changes Initiated by the Agency	H-8
3-3 Extra Work	H-9
Section 4 – Control of Materials	H-10
4-1 Materials and Workmanship	H-10
Section 5 – Utilities	H-10
5-1 Location	H-10
5-3 Removals	H-10
5-4 Relocation	H-10
5-7 Unknown Facilities	H-11
5-8 Facilities Requiring Special Precautions	H-11
Section 6 – Prosecution, Progress, and Acceptance of the Work	H-11
6-1 Construction Schedule	H-11
6-1.3 Preconstruction Conference	H-16
6-1.4 Notices	H-16
6-7 Time of Completion	H-18
6-8 Completion, Acceptance, and Warranty	H-18
6-9 Liquidated Damages	H-19
6-11 Claims Resolution	H-19
Section 7 – Responsibilities of the Contractor	H-23
7-1 The Contractor's Equipment and Facilities	H-23
7-2 Labor	H-23
7-3 Liability and Worker's Compensation Insurance	H-25
7-5 Permits	H-28
7-8 Work Site Maintenance	H-28
7-9 Protection and Restoration of Existing Improvements	H-30
7-10 Public Convenience and Safety	H-31
7-10.1 Traffic and Access	H-31
7-15 Taxes	H-34
7-16 Indemnification	H-34
Section 8 – Facilities for Agency Personnel	H-36
Section 9 – Measurement and Payment	H-36
9-3 Payment	H-37

DAISY – MYRTLE BICYCLE BOULEVARDS

9-4 Mobilization	H-37
------------------------	------

DIVISION I – TECHNICAL REQUIREMENTS

PART 2 – CONSTRUCTION MATERIALS

Section 200 – Rock Materials	I-1
200-2 Crushed Miscellaneous Base	I-1
Section 201 – Concrete, Mortar and Related Materials	I-2
201-1 Portland Cement Concrete	I-2
201-2 Reinforcement for Concrete	I-3
201-10 Curb Ramp Detectable Warning Surface	I-4
202 Masonry Materials	I-5
202-1 Brick	I-5
Section 203 – Bituminous Materials	I-5
Section 212 – Landscape and Irrigation Materials	I-6
12-1 Landscape Materials	I-6
12-2 Irrigation System Materials	I-9
212-3 Electrical Materials	I-10

PART 3 – CONSTRUCTION METHODS

Section 300 – Earthwork	I-11
300-1 Clearing and Grubbing	I-11
300-1.2 Preservation of Property	I-13
300-1.3 Removal and Disposal of Materials	I-13
300-2 Unclassified Excavation	I-13
Section 301 – Treated Soil, Subgrade Preparation and Placement of Base Materials	I-15
301-1 Subgrade Preparation	I-15
301-2 Untreated Base	I-17
Section 302 – Roadway Surfacing	I-18
302-1 Cold Milling of Existing Pavement	I-18
302-5 Asphalt Concrete Pavement	I-19
Section 303 – Concrete and Masonry Construction	I-21
303-5 Concrete Curbs, Walks, Gutters, Cross Gutters, Alley Intersections, Access Ramps, and Driveways	I-21
303-5.1.6 Mountable Curb	I-22
303-5 Stamped Concrete	I-22
Section 307 – Street Lighting and Traffic Signals	I-24
307-2 Conduits, Wiring and Electrical	I-27
307-3 Traffic Signal and Lighting Equipment	I-31
Section 308 – Landscaping and Irrigation Installation	I-34
308-2 Earthwork and Topsoil Placement	I-34
308-4 Planting	I-35
308-5 Irrigation System Installation	I-38
308-6 Maintenance and Plant Establishment	I-41
308-7 Guarantee	I-41
308-8 Payment	I-42
Section 309 – Monuments	I-42

DAISY – MYRTLE BICYCLE BOULEVARDS

309-2 Materials	I-42
309-3 Construction.....	I-42
309-4 Payment.....	I-42
Section 314 – Traffic Striping, Curb and Pavement Markings, and Pavement Markers	I-42
314-1 General	I-42
314-2 Preparation of Existing Surfaces.....	I-44
314-4 Application of Traffic Striping and Curb and Pavement Markings.....	I-44
314-6 Payment.....	I-44
Section 315 – Traffic Signs.....	I-45
315-1 General	I-45
315-1 Wayfinding Signage.....	I-46

DIVISION A
NOTICE INVITING BIDS

DIVISION A
NOTICE INVITING BIDS
FOR
DAISY- MYRTLE BICYCLE BOULEVARDS

RECEIPT OF BIDS: The City will receive sealed bids at the office of the City Clerk, on behalf of the City, Owner of the Work, located at the Lobby level of City Hall, 333 West Ocean Boulevard, Long Beach, California 90802, until 10:00 A.M. on June 28, 2017, for R-7080, Daisy-Myrtle Bicycle Boulevards. At that time, or as soon thereafter as practicable, at City Hall, the City Engineer or designee will publicly open and read all bids received.

MANDATORY PRE-BID MEETING: The City will conduct a mandatory pre-bid meeting to review HUD SECTION 3 requirements or other specific programs related to the project, June 14th, 2017 at 10:a.m. Prospective bidders must attend this meeting.

HUD SECTION 3: Bidders are advised that this Work is subject to requirements of Section 3 of the Housing and Urban Development (HUD) Act of 1968 [24 CFR Part 135]. See Instructions to Bidders for further information.

DESCRIPTION OF WORK: The Work to be done consists primarily of constructing a (North / South) 9.5-mile bicycle boulevard on the western side of the City of Long Beach along the roadways of; Daisy, Magnolia, Linden, Atlantic and Myrtle Avenues with southern terminus at Daisy Avenue and Third Street and northern terminus at Myrtle Avenue and 70th Street.

The City of Long Beach would like to construct various bike lanes / shared bike routes, (6) traffic circles, (3) ovals, (4) roundabouts with curb extensions and bio swales, (4) median refuge islands, (13) various irrigation systems for the traffic circles, ovals, roundabouts and the median islands, (1) traffic signal, (1) flashing pedestrian activated beacon, (1) traffic signal modification, miscellaneous sidewalk, curb and gutter, (5) bicycle detection loops, custom signage and pavement markings throughout the corridor.

CONTRACTOR'S LICENSE: The Contractor shall possess a valid California Class A General Engineering Contractor's license at the time of contract award. The City may deem any Bidder who fails to possess the required license to be non-responsive.

PLANS AND SPECIFICATIONS: Plans and specifications are posted on the City's website at the URL <http://www.longbeach.gov/finance/business-info/purchasing-division/purchasing-division/> and available for free download, however, you must be registered (registration is free and may be accomplished at the same URL) and logged in to view or download the documents. Alternatively, interested parties may obtain copies of the Plans and Specifications on the Wednesday following publication of this notice at the Engineering Records Section of the office of the City Engineer, telephone (562) 570-6784, 10th Floor, City Hall, 333 West Ocean Boulevard, Long Beach,

California 90802, by paying \$250.00 for each set at the time they obtain the set. Interested parties may request the Plans and Specifications by mail for an additional mailing cost of \$25.00 for each set. All requests must be accompanied by a check or money order payable to the City of Long Beach in the full amount for the number of sets requested. The cost for mailing will be waived if the parties provide their express mail account number for mailing (such as FedEx, UPS or other nationally recognized carrier). Interested parties shall mail the request and payment or account information to:

Department of Public Works
Engineering Records Section
10th Floor, City Hall
333 West Ocean Boulevard
Long Beach, CA 90802

The Plans and Specifications cannot be returned to the City Engineer for refund. These prices include sales tax and postage if applicable.

BID SECURITY: With their Bid, Bidders must submit a certified check or bank draft payable to the City Auditor of the City of Long Beach, drawn on a solvent bank in the United States of America, or a satisfactory bond in an amount not less than 10 percent of the Bid. The bid security shall serve as a guarantee that the Bidder, if awarded the Contract, will execute and deliver to the City Engineer, no later than 15 calendar days after the date shown on the "Notice of Award," the following items:

1. The Contract for doing the work, and
2. A corporate surety bond in favor of the City of Long Beach in an amount not less than 100 percent of the Contract price for the faithful performance of the Contract, and
3. A corporate surety bond in an amount not less than 100 percent of the Contract price for the payment of all labor and material claims, and
4. Evidence of required insurance coverage.

Failure to submit the items noted above when specified may result in the City, in its sole discretion, declaring the Bid Security forfeited and depositing same into the City Treasury.

The City will retain the Bid security accompanying all Bids until it awards the Contract. The City will retain the Bid security submitted with the Bid of the Bidder to whom an award of Contract is made, and the Bid security of the next higher Bid, until the Contract between the Bidder to whom award of the Contract is made and the City has been executed.

RETENTION: In the event the contract to be awarded hereunder, including Specifications and other documents incorporated therein by reference, provides for the withholding of monies by the City to ensure performance of such contract, the Contractor may: a) deposit with the City as a substitute for said monies, securities listed in Section 16430 of the California Government Code or bank or savings and loan certificates of deposit, or both, equivalent to the amount withheld; or b), request payment of retentions earned directly to the escrow agent at the expense of the

End of Division A – Notice Inviting Bids

DIVISION B
INSTRUCTIONS TO BIDDERS

DIVISION B

INSTRUCTIONS TO BIDDERS

Please read these instructions carefully. If you do not submit a complete Bid, the City may determine that your Bid is non-responsive, in which case the City will reject your Bid.

HUD SECTION 3 REQUIREMENTS: Bidders are advised that Work awarded under this Bid is subject to Section 3 of the Housing and Urban Development (HUD) Act of 1968 [24 CFR Part 135]. The Section 3 program requires, to the greatest extent possible, the Contractor to provide job training, employment, and subcontract opportunities for low-income residents in connection with the Work. Please note that Section 3 requirements will be discussed as part of the Mandatory Pre-bid Conference (See Notice Inviting Bids for details). It is a policy of the City of Long Beach that on this project, best efforts are utilized to meet Section 3 requirements. The Contractor shall cooperate with the City and its representatives regarding compliance with the City in complying with Section 3. The City will provide assistance to the Contractor in complying with the program. If you have any questions regarding Section 3, please contact the Business Relations Bureau at (562) 570-6200. See Divisions C and E for additional information regarding Section 3 requirements, including certain documents that are required to be submitted with the Bid.

EXAMINATION OF SITE AND WORK: Each Bidder must fully inform itself of the conditions relating to the Work and the employment of labor for the Work. A Contractor's failure to do so will not relieve it of the obligation to furnish all material and labor necessary to complete the Work.

TIME FOR COMPLETION: The Work must be completed within 120 working days after the commencement date stated in the Notice to Proceed.

CONTACT: Before the Bid opening, prospective Bidders shall direct any communications regarding this Work to:

City of Long Beach, Department of Public Works
Office of the City Engineer, Bureau of Engineering
9th Floor, City Hall
333 W. Ocean Boulevard
Long Beach, CA 90802
Attention: Steve Tweed
E-mail: steve.tweed@longbeach.gov

Communications may be written or oral, but the City is not bound by any oral interpretation of the Contract Documents made by any City employee, nor does the City guarantee the accurate transcription of oral questions.

PROPRIETARY INFORMATION: Responses to the Notice Inviting Bids become the exclusive property of the City of Long Beach. All Bids submitted in response to the Notice Inviting Bids are a matter of public record and shall be regarded as public records. Exceptions will be those elements in each Bid that are defined by the Bidder

as business or trade secrets and are marked as "Trade Secrets," "Confidential," or "Proprietary."

The City shall not be liable or responsible in any way for disclosure of any records not marked as "Trade Secrets," "Confidential," or "Proprietary." The City shall not be liable or responsible in any way for disclosure of any records so marked if disclosure is deemed to be required by law or by a court order.

BIDS SHALL REMAIN OPEN: The Bidder shall guarantee the Total Bid Price for 180 working days after the Bid opening.

INTERPRETATION AND MISUNDERSTANDINGS OF PLANS AND DOCUMENTS: Bidders may submit to the Engineer written requests for interpretation or correction of the Plans, Specifications or other Contract Documents. Bidders shall not make such requests later than 10 working days prior to the date of Bid opening. Bidders submitting such requests are responsible for their timely delivery. The Engineer will interpret or correct the Contract Documents only by a written Addendum, and such Addenda will be posted to the web address noted in Division A. The City is not bound by any oral interpretation of the Contract Documents made by any City employee.

If Bidder fails to raise any issue regarding such interpretation or correction or if the Engineer fails to respond to a request, Bidder will be deemed to have accepted all risks associated with that issue. Bidder specifically waives the right to request a Change Order, equitable adjustment, or to request additional time, or to seek recovery in quantum meruit in conjunction with any such issue. Bidder further waives the right to assert arguments of estoppel or implied or express warranty of design with regard to any such issue.

ITEM EQUIVALENCY: Any Bidder desiring to bid an "approved equal" item shall submit a request to do so to the Engineer in writing no later than 10 working days prior to the date of the Bid opening. The request shall include all data necessary to substantiate that the item is equal. The Engineer will notify the Bidder, in writing, of approval or disapproval of the proposed item no later than 3 working days prior to the date of the Bid opening. Submit written approvals with your Bid.

EQUAL EMPLOYMENT OPPORTUNITY: The City of Long Beach is an equal opportunity employer and requires all Bidders to comply with policies and regulations concerning equal employment opportunity.

IRAN CONTRACTING ACT: In accordance with California Public Contracting Code Section 2200-2208, all bidders submitting proposals for, entering into, or renewing contracts with the City and estimated at \$1,000,000 or more are required to complete, sign and submit the "Iran Contracting Act of 2010 Compliance Affidavit" contained in Division C.

TAXES: Bidders shall not mention Sales Tax, Use Tax, or any other tax in their Bids. All Bid amounts will be deemed to include such taxes.

BID PREPARATION: Bidders shall submit their Bids in writing on the form provided in the Bid Package or by written Addendum. The City will deem any bid using a different

form to be non-responsive. Bidders shall state all information in the Bid clearly and legibly, in the manner indicated.

Bidders shall complete all items of the Bid. Bidders shall authenticate erasures, interlineations, or other corrections by affixing in the margin immediately adjacent to them the initials of the person signing the Bid. If the unit price for an item of work and the extended total amount stated by a Bidder for that item do not agree, the City will deem the unit price alone as representing the Bidder's intention, and will correct the total amount of the item and the Bid accordingly. If the Bidder fails to enter a unit price and enters only an item total, then the City will divide the item total by the estimated quantity to arrive at a unit price, and the Bidder shall be bound by that unit price. If the unit price is less than one cent, Bidders shall include the proper number of zeros.

Contractors shall provide greater detail of lump sum items making up the Contract Price as indicated in the Special Provisions. Bidders shall not modify the Bid in any way. The City will not consider substitutions except as described in "Item Equivalency".

Bidders shall provide a Bid for the base Bid and, as directed by instructions on the Bid Document, a separate Bid for each of the alternates. The Bid form will state whether or not it is mandatory that Bidders bid on the alternates.

Bidders shall place the sum of all items in the "ITEM TOTAL" column, at the caption "TOTAL AMOUNT BID" unless otherwise directed by instructions on the Bid Document. "The TOTAL AMOUNT BID" is informational only and may be used by the City for comparison in determining the apparent low Bid at the time of Bid opening. The sum of the mathematically correct extended totals for each item under the ITEM TOTAL column shall be deemed the Bidder's intended Bid. Any errors shall, at the option of the City, constitute grounds for the City's rejection of the Bid.

The City will not consider oral, telephonic, fax, or electronic Bids.

Bidders shall sign the Bid properly, in longhand.

The City will not consider any Bid that does not meet these requirements.

LISTING SUBCONTRACTORS: Submit the list of subcontractors on this Project that is required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100, et. seq.).

ADDENDA ACKNOWLEDGEMENT: All Addenda issued before the time Bids are due shall form a part of the Contract Documents. It is the Bidders' responsibility to determine what Addenda are issued. Bidders may do so by accessing the website shown in Division A. The City may deem any Bid that fails to acknowledge all Addenda to be non-responsive. Bidders must acknowledge the Addenda in writing on the form "Addenda Acknowledgement / Signature" in Division C.

BID SECURITY: Bidders shall include with their Bids the security shown in the Notice Inviting Bids. The City will reject any Bid not accompanied by such Bid security.

DELIVERY OF BID: Bidders shall deliver the sealed Bid no later than the time shown in the "Notice Inviting Bids." Bidders shall deliver their Sealed Bid in the envelope provided with the Plans and Specifications, or any envelope capable of being sealed,

marked to indicate the Bidder's name, title of the Plans & Specifications, Plans & Specifications number, and the date on which the Sealed Bid is to be opened.

Sealed Bids may be mailed or may be delivered by messenger. However, it is the Bidder's responsibility to ensure delivery of the Bid into the hands of the City's designated official before the time set for the Bid opening in the Notice Inviting Bids. The City's clock is the official time for Bid opening.

WITHDRAWAL OF BIDS: Bidders may withdraw their Bids by signed request. Bidders must deliver their requests to the City's designated official before the time set for the Bid opening in the Notice Inviting Bids. Bidders may not withdraw their Bids after that time without forfeiture of the Bid security. Withdrawal of the Bid will not prejudice any Bidder's right to submit a new Bid, if there is time to do so.

LATE BIDS: The City will reject any Bid received after the time set for the Bid opening regardless of whether or not the Bids are opened exactly at the time set in the Notice Inviting Bids.

TELEPHONES: The City does not provide telephones for use by Bidders.

BID ALTERNATES: Please see the Bid form.

BID OPENING: All the Bids read aloud by the City will be subject to further evaluation with respect to:

- The responsiveness of the Bid
- Determination that Bidder is responsible

AWARD OF CONTRACT AND OWNER'S RIGHTS RESERVED: If the City awards the Contract, it will award the Contract to the lowest responsible Bidder as determined solely by the City. The City Engineer reserves the right to reject any or all Bids, and, to the extent not prohibited by law, to waive any minor irregularity or informality in any Bid that does not give the Bidder a competitive advantage over other Bidders and to take the Bids under advisement for the Bid guarantee period shown above, as may be necessary in the best interests of the City.

End of Division B - Instructions to Bidders

DIVISION C
BID DOCUMENTS

BIDDER'S NAME: _____

**BID TO THE CITY OF LONG BEACH
DAISY- MYRTLE BICYCLE BOULEVARDS PROJECT**

In accordance with the Notice Inviting Bids for this Work in the City of Long Beach, California, to be opened on June 28, 2017 at 10:00 a.m., we offer to furnish all necessary labor, tools, materials, appliances and equipment for and perform all Work mentioned in the Notice Inviting Bids, in full compliance with Plans & Specifications No. R-7080 at the prices listed below.

We certify that we have examined the site and that the Bid is complete. By signing the Bid, we certify that the Contractor will not submit a claim based on failure to examine the site thoroughly.

BASE BID Section A (Daisy-Myrtle) (Items 1 – 57)

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
1	Mobilization & Demobilization	1	LS		
2	Clear & Grub	1	LS		
3	Sawcut and Remove Existing AC Pavement to Existing Soil Base	54,000	SF		
4	Remove Tree and/or Planter	8	Ea		
5	Remove Existing PCC Curb Only	1,400	LF		
6	Remove Existing PCC Curb and Gutter	2,000	LF		
7	Remove Existing Sidewalk	6,200	SF		
8	Remove Existing Driveway	2,500	SF		
9	Adjust Manhole Frame and Cover to Grade	13	Ea		
10	Adjust Water Valve and Cover or Meter Box and Cover to Grade	26	Ea		
11	Adjust Gas Valve to Grade	1	Ea		
12	Adjust Utility to Grade	5	Ea		
13	Install Full Depth AC to Match Existing Finished Surface	1,600	Ton		

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
14	Overlay 1 1/2-2" AC Pavement on Existing Surface or Leveling Course as Needed, within Project Limits Shown on Plan	3,500	Ton		
15	Install 4" PCC Sidewalk per SPPWC Std Plan No. 113-2 over 6" CMB	10,600	SF		
16	Install 6" PCC Curb and Gutter per SPPWC Std Plan No. 120-2, Type A2-6 (150), over 6" CMB	3,000	LF		
17	Install 6" PCC Curb per SPPWC Std Plan No. 120-2, Type A1-6 (150) over 6" CMB	6,500	LF		
18	Install PCC Mountable Curb Over 6" CMB, per Mountable Curb Detail on Sheet 3.	1,850	LF		
19	Install 6" Stamped Concrete with #4 Bar 24" O.C. Over 6" CMB	6,350	SF		
20	Install 6" Stamped Concrete over 6" CMB (Median)	7,000	SF		
21	Install ADA Compliant Pedestrian/Wheelchair Ramp Over 3" CMB Per Pedestrian Crosswalk Ramp Detail on Sheet 3	3,200	SF		
22	Construct PCC Curb Ramp Per COLB Std Plan No. 122, Type as Noted	1,000	SF		
23	Install ADA Compliant Detectable Warning (Truncated Dome)	1,700	SF		
24	Construct Bioswale	3,600	Ton		
25	Install Curb Cut for Bioswale	33	Ea		
26	Construct Detention Basin	550	Ton		
27	Install Detention Basin Extension Inlet	22	Ea		

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
28	Rebuild Driveway per Modified Driveway Detail 2 on Sheet 3, per SPPWC Std Plan No. 130.	900	SF		
29	Rebuild Driveway per COLB Std Plan No. 105, Type as Noted.	900	SF		
30	Install 4" PVC Sleeve for Irrigation. See Landscape Plans for Details.	150	LF		
31	Remove and Reconstruct Catch Basin per Caltrans Std Plan D74B, Type GO	1	Ea		
32	Unclassified Excavation	1,200	CY		
33	Install Crushed Miscellaneous Base (CMB)	1,750	Ton		
34	Reconstruct Catch Basin per Detail 9.	1	Ea		
35	Reconstruct Spandrel per SPPWC Std Plan No. 122.	100	SF		
36	Relocate Existing 3" Diameter Area Drain as Shown on Plan.	2	Ea		
37	Remove and Salvage Street Light Pole Including Foundation.	9	Ea		
38	Bike Detector Modification at Daisy Ave and 6th Street Intersection	1	LS		
39	Bike Detector Modification at Daisy Ave and 7th Street Intersection	1	LS		
40	Bike Detector Modification at Magnolia Avenue and Anaheim Street Intersection	1	LS		
41	Bike Detector Modification at Long Beach Boulevard and Bixby Road Intersection	1	LS		
42	Bike Detector Modification at Atlantic Avenue and 52nd Street Intersection	1	LS		

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE (IN FIGURES)	ITEM TOTAL (IN FIGURES)
43	Traffic Signal Modification at Myrtle Avenue and Artesia Boulevard Intersection	1	LS		
44	Warning Beacon at Linden Avenue and San Antonio Drive Intersection	1	LS		
45	Install Traffic Signal at Daisy Avenue and Willow Street Intersection	1	LS		
46	Remove Existing Pull Box	5	Ea		
47	Adjust Pull Box to Grade	2	Ea		
48	Install LED Type Street Light with 250W Equivalent with Photocell.	14	Ea		
49	Install New Pull Box.	35	Ea		
50	Install Street Light Conduit	850	LF		
51	Wayfinding Signage	1	LS		
52	Wayfinding Striping	1	LS		
53	Striping, Markings, and Markers	1	LS		
54	Signage	1	LS		
55	Irrigation System	1	LS		
56	Landscape Planting	1	LS		
57	Changeable Message Signs	8	LS		

TOTAL BASE BID for Section A (Items 1 – 57)

ADDITIVE A to Section A (Item 58)

58	Brick Pavers	13,300	SF		
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TOTAL ADDITIVE A: _____

TOTAL BASE BID + ADDITIVE A for Section A:

We understand that these quantities are estimates only and are given solely for the purpose of facilitating the comparison of Bids, and that the Contractor's compensation will be computed on the basis of the actual quantities in the completed Work.

The following information will be used for statistical analysis only.

Is the Bidder a Minority-Owned Business? _____ Which racial minority? _____

Is the Bidder a Women-Owned Business? _____

Is the Bidder a Certified DBE? _____ If yes, Certification No _____

Where did your company first hear about this City of Long Beach Public Works project?

(Continued on Next Page)

ADDENDA ACKNOWLEDGEMENT / SIGNATURE

This Bid is submitted with respect to the changes to the Plans & Specifications included in the following addenda numbers:

1 2 3 4 5 6 7
(Initial above all appropriate numbers)

Respectfully submitted,

Signature**

Legal Name of Company

Print Name / Title

Names of Other General Partners

Names of Other Partners

State of Incorporation

State Where Registered as LLC

City of Long Beach Business License
Number

Business Address (Actual Address -Not A
Post Office Box)

City of Long Beach Business License
Expiration Date

Telephone Number / Fax Number

Address on City Business License

Email Address

Contractor's License Number

DIR Registration Number

_____ If Bidder is an individual, set forth his/her signature.

_____ If Bidder is a joint venture, set forth the name of the joint venture with the signature of an authorized representative of each venture..

_____ If Bidder is a general partnership, set forth the signature of the general partner.

_____ If Bidder is a limited partnership, provide names of other partners.

_____ If Bidder is a limited liability company, set forth legal name of company with signature of a member or manager authorized to bind the company

_____ If the Bidder is a corporation, set forth the legal name of the corporation with the signature of an officer of the corporation.

LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" Division 2 Part 1, Chapter 4 of the California Public Contract Code, the Bidder shall set forth hereon the name, the location of the place of business, Department of Industrial Relations registration number, and the California contractor license number of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater. The prime contractor shall set forth thereon the portion of the work (type and dollar value) that will be done by each subcontractor. The prime contractor shall list only one subcontractor for each portion as defined by the prime contractor in his or her bid. Information requested, other than the subcontractor's name, location of business, contractor license number and the portion of work that will be done by each subcontractor may be submitted by the prime contractor within 24 hours after the deadline for submission of bids.

Name	_____	Type of Work	_____
Address	_____		_____
City	_____	Dollar Value of Subcontract	\$ _____
Phone No.	_____		
License No.	_____	DIR Registration No.	_____
Name	_____	Type of Work	_____
Address	_____		_____
City	_____	Dollar Value of Subcontract	\$ _____
Phone No.	_____		
License No.	_____	DIR Registration No.	_____
Name	_____	Type of Work	_____
Address	_____		_____
City	_____	Dollar Value of Subcontract	\$ _____
Phone No.	_____		
License No.	_____	DIR Registration No.	_____
Name	_____	Type of Work	_____
Address	_____		_____
City	_____	Dollar Value of Subcontract	\$ _____
Phone No.	_____		
License No.	_____	DIR Registration No.	_____
Name	_____	Type of Work	_____
Address	_____		_____
City	_____	Dollar Value of Subcontract	\$ _____
Phone No.	_____		
License No.	_____	DIR Registration No.	_____

Contractor directs the City's attention to Continuous Bidder's Bond (CBB) # _____ CC-LM-C, on file in the office of the City Clerk of the City of Long Beach. If a CBB is not on file, please accept the bidder's bond listed below:

CITY OF LONG BEACH BIDDER'S BOND

KNOW ALL THOSE BY THESE PRESENTS: That we, _____
_____, as Principal, and _____
_____, a corporation, organized and existing under and by virtue of the laws of the State of _____
_____, with its principal place of business in the City of _____
_____, State of _____, with a paid up capital of not less than Two Hundred Fifty Thousand Dollars (\$250,000.00), incorporated, as aforesaid, for the purpose of making, guaranteeing or becoming a surety upon bonds and undertakings required or authorized by law, and having heretofore complied with all of the requirements of the law of the State of California regulating the formation or admission of such corporation to transact business in this State, as Surety, are held firmly bound unto the City of Long Beach, a municipal corporation, organized under the laws of the State of California, and situated in the County of Los Angeles, in the sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment whereof the Principal and sureties bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the above obligation is such that:

If the bid of said Principal shall be accepted by the City of Long Beach and the contract for delivery of goods, materials, equipment or supplies, or for the furnishings of services, materials, supplies, labor and performing work, all as specified in the Specifications, notice inviting bids, and bid is awarded to the Principal, and if Principal shall execute and submit all contract documents and insurance within fifteen (15) calendar days after delivery of them to Principal, and if Principal shall, in connection with said contract, furnish and deliver to the City of Long Beach a good and sufficient faithful performance bond, if required in the notice inviting bids, and a good and sufficient labor and material (payment) bond, if required in the notice inviting bids, with Surety or Sureties, then this obligation shall be void; otherwise it shall remain in full force and effect.

Principal

Surety

The bond shall be signed by both parties and all signatures shall be notarized

USE OF A NON-CITY OF LONG BEACH BID BOND MAY BE CAUSE FOR REJECTION

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [Date],
at _____ [City], _____ [State].

WORKERS' COMPENSATION CERTIFICATION

In accordance with California Labor Code Sections 1860 and 3700, I certify that I am aware of the provisions of Section 3700 which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with said provisions before commencing the performance of the Work of this contract.

Contractor's Name:

Signature of Contractor, or a corporate
officer of Contractor, or a general
partner of Contractor

Title: _____

Date: _____

**CITY OF LONG BEACH
CERTIFICATION OF SITE EXAMINATION**

Each bidder shall be fully informed of the conditions relating to the construction of the work and the employment of labor thereon. Failure to do so will not relieve Contractor of the obligation to furnish all material and labor necessary to carry out the provisions of the Contract Documents.

Each bidder shall examine the site for the work described herein. Bidders shall attend a mandatory pre-bid inspection of the building and site, conducted by the City, if specified by the Special Provisions. Failure to attend the mandatory pre-bid inspection shall be cause for rejection of the bid.

This is to certify that I have examined the site and the bid is complete and there will be no additional payment for failure to examine the site thoroughly.

Date of Site Examination

Company

Printed Name of Company Representative

Signature of Representative

Date

INFORMATION TO COMPLY WITH LABOR CODE SEC. 2810

To comply with Labor Code Sec. 2810, Contractor shall complete and submit this Information Sheet which shall be incorporated into and be a part of the Contract:

- 1) Workers' Compensation Insurance:
 - A. Policy Number: _____
 - B. Name of Insurer (**NOT** Broker): _____
 - C. Address of Insurer: _____
 - D. Telephone Number of Insurer: _____
- 2) For vehicles owned by Contractor and used in performing work under this Contract:
 - A. VIN (Vehicle Identification Number): _____
 - B. Automobile Liability Insurance Policy Number: _____
 - C. Name of Insurer (**NOT** Broker): _____
 - D. Address of Insurer: _____
 - E. Telephone Number of Insurer: _____
- 3) Address of Property used to house workers on this Contract, if any: _____

- 4) Estimated total number of workers to be employed on this Contract: _____
- 5) Estimated total wages to be paid those workers: _____
- 6) Dates (or schedule) when those wages will be paid: _____

(Describe schedule: For example, weekly or every other week or monthly)
- 7) Estimated total number of independent contractors to be used on this Contract: _____

- 8) Taxpayer's Identification Number: _____



ATTACHMENT

Debarment, Suspension, Ineligibility Certification

(Please read attached *Acceptance of Certification and Instructions for Certification* before completing)

This certification is required by federal regulations implementing Executive Order

1. The potential recipient of Federal assistance funds certifies, by submission of proposal, that:
 - Neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency;
 - Have not within three (3) year period preceding this bid/agreement/proposal had a civil judgment rendered against them for commission of fraud or been convicted of a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
 - Are not presently or previously indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in the above paragraph of this certification; and
 - Have not within a three (3) year period preceding this bid/agreement/proposal had one or more public (Federal, State, or local) transactions terminated for cause of default.
2. Where the potential prospective recipient of Federal assistance funds is unable to certify to any of the statement in this certification, such prospective participant shall attach an explanation to the applicable bid/agreement/proposal.

Signature of Authorized Representative

Title of Authorized Representative

Business/Contractor/ Agency

Date

City of Long Beach
Business Relations – Purchasing Division

Acceptance of Certification

1. This bid/agreement/proposal or like document has the potential to be a recipient of Federal funds. In order to be in compliance with Code of Federal Regulations, the City requires this completed form. By signing and submitting this document, the prospective bidder/proposer is providing the certification and acknowledgement as follows:
2. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549.
3. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
4. The potential recipient of Federal assistance funds agrees by submitting this bid/agreement/proposal or like document that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

Instructions for completing the form, Attachment –Debarment Certification

1. The City of Long Beach sometimes receives Federal funding on certain purchases/projects. To ensure that the City is in compliance with Federal regulations we require this form to be completed.
2. The City of Long Beach checks the System for Award Management at www.sam.gov to confirm that vendors who are awarded City contracts and/or purchase orders are not debarred or suspended. Prospective contractors should perform a search on this website for your company and or persons associated with your business under "Search Records". The finding that "Your search returned no results" is an indicator of compliance.
3. If your business is in compliance with the conditions in the form, please have the appropriate person complete and sign this form and return with your bid/proposal/agreement.
4. If at anytime, your business or persons associated with your business become debarred or suspend, we require that you inform us of this change in status.
5. If there are any exceptions to the certification, please include an attachment. Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception, indicate to whom it applies, initiating agency and dates of action.

Note: Providing false information may result in criminal prosecution or administrative sanctions.

If you have any questions on how to complete this form, please contact the City of Long Beach, Business Relations, Purchasing Division at 562-570-6200.



BEST EFFORT SUBMITTAL PACKAGE

To be submitted as part of the prime contractor's bid package
to document that the prime contractor has made best efforts to contract with Section 3 businesses.

COVER SHEET

Submitted by
Developer/Contractor: _____

Project: _____

1. ATTACHMENT B – HUD SECTION 3 AFFIDAVIT

2. ATTACHMENT I: CONTACT LOG – BUSINESSES

SECTION 3 BUSINESSES LOCATED ON OUR WEBSITE AT:

[HTTP://WWW.LONGBEACH.GOV/FINANCE/BUSINESS-INFO/COMPLIANCE/HUD-SECTION-3-PROGRAM/](http://www.longbeach.gov/finance/business-info/compliance/hud-section-3-program/)

3. ATTACHMENT I: CONTACT LOG – OUTREACH AGENCIES

**4. ATTACHMENT J: BUSINESS INFORMATION FORMS FOR THE
PRIME CONTRACTOR AND ALL LISTED SUBCONTRACTORS
(IF NOT AVAILABLE WITH BID DOCUMENTS, IT MUST BE
RECEIVED BY THE CITY BY 10:00 A.M. OF THE NEXT
WORKING DAY)**

**5. APPENDIX: ALL DOCUMENTATION PROVING CONTACTS
WERE MADE. THIS *SHOULD* INCLUDE THE FOLLOWING:**

- Fax Confirmation Sheets
- Copies of Metered Envelopes
- Copies of Registered Mail Receipts
- Sent Email Confirmation printouts



CITY OF LONG BEACH

HUD SECTION 3 AFFIDAVIT

Must be completed by the Prime contractor and submitted with bid documents. Must be completed and submitted by all subcontractors prior to issuance of Notice to Proceed.

IMPORTANT NOTE: YOUR SIGNATURE BELOW INDICATES THAT YOU RECEIVED A COPY OF THE CITY'S SECTION 3 POLICY AND REQUIREMENTS AND THE HUD SECTION 3 COMPLIANCE CERTIFICATION (ATTACHMENT C) AND COMPLIANCE REQUIREMENTS STATED THEREIN.

I, THE UNDERSIGNED

OFFICER OR AUTHORIZED
AGENT OF COMPANY
(PRINT NAME)

SIGNATURE'S TITLE

SIGNATURE

PROJECT NAME:

COMPANY NAME:

ADDRESS:

CITY

STATE

ZIP CODE

TELEPHONE NUMBER:

()

E-MAIL ADDRESS:

DATE:

ATTACHMENT B



Section 3 Business Contact Log for documenting contact with: Section 3 & Local Businesses

PROJECT: _____

COMPANY: _____

This form must be submitted with the prime contractor's bid documents as evidence that good faith efforts were made **if unable to meet the 10% Section 3 Business Contracting Requirements** at the time of bid. This form must also be maintained during the entire period of construction for any contact with businesses.

Date/Time	Company	Mode of Contact	Contact Info	Contact Person	RESULTS OF CONVERSATION
Example: 1/12/06/ 2:00 p.m.	Example: ABC Contracting Co.	Example: Fax	Example: Fax: (562) 123-4567	Example: John Doe, Owner	Example: Fax was sent to John Doe contractor asking for their participation. John Doe called us and we inquired about their product experience. John Doe sent me a listing of their completed projects. This contractor thinks they may qualify as a Section 3 business. We will include them as part of our proposed team.



Section 3 Business Contact Log for documenting contact with: Outreach Agencies

PROJECT: _____

COMPANY: _____

This form must be submitted with the prime contractor's bid documents as evidence that good faith efforts were made **if unable to meet the 10% Section 3 Business Contracting Requirements** at the time of bid. This form must also be maintained during the entire period of construction for any contact with businesses.

Date/Time	Company	Mode of Contact	Contact Info	Contact Person	RESULTS OF CONVERSATION
Example: 1/12/06/ 2:00 p.m.	Example: ABC Contracting Co.	Example: Fax	Example: Fax: (562) 123-4567	Example: John Doe, Owner	Example: Fax was sent to John Doe contractor asking for their participation. John Doe called us and we inquired about their product experience. John Doe sent me a listing of their completed projects. This contractor thinks they may qualify as a Section 3 business. We will include them as part of our proposed team.



THE CITY OF LONG BEACH

HUD SECTION 3 BUSINESS INFORMATION FORM

Must be submitted with bid documents. To be completed by the prime contractor and all subcontractors. If not available with bid documents, this form must be received by the City by 10:00 a.m. of the next working day.

The sole purpose of this form is to calculate the number of Section 3 business enterprises working on construction projects. Please print or type.

COMPANY
NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE: () _____

FORM COMPLETED BY: _____

SERVICE OR PRODUCT: _____

IS 51% OR MORE OF YOUR BUSINESS
OWNED BY SECTION 3 RESIDENTS?

YES

☐

NO

☐

IS AT LEAST 30% OF YOUR WORKFORCE
(FULL TIME, PERMANENT STAFF) MADE UP OF
SECTION 3 RESIDENTS OR WERE THEY
SECTION 3 RESIDENTS WITHIN 3 YEARS OF
THEIR FIRST DATE OF EMPLOYMENT?

YES

☐

NO

☐

SIGNATURE

DATE

CITY OF LONG BEACH • DEPARTMENT OF FINANCIAL MANAGEMENT
333 WEST OCEAN BOULEVARD, 7TH FL • LONG BEACH, CA 90802
(562) 570-6200 FAX: (562) 570-5099

ATTACHMENT J

What is a Section 3 Business?

Legal Definition:

Section 3 Business - A business entity formed in accordance with State law, and which is licensed under State, county, or municipal law to engage in the type of business activity for which it was formed **and**: A business that is 51 percent or more owned by Section 3 resident(s); **or** whose permanent, full-time employees include persons, at least 30 percent of whom are currently Section 3 residents who reside in the Cities of Long Beach or Signal Hill, **or** within three years of the date of first employment with the business concern were Section 3 residents;

Your Business is a Section 3 Business if...

AND You can answer yes to **ONE** of the following questions:

YOUR BUSINESS WAS FORMED IN ACCORDANCE WITH STATE LAW, AND LICENSED TO ENGAGE IN THE TYPE OF BUSINESS ACTIVITY FOR WHICH IT WAS FORMED.

✓ Is 51% of the Business owned by Section 3 Resident(s)?

OR

✓ Are 30% of the permanent, full-time employees currently Section 3 Residents who reside in the Cities of Long Beach or Signal Hill?

OR

✓ Were 30% of the permanent, full-time employees, within 3 years of the date of first employment, Section 3 Residents who reside in the Cities of Long Beach or Signal Hill?

For a definition of a Section 3 Resident, please see the attached sheet. For more information about Section 3 Requirements Contact:

City of Long Beach
Business Services Bureau
333 W. Ocean Blvd., 7th Floor
Long Beach, CA 90802
(562) 570-6200

<http://www.longbeach.gov/finance/business-info/compliance/hud-section-3-program/>

What is a Section 3 Resident?

SECTION 3 RESIDENT

A Section 3 Person:

A Section 3 person resides in the Long Beach, Los Angeles, Santa Ana Economic Region, where the Section 3 covered assistance is expended and whose household income does not exceed 80 percent of the median income for the area. Please see the chart below.

Section 3 Residents Income Restrictions

FAMILY SIZE	INCOME CRITERIA (80% of Median or Less)
1	\$46,500
2	\$53,150
3	\$59,800
4	\$66,400
5	\$71,750
6	\$77,050
7	\$82,350
8	\$87,650

Los Angeles-Long Beach Area Median Family Income = **\$63,000***

(If your salary is currently or was, within the past three years, within these income levels you STILL qualify as a Section 3 Resident).

If you have any questions regarding Section 3, please contact:

City of Long Beach
Department of Financial Management
Business Services Bureau
333 W. Ocean Blvd., 7th Floor
Long Beach, CA 90802
562.570.6200

<http://www.longbeach.gov/finance/business-info/compliance/hud-section-3-program/>

*Numbers are based on HUD FY 2015 Income Limits

**CERTIFICATION OF COMPLIANCE WITH THE
EQUAL BENEFITS ORDINANCE**

Section 1. CONTRACTOR/VENDOR INFORMATION

Name: _____ Federal Tax ID No.: _____
Address: _____
City: _____ State: _____ ZIP: _____
Contact Person: _____ Telephone: _____
Email: _____ Fax: _____

Section 2. COMPLIANCE QUESTIONS

- A. The EBO is inapplicable to this Contract because the Contractor/Vendor has no employees. ____ Yes ____ No
- B. Does your company provide (or make available at the employees' expense) any employee benefits? ____ Yes ____ No
(If "yes," proceed to Question C. If "no," proceed to section 5, as the EBO does not apply to you.)
- C. Does your company provide (or make available at the employees' expense) any benefits to the spouse of an employee?
____ Yes ____ No
- D. Does your company provide (or make available at the employees' expense) any benefits to the domestic partner of an employee?
____ Yes ____ No (If you answered "no" to both questions C and D, proceed to section 5, as the EBO is not applicable to this contract. If you answered "yes" to both Questions C and D, please continue to Question E. If you answered "yes" to Question C and "no" to Question D, please continue to section 3.)
- E. Are the benefits that are available to the spouse of an employee identical to the benefits that are available to the domestic partner of an employee?
____ Yes ____ No
(If "yes," proceed to section 4, as you are in compliance with the EBO. If "no," continue to section 3.)

Section 3. PROVISIONAL COMPLIANCE

- A. Contractor/Vendor is not in compliance with the EBO now but will comply by the following date:

_____ By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/Vendor submits evidence of taking reasonable measures to comply with the EBO; or

_____ At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or

_____ Upon expiration of the contractor's current collective bargaining agreement(s).

- B. If you have taken all reasonable measures to comply with the EBO but are unable to do so, do you agree to provide employees with a cash equivalent? (The cash equivalent is the amount of money your company pays for spousal benefits that are unavailable for domestic partners.)

_____ Yes _____ No

Section 4. REQUIRED DOCUMENTATION

At time of issuance of purchase order or contract award, you may be required by the City to provide documentation (copy of employee handbook, eligibility statement from your plans, insurance provider statement, etc.) to verify that you do not discriminate in the provision of benefits.

Section 5. CERTIFICATION

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I am authorized to bind this entity contractually. By signing this certification, I further agree to comply with all additional obligations of the Equal Benefits Ordinance that are set forth in the Long Beach Municipal Code and in the terms of the contract or purchase order with the City.

Executed this _____ day of _____, 20____, at _____, _____

Name: _____ Signature: _____

Title: _____ Federal Tax ID No.: _____

EQUAL BENEFITS ORDINANCE DISCLOSURE FORM

As a condition of being awarded a contract with the City of Long Beach ("City"), the selected Contractor/Vendor ("Contractor") may be required during the performance of the Contract, to comply with the City's nondiscrimination provisions of the Equal Benefits Ordinance ("EBO") set forth in the Long Beach Municipal Code section 2.73 et seq. The EBO requires that during the performance of the contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners. Benefits include but are not limited to, health benefits, bereavement leave, family medical leave, membership and membership discounts, moving expenses, retirement benefits and travel benefits. A cash equivalent payment is permitted if an employer has made all reasonable efforts to provide domestic partners with access to benefits but is unable to do so. A situation in which a cash equivalent payment might be used if where the employer has difficulty finding an insurance provider that is willing to provide domestic partner benefits.

The EBO is applicable to the following employers:

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements and other construction projects in the amount of \$100,000 or more
- For-profit entities that generate \$350,000 or more in annual gross receipts leasing City property pursuant to a written agreement for a term exceeding 29 days in any calendar year

Contractors who are subject to the EBO must certify to the City before execution of the contract that they are in compliance with the EBO by completing the EBO Certification Form, attached, or that they have been issued a waiver by the City. Contractors must also allow authorized City representatives access to records so the City can verify compliance with the EBO.

The EBO includes provisions that address difficulties associated with implementing procedures to comply with the EBO. Contractors can delay implementation of procedures to comply with the EBO in the following circumstances:

- 1) By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/Vendor submits evidence of taking reasonable measures to comply with the EBO; or

- 2) At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/Vendor's infrastructure, not to exceed three months; or
- 3) Upon expiration of the Contractor's current collective bargaining agreement(s).

Compliance with the EBO

If a Contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the Contractor may be deemed to be in material breach of the Contract. In the event of a material breach, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of three years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor. The City may also pursue any other remedies available at law or in equity.

By my signature below, I acknowledge that the Contractor understands that to the extent it is subject to the provisions of the Long Beach Municipal Code section 2.73, the Contractor shall comply with this provision.

Printed Name:_____ Title:_____

Signature:_____ Date:_____

Business Entity Name:_____

IRAN CONTRACTING ACT OF 2010 COMPLIANCE AFFIDAVIT

(California Public Contract Code Sections 2200-2208)

The California Legislature adopted the Iran Contracting Act of 2010 to respond to policies of Iran in a uniform fashion (PCC § 2201(q)). The Iran Contracting Act prohibits bidders engaged in investment activities in Iran from bidding on, submitting proposals for, or entering into or renewing contracts with public entities for goods and services of one million dollars (\$1,000,000) or more (PCC § 2203(a)). A bidder who "engages in investment activities in Iran" is defined as either:

1. A bidder providing goods or services of twenty million dollars (\$20,000,000) or more in the energy sector of Iran, including provision of oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; **or**
2. A bidder that is a financial institution (as that term is defined in 50 U.S.C. § 1701) that extends twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created by the California Department of General Services (DGS) pursuant to PCC § 2203(b) as a person engaging in the investment activities in Iran.

The bidder shall certify that at the time of submitting a bid for new contract or renewal of an existing contract, the bidder is **not** identified on the DGS list of ineligible businesses or persons and that the bidder is **not** engaged in investment activities in Iran in violation of the Iran Contracting Act of 2010.

California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts (PCC § 2205).

To comply with the Iran Contracting Act of 2010, the bidder shall provide its vendor or financial institution name, and City Business Tax Registration Certificate (BTRC) if available, in completing **ONE** of the options shown below.

OPTION #1: CERTIFICATION

I, the official named below, certify that I am duly authorized to execute this certification on behalf of the bidder or financial institution identified below, and that the bidder or financial institution identified below is **not** on the current DGS list of persons engaged in investment activities in Iran and is **not** a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person or vendor, for 45 days or more, if that other person or vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current DGS list of persons engaged in investment activities in Iran.

Vendor Name/Financial Institution (printed)		BTRC (or n/a)
By (Authorized Signature)		
Print Name and Title of Person Signing		
Date Executed	City Approval (Signature)	(Print Name)

OPTION #2: EXEMPTION

Pursuant to PCC § 2203(c) and (d), a public entity may permit a bidder or financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enter into, or renew, a contract for goods and services. If the bidder or financial institution identified below has obtained an exemption from the certification requirement under the Iran Contracting Act of 2010, the bidder or financial institution shall complete and sign below and attach documentation demonstrating the exemption approval.

Vendor Name/Financial Institution (printed)		BTRC (or n/a)
By (Authorized Signature)		
Print Name and Title of Person Signing		
Date Executed	City Approval (Signature)	(Print Name)

DIVISION D
POST-BID DOCUMENTS

C O N T R A C T

THIS CONTRACT is made and entered, in duplicate, as of _____, 20__
for reference purposes only, pursuant to a minute order adopted by the City Council of the
City of Long Beach at its meeting held on _____, 20__, by and between
_____, a California corporation/partnership/limited liability
company ("Contractor"), whose address is
_____, and the CITY OF LONG BEACH, a
municipal corporation ("City").

WHEREAS, pursuant to a "Notice Inviting Bids for _____ in
the City of Long Beach, California," dated _____, 20__, and published by City, bids
were received, publicly opened and declared on the date specified in said Notice; and

WHEREAS, the City Manager accepted the bid of Contractor; and

WHEREAS, the City Council authorized the City Manager to enter a contract
with Contractor for the work described in Project Plans and Specifications No. R-_____;

NOW, THEREFORE, in consideration of the mutual terms and conditions
herein, the parties agree as follows:

1. SCOPE OF WORK. Contractor shall furnish all necessary labor,
supervision, tools, materials, supplies, appliances, equipment and transportation for the
work described in "Project Plans and Specifications No. R-_____ for _____
in the City of Long Beach, California," said work to be performed according to the Contract
Documents identified below. However, this Contract is intended to provide to City complete
and finished work and, to that end, Contractor shall do everything necessary to complete
the work, whether or not specifically described in the Contract Documents.

2. PRICE AND PAYMENT.

A. City shall pay to Contractor the amount(s) for materials and
work identified in Contractor's "Bid for _____ in the City
of Long Beach, California," attached hereto as Exhibit "A".

1 B. Contractor shall submit requests for progress payments and
2 City will make payments in due course of payments in accordance with Section 9 of
3 the Standard Specifications for Public Works Construction (latest edition).

4 3. CONTRACT DOCUMENTS.

5 A. The Contract Documents include: The Notice Inviting Bids,
6 Project Specifications No. R-____ (which may include by reference the Standard
7 Specifications for Public Works Construction, latest edition, and any supplements
8 thereto, collectively the "Standard Specifications"); the City of Long Beach Standard
9 Plans; Project Drawing No. _____ for this work; the California Code of Regulations;
10 the various Uniform Codes applicable to trades; the prevailing wage rates;
11 Instructions to Bidders; the Bid; the bid security; the City of Long Beach
12 Disadvantaged, Minority and Women-Owned Business Enterprise Program; this
13 Contract and all documents attached hereto or referenced herein including but not
14 limited to insurance; Bond for Faithful Performance; Payment Bond; Notice to
15 Proceed; Notice of Completion; any addenda or change orders issued in
16 accordance with the Standard Specifications; any permits required and issued for
17 the work; approved final design drawings and documents; and the Information
18 Sheet. These Contract Documents are incorporated herein by the above reference
19 and form a part of this Contract.

20 B. Notwithstanding Section 2-5.2 of the Standard Specifications,
21 if any conflict or inconsistency exists or develops among or between Contract
22 Documents, the following priority shall govern: 1) Permit(s) from other public
23 agencies; 2) Change Orders; 3) this Contract (including any and all amendments
24 hereto); 4) Addenda (which shall include written clarifications, corrections and
25 changes to the bid documents and other types of written notices issued prior to bid
26 opening; 5) Project Specifications; 6) Project Plans (including drawings); 7) the City
27 of Long Beach Standard Plans; 8) Standard Specifications (as identified in Section
28 3.A. hereof, the "Greenbook"); 9) other reference specifications; 10) other

reference plans; 11) the bid; and 12) the Notice Inviting Bids.

4. TIME FOR CONTRACT. Contractor shall commence work on a date to be specified in a written "Notice to Proceed" from City and shall complete all work within _____ (____) working/calendar days thereafter, subject to strikes, lockouts and events beyond the control of Contractor. Time is of the essence hereunder. City will suffer damage if the work is not completed within the time stated, but those damages would be difficult or impractical to determine. So, Contractor shall pay to City, as liquidated damages, the amount stated in the Contract Documents.

5. ACCEPTANCE OF WORK NOT TO CONSTITUTE A WAIVER. The acceptance of any work or the payment of any money by City shall not operate as a waiver of any provision of any Contract Document, of any power reserved to City, or of any right to damages or indemnity hereunder. The waiver of any breach or any default hereunder shall not be deemed a waiver of any other or subsequent breach or default.

6. WORKERS' COMPENSATION CERTIFICATION. Concurrently herewith, Contractor shall submit certification of Workers' Compensation coverage in accordance with California Labor Code Sections 1860 and 3700, a copy of which is attached hereto as Exhibit "B".

7. CLAIMS FOR EXTRA WORK. No claim shall be made at any time upon City by Contractor for and on account of any extra or additional work performed or materials furnished, unless such extra or additional work or materials shall have been expressly required by the City Manager and the quantities and price thereof shall have been first agreed upon, in writing, by the parties hereto.

8. CLAIMS. Contractor shall, upon completion of the work, deliver possession thereof to City ready for use and free and discharged from all claims for labor and materials in doing the work and shall assume and be responsible for, and shall protect, defend, indemnify and hold harmless City from and against any and all claims, demands, causes of action, liability, loss, costs or expenses for injuries to or death of persons, or damages to property, including property of City, which arises from or is connected with the

1 performance of the work.

2 9. INSURANCE. Prior to commencement of work, and as a condition
3 precedent to the effectiveness of this Contract, Contractor shall provide to City evidence of
4 all insurance required in the Contract Documents.

5 In addition, Contractor shall complete and deliver to City the form
6 ("Information Sheet") attached as Exhibit "C" and incorporated by reference, to comply with
7 Labor Code Section 2810.

8 10. WORK DAY. Contractor shall comply with Sections 1810 through
9 1815 of the California Labor Code regarding hours of work. Contractor shall forfeit, as a
10 penalty to City, the sum of Twenty-Five Dollars (\$25) for each worker employed by
11 Contractor or any subcontractor for each calendar day such worker is required or permitted
12 to work more than eight (8) hours unless that worker receives compensation in accordance
13 with Section 1815.

14 11. PREVAILING WAGE RATES. Contractor is directed to the prevailing
15 wage rates. Contractor shall forfeit, as a penalty to the City, Two Hundred Dollars (\$200)
16 for each laborer, worker or mechanic employed for each calendar day, or portion thereof,
17 that such laborer, worker or mechanic is paid less than the prevailing wage rates for any
18 work done by Contractor, or any subcontractor, under this Contract.

19 12. COORDINATION WITH GOVERNMENTAL REGULATIONS.

20 A. If the work is terminated pursuant to an order of any Federal or
21 State authority, Contractor shall accept as full and complete compensation under
22 this Contract such amount of money as will equal the product of multiplying the
23 Contract price stated herein by the percentage of work completed by Contractor as
24 of the date of such termination, and for which Contractor has not been paid. If the
25 work is so terminated, the City Engineer, after consultation with Contractor, shall
26 determine the percentage of work completed and the determination of the City
27 Engineer shall be final.

28 B. If Contractor is prevented, in any manner, from strict

1 compliance with the Plans and Specifications due to any Federal or State law, rule
2 or regulation, in addition to all other rights and remedies reserved to the parties City
3 may by resolution of the City Council suspend performance hereunder until the
4 cause of disability is removed, extend the time for performance, make changes in
5 the character of the work or materials, or terminate this Contract without liability to
6 either party.

7 13. NOTICES.

8 A. Any notice required hereunder shall be in writing and personally
9 delivered or deposited in the U.S. Postal Service, first class, postage prepaid, to
10 Contractor at the address first stated herein, and to the City at 333 West Ocean
11 Boulevard, Long Beach, California 90802, Attn: City Manager. Notice of change of
12 address shall be given in the same manner as stated herein for other notices. Notice
13 shall be deemed given on the date deposited in the mail or on the date personal
14 delivery is made, whichever first occurs.

15 B. Except for stop notices and claims made under the Labor Code,
16 City will notify Contractor when City receives any third party claims relating to this
17 Contract in accordance with Section 9201 of the Public Contract Code.

18 14. BONDS. Contractor shall, simultaneously with the execution of this
19 Contract, execute and deliver to City a good and sufficient corporate surety bond, in the
20 form attached hereto and in the amount specified therein, conditioned upon the faithful
21 performance of this Contract by Contractor, and a good and sufficient corporate surety
22 bond, in the form attached hereto and in the amount specified therein, conditioned upon
23 the payment of all labor and material claims incurred in connection with this Contract.

24 15. COVENANT AGAINST ASSIGNMENT. Neither this Contract nor any
25 of the moneys that may become due Contractor hereunder may be assigned by Contractor
26 without the written consent of City first had and obtained, nor will City recognize any
27 subcontractor as such, and all persons engaged in the work of construction will be
28 considered as independent contractors or agents of Contractor and will be held directly

1 responsible to Contractor.

2 16. CERTIFIED PAYROLL RECORDS.

3 A. Contractor shall keep and shall cause each subcontractor
4 performing any portion of the work under this Contract to keep an accurate payroll
5 record, showing the name, address, social security number, work classification,
6 straight time and overtime hours worked each day and week, and the actual per
7 diem wages paid to each journeyman, apprentice, worker, or other employee
8 employed by Contractor or subcontractor in connection with the work, all in
9 accordance with Division 2, Part 7, Article 2 of the California Labor Code. Such
10 payroll records for Contractor and all subcontractors shall be certified and shall be
11 available for inspection at all reasonable hours at the principal office of Contractor
12 pursuant to the provisions of Section 1776 of the Labor Code. Contractor's failure
13 to furnish such records to City in the manner provided herein for notices shall entitle
14 City to withhold the penalty prescribed by law from progress payments due to
15 Contractor.

16 B. Upon completion of the work, Contractor shall submit to the City
17 certified payroll records for Contractor and all subcontractors performing any portion
18 of the work under this Contract. Certified payroll records for Contractor and all
19 subcontractors shall be maintained during the course of the work and shall be kept
20 by Contractor for up to three (3) years after completion of the work.

21 C. The foregoing is in addition to, and not in lieu of, any other
22 requirements or obligations established and imposed by any department of the City
23 with regard to submission and retention of certified payroll records for Contractor
24 and subcontractors.

25 17. RESPONSIBILITY OF CONTRACTOR. Notwithstanding anything to
26 the contrary in the Standard Specifications, Contractor shall have the responsibility, care
27 and custody of the work. If any loss or damage occurs to the work that is not covered by
28 collectible commercial insurance, excluding loss or damage caused by earthquake or flood

1 or the negligence or willful misconduct of City, then Contractor shall immediately make the
2 City whole for any such loss or pay for any damage. If Contractor fails or refuses to make
3 the City whole or pay, then City may do so and the cost and expense of doing so shall be
4 deducted from the amount due Contractor from City hereunder.

5 18. CONTINUATION. Termination or expiration of this Contract shall not
6 terminate the rights or liabilities of either party which rights or liabilities accrued or existed
7 prior to termination or expiration of this Contract.

8 19. TAXES AND TAX REPORTING.

9 A. As required by federal and state law, City is obligated to and
10 will report the payment of compensation to Contractor on Form 1099-Misc.
11 Contractor shall be solely responsible for payment of all federal and state taxes
12 resulting from payments under this Contract. Contractor shall submit Contractor's
13 Employer Identification Number (EIN), or Contractor's Social Security Number if
14 Contractor does not have an EIN, in writing to City's Accounts Payable, Department
15 of Financial Management. Contractor acknowledges and agrees that City has no
16 obligation to pay Contractor until Contractor provides one of these numbers.

17 B. Contractor shall cooperate with City in all matters relating to
18 taxation and the collection of taxes, particularly with respect to the self-accrual of
19 use tax. Contractor shall cooperate as follows: (i) for all leases and purchases of
20 materials, equipment, supplies, or other tangible personal property totaling over
21 \$100,000 shipped from outside California, a qualified Contractor shall complete and
22 submit to the appropriate governmental entity the form in Appendix "A" attached
23 hereto; and (ii) for construction contracts and subcontracts totaling \$5,000,000 or
24 more, Contractor shall obtain a sub-permit from the California Board of Equalization
25 for the Work site. "Qualified" means that the Contractor purchased at least \$500,000
26 in tangible personal property that was subject to sales or use tax in the previous
27 calendar year.

28 C. Contractor shall create and operate a buying company, as

1 defined in State of California Board of Equalization Regulation 1699, subpart (h), in
2 City if Contractor will purchase over \$10,000 in tangible personal property subject
3 to California sales and use tax.

4 D. In completing the form and obtaining the permit(s), Contractor
5 shall use the address of the Work site as its business address and may use any
6 address for its mailing address. Copies of the form and permit(s) shall also be
7 delivered to the City Engineer. The form must be submitted and the permit(s)
8 obtained as soon as Contractor receives a Notice to Proceed. Contractor shall not
9 order any materials or equipment over \$100,000 from vendors outside California
10 until the form is submitted and the permit(s) obtained and, if Contractor does so, it
11 shall be a material breach of this Contract. In addition, Contractor shall make all
12 purchases from the Long Beach sales office of its vendors if those vendors have a
13 Long Beach office and all purchases made by Contractor under this Contract which
14 are subject to use tax of \$500,000 or more shall be allocated to the City of Long
15 Beach. Contractor shall require the same cooperation with City, with regards to
16 subsections B, C and D under this section (including forms and permits), from its
17 subcontractors and any other subcontractors who work directly or indirectly under
18 the overall authority of this Contract.

19 E. Contractor shall not be entitled to and by signing this Contract
20 waives any claim or damages for delay against City if Contractor does not timely
21 submit these forms to the appropriate governmental entity. Contractor may contact
22 the City Controller at (562) 570-6450 for assistance with the form.

23 20. ADVERTISING. Contractor shall not use the name of City, its officials
24 or employees in any advertising or solicitation for business, nor as a reference, without the
25 prior approval of the City Manager, City Engineer or designee.

26 21. AUDIT. City shall have the right at all reasonable times during
27 performance of the work under this Contract for a period of five (5) years after final
28 completion of the work to examine, audit, inspect, review, extract information from and

1 copy all books, records, accounts and other documents of Contractor relating to this
2 Contract.

3 22. NO PECULIAR RISK. Contractor acknowledges and agrees that the
4 work to be performed hereunder does not constitute a peculiar risk of bodily harm and that
5 no special precautions are required to perform said work.

6 23. THIRD PARTY BENEFICIARY. This Contract is intended by the
7 parties to benefit themselves only and is not in any way intended or designed to or entered
8 for the purpose of creating any benefit or right of any kind for any person or entity that is
9 not a party to this Contract.

10 24. SUBCONTRACTORS. Contractor agrees to and shall bind every
11 subcontractor to the terms of this Contract; provided, however, that nothing herein shall
12 create any obligation on the part of City to pay any subcontractor except in accordance
13 with a court order in an action to foreclose a stop notice. Failure of Contractor to comply
14 with this Section shall be deemed a material breach of this Contract. A list of
15 subcontractor(s) submitted by Contractor in compliance with Public Contract Code
16 Sections 4100 et seq. is attached hereto as Exhibit "D" and incorporated herein by this
17 reference.

18 25. NO DUTY TO INSPECT. No language in this Contract shall create
19 and City shall not have any duty to inspect, correct, warn of or investigate any condition
20 arising from Contractor's work hereunder, or to insure compliance with laws, rules or
21 regulations relating to said work. If City does inspect or investigate, the results thereof
22 shall not be deemed compliance with or a waiver of any requirements of the Contract
23 Documents.

24 26. GOVERNING LAW. This Contract shall be governed by and
25 construed pursuant to the laws of the State of California (except those provisions of
26 California law pertaining to conflicts of laws).

27 27. INTEGRATION. This Contract, including the Contract Documents
28 identified in Section 3 hereof, constitutes the entire understanding between the parties and

supersedes all other agreements, oral or written, with respect to the subject matter herein.

28. NONDISCRIMINATION. In connection with performance of this Contract and subject to federal laws, rules and regulations, Contractor shall not discriminate in employment or in the performance of this Contract on the basis of race, religion, national origin, color, age, sex, sexual orientation, gender identity, AIDS, HIV status, handicap or disability. It is the policy of the City to encourage the participation of Disadvantaged, Minority and Women-Owned Business Enterprises, and the City encourages Contractor to use its best efforts to carry out this policy in the award of all subcontracts.

29. EQUAL BENEFITS ORDINANCE. Unless otherwise exempted in accordance with the provisions of the Ordinance, this Contract is subject to the applicable provisions of the Equal Benefits Ordinance ("EBO"), section 2.73 et seq. of the Long Beach Municipal Code, as amended from time to time.

A. During the performance of this Contract, the Contractor certifies and represents that the Contractor will comply with the EBO. The Contractor agrees to post the following statement in conspicuous places at its place of business available to employees and applicants for employment:

"During the performance of a Contract with the City of Long Beach, the Contractor will provide equal benefits to employees with spouses and its employees with domestic partners. Additional information about the City of Long Beach's Equal Benefits Ordinance may be obtained from the City of Long Beach Business Services Division at 562-570-6200."

B. The failure of the Contractor to comply with the EBO will be deemed to be a material breach of the Contract by the City.

C. If the Contractor fails to comply with the EBO, the City may cancel, terminate or suspend the Contract, in whole or in part, and monies due or to become due under the Contract may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.

D. Failure to comply with the EBO may be used as evidence against the Contractor in actions taken pursuant to the provisions of Long Beach Municipal Code 2.93 et seq., Contractor Responsibility.

E. If the City determines that the Contractor has set up or used its contracting entity for the purpose of evading the intent of the EBO, the City may terminate the Contract on behalf of the City. Violation of this provision may be used as evidence against the Contractor in actions taken pursuant to the provisions of Long Beach Municipal Code section 2.93 et seq., Contractor Responsibility.

30. DEFAULT. Default shall include but not be limited to Contractor's failure to perform in accordance with the Plans and Specifications, failure to comply with any Contract Document, failure to pay any penalties, fines or charges assessed against Contractor by any public agency, failure to pay any charges or fees for services performed by the City, and if Contractor has substituted any security in lieu of retention, then default shall also include City's receipt of a stop notice. If default occurs and Contractor has substituted any security in lieu of retention, then in addition to City's other legal remedies, City shall have the right to draw on the security in accordance with Public Contract Code Section 22300 and without further notice to Contractor. If default occurs and Contractor has not substituted any security in lieu of retention, then City shall have all legal remedies available to it.

IN WITNESS WHEREOF, the parties have caused this document to be duly executed with all formalities required by law as of the date first stated above.

(company), a corporation

_____, 20__

By _____
Name _____
Title _____

_____, 20__

By _____
Name _____
Title _____

"Contractor"

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CITY OF LONG BEACH, a municipal
corporation

_____, 20__

By _____
City Manager

“City”

This Contract is approved as to form on _____, 20__.

CHARLES PARKIN, City Attorney

By _____
Deputy

SPECIMEN

BOND FOR FAITHFUL PERFORMANCE

KNOW ALL MEN BY THESE PRESENTS: That we, _____, as PRINCIPAL, and _____, located at _____, a corporation, incorporated under the laws of the State of _____, admitted as a surety in the State of California, and authorized to transact business in the State of California, as SURETY, are held and firmly bound unto the CITY OF LONG BEACH, CALIFORNIA, a municipal corporation, in the sum of _____ DOLLARS (\$_____), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our respective heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, said Principal has been awarded and is about to enter the annexed contract (incorporated herein by this reference) with said City of Long Beach for the _____ and is required by said City to give this bond in connection with the execution of said contract;

NOW, THEREFORE, if said Principal shall well and truly keep and faithfully perform all of the covenants, conditions, agreements and obligations of said contract on said Principal's part to be kept, done and performed, at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect;

PROVIDED, that any modifications, alterations or changes which may be made in said contract, or in the work to be done, or in the services to be rendered, or in any materials or articles to be furnished pursuant to said contract, or the giving by the City of any extension of time for the performance of said contract, or the giving of any other forbearance upon the part of either the City or the Principal to the other, shall not in any way release the Principal or the Surety, or either of them, or their respective heirs, administrators, executors, successors or assigns, from any liability arising hereunder, and notice to the Surety of any such modifications, alterations, changes, extensions or forbearances is hereby waived. No premature payment by said City to said Principal shall release or exonerate the Surety, unless the officer of said City ordering the payment shall have actual notice at the time the order is made that such payment is in fact premature, and then only to the extent that such payment shall result in actual loss to the Surety, but in no event in an amount more than the amount of such premature payment.

IN WITNESS WHEREOF, the above-named Principal and Surety have executed, or caused to be executed, this instrument with all of the formalities required by law on this _____ day of _____, 20__.

Contractor

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____

Approved as to form this _____ day
of _____, 20__.

CHARLES PARKIN, City Attorney

By: _____

Deputy City Attorney

SURETY, admitted in California

By: _____

Name: _____

Title: _____

Telephone: _____

Approved as to sufficiency this _____ day
of _____, 20__.

By: _____

City Manager/City Engineer

- NOTE:**
1. Execution of the bond must be acknowledged by both PRINCIPAL and SURETY before a Notary Public and a Notary's certificate of acknowledgment must be attached.
 2. A corporation must execute the bond by 2 authorized officers or, if executed by a person not listed in Sec. 313, Calif. Corp. Code, then a certified copy of a resolution of its Board of Directors authorizing execution must be attached.

LABOR AND MATERIAL BOND

KNOW ALL MEN BY THESE PRESENTS: That we, _____, as PRINCIPAL, and _____, located at _____, a corporation, incorporated under the laws of the State of _____, admitted as a surety in the State of California, and authorized to transact business in the State of California, as SURETY, are held and firmly bound unto the CITY OF LONG BEACH, a municipal corporation, in the sum of _____ DOLLARS (\$_____), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our respective heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, said Principal has been awarded and is about to enter the annexed contract (incorporated herein by this reference) with said City of Long Beach for the _____ is required by law and by said City to give this bond in connection with the execution of said contract;

NOW, THEREFORE, if said Principal, as Contractor of said contract, or any subcontractor of said Principal, fails to pay for any materials, provisions, equipment, or other supplies, used in upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon, of any kind, or for amounts due under the Unemployment Insurance Act, during the original term of said contract and any extensions thereof, and during the life of any guaranty required under the contract, or shall fail to pay for any materials, provisions, equipment, or other supplies, used in, upon, for or about the performance of the work to be done under any authorized modifications of said contract that may hereafter be made, or for any work or labor done of any kind, or for amounts due under the Unemployment Insurance Act, under said modification, said Surety will pay the same in an amount not exceeding the sum of money hereinabove specified and, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court; otherwise this obligation shall be void;

PROVIDED, that any modifications, alterations or changes which may be made in said contract, or in any of the work or labor required to be done thereunder, or in any of the materials, provisions, equipment, or other supplies required to be furnished pursuant to said contract, or the giving by the City of any extension of time for the performance of said contract, or the giving of any other forbearance upon the part of either the City or the Principal to the other, shall not in any way release the Principal or Surety, or either of them, or their respective heirs, administrators, executors, successors or assigns, from any liability arising hereunder, and notice to the Surety of any such modifications, alterations, changes, extensions or forbearances is hereby waived. No premature payment by said City to said Principal shall release or exonerate the Surety, unless the officer of the City ordering the payment shall have actual notice at the time the order is made that the payment is in fact premature, and then only to the extent that such payment shall result in actual loss to the Surety, but in no event in an amount more than the amount of such premature payment.

This Bond shall inure to the benefit of any and all persons, companies and corporations entitled by law to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond.

IN WITNESS WHEREOF, the above-named Principal and Surety have executed, or caused to be executed, this instrument with all of the formalities required by law on this ____ day of _____, 20__.

Contractor
By: _____
Name: _____
Title: _____
By: _____
Name: _____
Title: _____

SURETY, admitted in California
By: _____
Name: _____
Title: _____
Telephone: _____

Approved as to form this ____ day
of _____, 20__.

CHARLES PARKIN, City Attorney

Approved as to sufficiency this ____ day
of _____, 20__.

By: _____
Deputy City Attorney

By: _____
City Manager/City Engineer

- NOTE:**
1. Execution of the bond must be acknowledged by both PRINCIPAL and SURETY before a Notary Public and a Notary's certificate of acknowledgment must be attached.
 2. A corporation must execute the bond by 2 authorized officers or, if executed by a person not listed in Sec. 313, Calif. Corp. Code, then a certified copy of a resolution of its Board of Directors authorizing execution must be attached.

Return completed certificates to:
City of Long Beach, 10th floor
333 W. Ocean Boulevard, Risk Mgmt.
Long Beach, California 90802

CERTIFICATE OF INSURANCE
CITY OF LONG BEACH, CA
("the City")
A Municipal Corporation

Only this Certificate
of Insurance Form
will be Accepted

This certifies to the City that the following described policies have been issued to the Insured named below and are in force at this time.

Insured: .

Approved as to Sufficiency: _____

Address:

City Engineer

Description of project:

Approved as to Form: _____, 20____

J. CHARLES PARKIN, City Attorney

by _____ Deputy City Attorney

POLICIES AND INSURERS	LIMITS	POLICY NUMBER	EXPIRATION DATE
Workers' Compensation and Employer's Liability _____ (Name of Insurer)	Statutory workers comp _____ Employer's liability* \$ _____ * Minimum \$1,000,000 per accident		
General Liability* <u>Policy form equivalent to:</u> CG 00 01 ____ CG 00 02 ____ GL 00 02 ____ _____ (Name of Insurer)	\$ _____ per occurrence or \$ _____ per claim \$ _____ general aggregate * Minimum \$1,000,000 combined single limit per occurrence and \$2,000,000 General Aggregate		
Commercial Auto Liability* Symbol _____ _____ (Name of Insurer)	\$ _____ BI per accident \$ _____ PD per accident \$ _____ BI per person or \$ _____ combined single limit each accident * Minimum \$1,000,000 combined single limit per occurrence		
Excess/Umbrella Liability Claims-made ____ Occurrence ____ Umbrella ____ Excess ____ _____ (Name of Insurer)	\$ _____ per occurrence or \$ _____ per claim \$ _____ general aggregate Self-insured retention \$ _____		

The following coverages or conditions are in effect:	YES	NO
The City, its officials, and employees are named on all liability policies described above as insureds as respects: (a) activities performed for the City by or on behalf of the Named Insured, (b) products and completed operation of the Named Insured, and (c) premises owned, leased, or used by the Named Insured.		
Products and Completed Operations		
The undersigned will mail to the City 30 days' written notice of cancellation or reduction of coverage or limits.		
Cross Liability Clause (or equivalent wording)		
Personal Injury, Perils A, B, and C		
Broad Form Property Damage		
X, C, and U Hazards included		
Contractual Liability Coverage applying to this contract		
Liquor Liability		
Coverage afforded the City, its officials, employees, and agents as Insureds applies as primary and not excess or contributing to any insurance issued in the name of the City.		
Waiver of subrogation from Workers' Compensation insurer.		

This certificate is issued as a matter of information. This certificate is not an insurance policy and does not amend, extend, or alter the coverage afforded the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions, and conditions of such policies.

Agent or Brokerage _____ Insurance Company _____

Address _____ Home Office _____

Name of Person to be Contacted _____ Authorized Signature _____ Date _____

() _____
Telephone Number

Note: Authorized signatures may be the agent's if agent has placed insurance through an agency agreement with the insurer. If insurance is brokered, authorized signature must be that of official of insurer.



**GENERAL LIABILITY ENDORSEMENT
CITY OF LONG BEACH
333 WEST OCEAN BLVD., LONG BEACH, CA 90802**

A. POLICY INFORMATION

1. Insurance Company _____; Policy Number _____
2. Policy Term (from) _____ (to) _____; Endorsement Effective Date _____
3. Named Insured _____
4. Address _____ of _____ Named _____ Insured _____
5. Limit of Liability* Any One Occurrence/Aggregate \$
* Minimum \$1,000,000 combined single limit per occurrence with \$2,000,000 General Aggregate
6. Deductible or Self-Insured Retention (Nil unless otherwise specified): \$ _____
7. Coverage is equivalent to:
Comprehensive General Liability Form GL 00 02 (Ed. 1/73) _____
Commercial General Liability "occurrence" form CG 00 01 _____
Commercial General Liability "claims-made" form CG 00 02 _____
8. If this policy is "claims-made," the retroactive date is _____.

Note: The City's standard insurance requirements specify "occurrence" coverage. "Claims-made" coverage requires special approval.

B. POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

1. **INSURED.** The City, its elected or appointed officials, employees, and agents are included as insureds with regard to damages and defense of claims arising from (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, or (c) premises owned, leased, or used by the Named Insured.
2. **CONTRIBUTION NOT REQUIRED.** As respects: (a) work performed by the Named Insured for or on behalf of the City; or (b) products sold by the Named Insured to the City; or (c) premises leased by the Named Insured from the City, the insurance afforded by this policy shall be primary insurance as respects the City, its elected or appointed officials, employees, or agents; or stand in an unbroken chain of coverage excess of the Named Insured's schedule underlying primary coverage. In either event, any other insurance maintained by the City, its elected or appointed officials, employees or agents shall be in excess of this insurance and shall not contribute to it.
3. **SCOPE OF COVERAGE.** This policy, if primary, affords coverage at least as broad as:
(1) Insurance Services Office form number GL 00 02 (Ed.1/73), Comprehensive General Liability Insurance and Insurance Services Office form number GL 04 04 Broad Form Comprehensive General Liability endorsement; or

- (2) Insurance Services Office Commercial General Liability Coverage, "occurrence" form CG 00 01 11 85 or 11 88 or "claims-made" form CG 00 02; or
- (3) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding sections (1) and (2).

4. SEVERABILITY OF INTEREST. The insurance afforded by this policy applies separately to each insured which is seeking coverage or against whom a claim is made or a suit is brought, except with respects to the Company's limit of liability.

5. PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its elected or appointed officials, employees, or agents.

6. CANCELLATION NOTICE. The insurance afforded by this policy shall not be cancelled, nonrenewed, reduced in coverage, or materially changed in coverage or limits except after thirty (30) days' prior written notice by certified mail return receipt requested has been given to the City. Such notice shall be addressed as shown in the heading of this statement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

Incidents and claims are to be reported to the insurer at:

Attn:

Name and title

Department

Company

Address

City

State

Zip Code

() -
Telephone number

() -
Fax number

D. SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE OF THE INSURER

I, _____(print/type name), warrant that I have authority to bind the below listed insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (original signature required
on endorsement furnished to the City)

TITLE: _____ DATE: _____

ADDRESS: _____

PHONE NUMBER: _____ FAX NUMBER: _____



**AUTO LIABILITY ENDORSEMENT
CITY OF LONG BEACH
333 WEST OCEAN BLVD., LONG BEACH, CA 90802**

A. POLICY INFORMATION

1. Insurance Company _____; Policy Number _____
2. Policy Term (from) _____ (to) _____; Endorsement Effective Date _____
3. Named Insured _____
4. Address of Named Insured _____
5. Limit of Liability* Any One Occurrence/Aggregate \$
* Minimum \$1,000,000 combined single limit per occurrence
6. Deductible of Self-Insured Retention (Nil unless otherwise specified): \$ _____

B. POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

1. **INSURED.** The City, its elected or appointed officials, employees, and agents are included as insureds with regard to damages and defense of claims arising from the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired, or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the City, its elected or appointed officials, employees, and agents.
2. **CONTRIBUTION NOT REQUIRED.** As respects work performed by the Named Insured for or on behalf of the City, the insurance afforded by this policy shall: (a) be primary insurance as respects the City, its elected or appointed officials, employees, or agents; or (b) stand in an unbroken chain of coverage excess of the Named Insured's primary coverage. In either event, any other insurance maintained by the City, its elected or appointed officials, employees, or agents shall be in excess of this insurance and shall not contribute to it.
3. **SCOPE OF COVERAGE.** This policy, if primary, affords coverage at least as broad as:
 - (1) Insurance Services Office form number CA 00 01 06 92, Code 1 ("Any Auto") and endorsement CA 00 25.
 - (2) If excess, affords coverage which is at least as broad as the primary insurance forms referenced in the preceding section (1).
4. **SEVERABILITY OF INTEREST.** The insurance afforded by this policy applies separately to each insured which is seeking coverage or against whom a claim is made or a suit is brought, except with respects to the Company's limit of liability.

5. PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its elected or appointed officials, employees, or agents.
6. CANCELLATION NOTICE. The insurance afforded by this policy shall not be cancelled, nonrenewed, reduced in coverage, or materially changed in coverage or limits except after thirty (30) days' prior written notice by certified mail return receipt requested has been given to the City. Such notice shall be addressed as shown in the heading of this statement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

Attn:

Name and title

Department

Company

Address

City

State

Zip Code

() -
Telephone number

() -
Fax number

D. SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE OF THE INSURER

I, _____(print/type name), warrant that I have authority to bind the below listed insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (original signature required on endorsement furnished to the City)

TITLE: _____ DATE: _____

ADDRESS: _____

PHONE NUMBER: _____ FAX NUMBER: _____



**WORKER'S COMPENSATION/EMPLOYERS LIABILITY ENDORSEMENT
CITY OF LONG BEACH
333 WEST OCEAN BLVD., LONG BEACH, CA 90802**

A. POLICY INFORMATION

1. Insurance Company _____ ("the Company");
Policy Number _____
2. Effective date of this Endorsement _____ Expiration Date _____
3. Named Insured _____
4. Employer's Liability Limit*(Coverage B) \$ _____
* Minimum \$1,000,000 per accident

B. POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

1. CANCELLATION NOTICE. The insurance afforded by this policy shall not be cancelled, nonrenewed, reduced in coverage, or materially changed in coverage or limits except after thirty (30) days' prior written notice by certified mail return receipt requested has been given to the City. Such notice shall be addressed as shown in the heading of this endorsement.
2. WAIVER OF SUBROGATION. The Insurance Company agrees to waive all rights of subrogation against the City, its elected or appointed officials, agents, and employees for losses paid under the terms of this policy which arise from work performed by the Named Insured for the City.

C. SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE OF THE INSURER

I, _____ (print/type name), warrant that I have authority to bind the below listed insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (original signature required on endorsement furnished to the City)

TITLE: _____ DATE: _____

ADDRESS: _____

TELEPHONE: _____ FAX NUMBER: _____



**EXCESS LIABILITY ENDORSEMENT
CITY OF LONG BEACH
333 WEST OCEAN BLVD., LONG BEACH, CA 90802**

A. POLICY INFORMATION

1. Insurance Company _____; Policy Number _____
2. Policy Term (from) _____ (to) _____; Endorsement Effective Date _____
3. Named Insured _____
4. Address of Named Insured _____
5. Limit of Liability Any One Occurrence/Aggregate \$ _____
6. Deductible of Self-Insured Retention (Nil unless otherwise specified): \$ _____
7. Bodily Injury and Property Damage Coverage is:
_____ "claims-made"
_____ "occurrence"
If claims-made, the retroactive date is _____.

Note: The City's standard insurance requirements specify "occurrence" coverage. "Claims-made" coverage requires special approval.

B. POLICY AMENDMENTS

This endorsement is issued in consideration of the policy premium. Notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any other endorsement attached thereto, it is agreed as follows:

1. **INSURED.** The City, its elected or appointed officials, employees, and agents are included as insureds with regard to damages and defense of claims arising from (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, or (c) premises owned, leased, or used by the Named Insured.
2. **CONTRIBUTION NOT REQUIRED.** As respects: (a) work performed by the Named Insured for or on behalf of the City; or (b) products sold by the Named Insured to the City; or (c) premises leased by the Named Insured from the City, the insurance afforded by this policy shall be primary insurance as respects the City, its elected or appointed officials, employees, or agents; or stand in an unbroken chain of coverage excess of the Named Insured's schedule underlying primary coverage. In either event, any other insurance maintained by the City, its elected or appointed officials, employees or agents shall be in excess of this insurance and shall not contribute to it.
3. **SCOPE OF COVERAGE.** Affords coverage which is at least as broad as the primary insurance forms referenced in the preceding endorsements.
4. **SEVERABILITY OF INTEREST.** The insurance afforded by this policy applies separately to each insured which is seeking coverage or against whom a claim is made or a suit is brought, except with respects to the Company's limit of liability.

5. PROVISIONS REGARDING THE INSURED'S DUTIES AFTER ACCIDENT OR LOSS. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its elected or appointed officials, employees, or agents.
6. CANCELLATION NOTICE. The insurance afforded by this policy shall not be cancelled, nonrenwed, reduced in coverage, or materially changed in coverage or limits except after thirty (30) days' prior written notice by certified mail return receipt requested has been given to the City. Such notice shall be addressed as shown in the heading of this statement.

C. INCIDENT AND CLAIM REPORTING PROCEDURE

Incidents and claims are to be reported to the insurer at:

Attn:

Name and title

Department

Company

Address

City

State

Zip Code

() -

Telephone number

() -

Fax number

D. SIGNATURE OF INSURER OR AUTHORIZED REPRESENTATIVE OF THE INSURER

I, _____(print/type name), warrant that I have authority to bind the below listed insurance company and by my signature hereon do so bind this company.

SIGNATURE OF AUTHORIZED REPRESENTATIVE (original signature required on endorsement furnished to the City)

TITLE: _____ DATE: _____

ADDRESS: _____

TELEPHONE: _____ FAX NUMBER: _____

Bid Protest Procedures

Section 1: Who May Protest

Only a bidder who has actually submitted a bid proposal is eligible to protest a bid. The City will not accept or entertain bid protests from manufacturers, vendors, suppliers, subcontractors or the like. A bidder may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.

Section 2: Time for Protest

A bidder desiring to protest a bid shall file the protest within five (5) business days following the date on which bids were opened. The City Engineer must receive the protest by the close of business on the fifth (5th) business day following the bid opening.

Section 3: Form of Protest

The protest must be in writing and signed by the individual who signed the bid or, if the bidder is a corporation, by an officer of the corporation, and addressed to the City Engineer. A protest shall not be made by e-mail or fax and the City will not accept such. A protest must set forth a complete and detailed statement of the grounds for the protest and include all relevant information to support the grounds stated, must refer to the specific portion(s) of the Contract Documents upon which the protest is based, and shall include a valid e-mail address, street address and phone number sufficient to ensure the City's response will be received.

Section 4: Additional Information

Once the protest is received by the City Engineer, the City will not accept additional information on the protest unless the City itself requests it. In that case, the additional information must be submitted within three (3) business days after the request is made and must be received by the City Engineer by the close of business on the third (3rd) business day.

Section 5: City Response to Protest

The City Engineer or designee will respond, by e-mail and regular mail to the addresses provided in the protest, with a decision regarding the protest within ten (10) business days following receipt of the protest or, if applicable, the receipt of requested additional information. This decision shall be final.

Section 6: Limitation of Remedy

The procedure and time limits set forth herein are mandatory and are the bidder's sole and exclusive remedy in the event of bid protest. The bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue a bid protest, including filing a Government Code Claim or initiation of legal proceedings.

Issued: _____

Director of Public Works

Date: _____

8/17/11

DIVISION E
FEDERAL, STATE & LOCAL
REQUIREMENTS



CITY OF LONG BEACH

**DEPARTMENT OF FINANCIAL MANAGEMENT
Business Services Bureau**

DEVELOPER/CONTRACTOR HUD SECTION 3 PROJECT COMPLIANCE REQUIREMENTS

REVISED November 12, 2015

Policy

Notwithstanding anything contained in federal law, the Contractor (throughout this checklist, reference to “Contractor” shall mean prime contractor and shall include “Developer” as applicable) and its subcontractors shall comply with Section 3 hiring requirements (24 CFR Part 135) and shall:

1. Contract with Section 3 businesses for a minimum of ten percent (10%) of the total dollar amount of all building trades work at the subject project site.
2. Hire Section 3 residents for a minimum of thirty percent (30%) of total hours, above the existing Core Workforce.

Definitions

► **Existing Core Workforce:** The core workforce is composed of those employees whose names appeared on the Contractor’s active payroll for fifty (50) of the one hundred (100) working days prior to award of the project to the Contractor; and who possess any license required by state or federal law for work; and who have the ability to safely perform the basic functions of the applicable trade.

► **Section 3 Coordinator:** Representative(s) of the City available to assist the Contractor and any subcontractor(s) meet the Section 3 goals described above.

► **Section 3 Business:** A business that is fifty-one percent (51%) or more owned by a Section 3 resident; **or** whose permanent, full-time employees include a minimum of thirty percent (30%) current Section 3 residents or workers who were Section 3 residents within three (3) years of the date of their first employment with the business.

► **Section 3 Resident:** A low-income individual whose household income does not exceed eighty percent (80%) of the area median income for the Los Angeles County-Long Beach area and who resides in the City of Long Beach or Signal Hill or an individual who lives in public housing. **For Section 3 business certification, expands to Long Beach-LA-Santa Ana Metropolitan Statistical Area (Attachment A, “HUD Income Limits,” provides guidelines).**

Section 3 Business Enterprises – Compliance Requirements

Prior to bid opening, the Section 3 Coordinator will provide the Developer/Contractor with the direction to meet the 10% Section 3 Subcontracting Requirement. The following will also be provided to demonstrate that the Contractor/Developer utilized its best efforts to contract with Section 3 businesses for a minimum of ten percent (10%) of the total dollar amount of all building trades work at the project site as a requirement for the Developer/Contractor who fails to meet this contracting requirement:

1. Advertise subcontracting opportunities in at least one (1) of the newspapers specified as General Press and at least two (2) of the Community Newspaper outlets. Documentation of these efforts could consist of a tear sheet, proof of publication, or other verification that confirms the date the advertisement was placed.

The media sources below are available for the advertisement of subcontracting and employment opportunities. Other known sources may also be used.

General Press

Long Beach Press Telegram
727 Pine Avenue
Long Beach, CA 90844
(562) 435-1161

Long Beach Business Journal
2599 E. 28th St., Suite 212
Signal Hill, CA 90755
(562) 988-1222

Downtown and Grunion Gazette
5225 E. 2nd St.
Long Beach, CA 90803
(562) 433-2000

Community Newspapers

Signal Tribune
939 E. 27th Street
Signal Hill, CA 90755
(562) 595-7900

La Opinion
700 S. Flower Street, Suite 3000
Los Angeles, CA 90017
213) 622-8332

Long Beach Times
3798 Atlantic Avenue
Long Beach, CA 90807
(562) 715-5641

2. Provide written notice of such opportunities to all known Section 3 businesses. This notice shall be in sufficient time to allow the Section 3 businesses to respond to the bid invitation. The Section 3 Business List is on the City's website at <http://www.longbeach.gov/finance/business-info/compliance/hud-section-3-program/>

3. Work with outreach agencies that can assist in the recruiting of Section 3 businesses. Correspondence to outreach agencies will indicate specific contracting opportunities for Section 3 businesses. A list of outreach agencies is below. Other known agencies may be used.

Regional Hispanic Chamber of Commerce
3515 Linden Avenue
Long Beach, CA 90807
(562) 212-2889
info@regionalhispaniccc.org

Long Beach Chamber of Commerce
One World Trade Center, Suite 206
Long Beach, CA 90831-0206
(562) 436-1251

The Regional Hispanic Chamber receives advertisements for contracting opportunities to their members. Please send a concise email detailing subcontracting opportunities that you are offering together with your applicable contact information and a due date.

The Long Beach Chamber is pleased to advertise contracting opportunities to their members, but please provide Notice to the chamber as soon as possible, due to the chambers turn-around time.

4. Follow up on all non-responsive solicitations of Section 3 businesses and provide additional information about the contracting opportunity.

Prior to bid opening, the Contractor shall do the following:

Contract with Section 3 businesses for a minimum of ten percent (10%) of the total dollar amount of all building trades work at the project site. The City is committed to working with the Contractor to successfully achieve Section 3 requirements. Accordingly, the City will assign a Section 3 Coordinator to be available to the Contractor for assistance in completing the requirements listed herein. If the Contractor fails to meet this contracting requirement, the Contractor shall be subject to penalties outlined in Effects of Noncompliance on page 8. To avoid imposition of such penalties, **the Contractor who fails to meet the contracting requirement must demonstrate that it utilized its best efforts** to contract with Section 3 businesses for a minimum of ten percent (10%) of the total dollar amount of all building trades work at the project site.

1. The Contractor must demonstrate best efforts by detailing all efforts made on a contact log similar to **Attachment I** and affixing documents to the log that support such efforts (e.g., proof of mailing, fax transmittal sheets, e-mails, etc.), and advertising in local media. The contact log must at a minimum include the following:
 - ▶ **Company called**
 - ▶ **Contact information (telephone or fax number, e-mail address)**
 - ▶ **Contact person**
 - ▶ **Time**
 - ▶ **Date**
 - ▶ **Results of the conversation**

2. The Contractor must also demonstrate best efforts by detailing all efforts made by obtaining a list of known Section 3 and local business enterprises made available on the City of Long Beach HUD Section 3 Program Webpage at: <http://www.longbeach.gov/finance/business-info/compliance/hud-section-3-program/>. Actively contact those businesses to ascertain whether they are interested in participating on the project team. Contractors are encouraged to contact other business enterprises that may qualify as Section 3 business enterprises. All contact with these businesses must be documented by providing a contact log (**Attachment I**) or a list of businesses contacted via fax, mail or e-mail. If a contact log is used it must include the information noted in **Attachment I**. If other lists are used, they should at a minimum include company name, address, contact person (if available), date contacted via fax, mail or e-mail, and result of contact.
3. The Contractor must also demonstrate best efforts by detailing all efforts made by contacting the outreach agencies listed on page 4. All contact with these outreach agencies must be documented by providing a contact log similar to **Attachment I** or a list of agencies contacted via fax, mail or e-mail. If other lists are provided, they should at a minimum include company name, address, contact person (if available), date contacted via fax, mail or e-mail, and result of contact.
4. Submit a Business Information Form (**Attachment J**) for the Prime Contractor and all listed subcontractors with the Prime's Bid. If not available with Bid Documents, each form must be received by the City by 10:00 a.m. of the next working day. **This requirement must be met whether or not the 10% Section 3 Contracting Requirement is met.** The Section 3 Coordinator will use this form to determine if the subcontractor qualifies as a Section 3 business enterprise.

Section 3 Workforce – Compliance Requirements

During construction, the Contractor shall do the following:

1. **The Contractor shall hire Section 3 residents for a minimum of thirty percent (30%) of total hours, above the existing Core Workforce.** If the Contractor fails to meet this hiring requirement, the Contractor shall be subject to penalties outlined in Effects of Noncompliance on page 8. To avoid imposition of such penalties, the Contractor must demonstrate that it utilized its best efforts to hire Section 3 residents for a **minimum of thirty percent (30%) of total hours, above the existing Core Workforce.** The Contractor may demonstrate best efforts by detailing all efforts made on a contact log similar to **Attachment I** and affixing documents to the log that support such efforts (e.g., proof of mailing, fax transmittal sheets, e-mails, etc.).

2. The Contractor shall submit the following documentation to the City's Section 3 Coordinator at a date and time to be specified:

- **An executed HUD Section 3 Affidavit (Attachment B).** This document is to be submitted with the Prime Contractor's bid. Must be completed by all subcontractors prior to issuance of Notice to Proceed.
- **An executed HUD Section 3 Compliance Certificate (Attachment C).** This document is to be submitted with the Contractor's bid and becomes a part of the Contractor's contract with the City and required for each subcontractor. Must be completed by all contractors prior to the issuance of Notice to Proceed.
- A list of the **Existing Core Workforce** for the prime contractor and each listed subcontractor (**Attachment D**). Must be submitted prior to the issuance of Notice to Proceed.
- A **Project Employee Survey Form (Attachment E)** for each new employee for the prime contractor and each listed subcontractor. The list shall include the employee's name, address, occupation, and date of hire. This form will be used to determine if the employee is or qualifies as a Section 3 resident, or in situations of subcontractors, whether they qualify as a Section 3 business.
- An **Employment Forecast Form (Attachment F)** identifying the trades that will be used, numbers of workers needed, and forecasted number of hours for each trade. This form must be submitted even if no new hires are anticipated. (This is a mandatory monthly submittal.)

In addition to submitting the documentation listed above, during construction of the project, the Contractor shall do the following:

1. If applicable, work with local unions to request hiring priority for journeymen and apprentices who are Long Beach and Signal Hill residents. The Contractor shall provide priority to Long Beach and Signal Hill residents for all hiring opportunities so as to ensure that a minimum of thirty percent (30%) of all new hires are Long Beach or Signal Hill residents. A sample letter is provided in these Section 3 documents.
2. Use the Request for Craft Employees Form (**Attachment L**) or Worker Requisition Form (**Attachment M**), as applicable, to notify the local Workforce Development Office, non-profit entities, and community-based organizations of available employment opportunities at the project site. As new construction employees are needed by the Contractor or subcontractor, the following should be followed:

- a. **Union Contractors:** Contractors are required to submit a letter (**Attachment K**) and the Request for Craft Employees Form (**Attachment L**) to their respective unions notifying them of the Contractor's Section 3 obligations when requesting workers.
 - b. **Non-Union Contractors:** Non-Union contractors are required to use the Worker Requisition Form (**Attachment M**) and submit same to the City's Workforce Development Bureau when requesting new workers.
3. Post public notices announcing **HUD Section 3 Job and Contracting/Business Opportunities (Attachment H)**. The Contractor shall post these notices at the jobsite.
4. With each monthly application for payment, the Contractor shall provide to the Section 3 Coordinator or designee, by the fifteenth (15th) calendar day of the following month, Contractor and subcontractor documentation to confirm compliance with Section 3 requirements. These documents shall include, but not be limited to:
 - a. Certified Payrolls
 - b. **Monthly Section 3 Hiring Report (Attachment G)** for the Contractor and each subcontractor showing employee name, employer, date hired and occupation
 - c. **Construction Jobs Survey Form (Attachment E)** for all new hires
 - d. **Monthly Forecasting Form (Attachment F)**
5. Submit other such documentation that the City may require to demonstrate the Contractor's/subcontractor's compliance with Section 3 requirements, such as follow up contact logs for Section 3 applicant inquiries.

During construction of the project, the Contractor shall provide all required information to the Section 3 Coordinator or designee who will do the following:

1. Coordinate with the City's workforce development bureau and other community organizations that provide workforce opportunities and training.
2. Provide to the Contractor all documents and responses from Section 3 applicants for the purpose of having the Contractor follow up and respond to such inquiries. Such follow-up must be documented with a contact log similar to **Attachment I** or by providing a list of follow-ups contacted via fax, mail or e-mail. Fax, mailing lists and/or e-mail distributions should contain the applicant's name, fax number, mailing address or e-mail address, and the date faxing, mailing or e-mailing occurred.

Section 3 Workforce and Business Enterprises – Effects of Noncompliance

The City is committed to working with the Contractor to meet the hiring and contracting requirements. **In this regard, the Contractor shall include the Section 3 Coordinator in all meetings related to complying with the hiring and subcontracting goals.** Failure to meet these goals or to assist in the documentation of the Contractor's best efforts to meet these goals, shall result in a penalty equal to ten percent (10%) of each subsequent progress payment application beyond any normal retention until the deficiency is corrected. Upon remediation of the deficiency, the penalty amount will be released to the Contractor. In the event that the Contractor fails to provide required documentation regarding both the thirty percent (30%) hiring and ten percent (10%) subcontracting goals, the maximum penalty that may be assessed is ten percent (10%) of each subsequent progress pay application.

Note: In the event a subcontractor fails to furnish the required documentation to the Contractor, the Contractor at its discretion shall withhold a penalty equal to ten percent (10%) of each payment application from that subcontractor. Upon remediation of the deficiency, the Contractor shall release the penalty amount to the subcontractor. The maximum penalty that may be assessed against a subcontractor is ten percent (10%) of each subsequent pay application.

HUD Section 3 Contract/Business Opportunity and Workforce Development Compliance Personnel List

	Contracting/ Business	Employment Opportunities
Contact	HUD Section 3 Coordinator	Cort Huckabone Pacific Gateway Coordinator
Phone	(562) 570-6200	(562) 570-4576
Address	City Hall 333 W. Ocean Boulevard, 7th floor Long Beach, CA 90802	Pacific Gateway Network 3447 Atlantic Avenue Long Beach, CA 90806
Email	lb purchasing@longbeach.gov	Cort.Huckabone@pacific-gateway.org
Fax	(562) 570-5099	(562) 570-4551

For additional outreach efforts, please refer to the ‘HUD Appendix to Part 135’ (Attachment N).

I, the undersigned

(Officer or authorized agent of
company—Print Name)

Signature’s Title

agree to adhere to the City of Long Beach Housing and Urban Development (HUD) Section 3 Policy and Checklist as stated herein.

Signature

Date



CITY OF LONG BEACH

HUD SECTION 3 COMPLIANCE

ATTACHMENTS

TABLE OF CONTENTS

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT INCOME
LIMITS

ATTACHMENT A

AFFIDAVIT INDICATING RECEIPT OF THE CITY'S SECTION 3
POLICY AND THE HUD SECTION 3 COMPLIANCE CERTIFICATION

ATTACHMENT B -
ONE TIME SUBMITTAL

COMPLIANCE CERTIFICATION

ATTACHMENT C - ONE TIME SUBMITTAL

EXISTING CORE WORKFORCE LIST

ATTACHMENT D - ONE TIME SUBMITTAL

CITY OF LONG BEACH PROJECT EMPLOYEE JOBS SURVEY
(EXAMPLES IN ENGLISH, SPANISH AND KHMER)

ATTACHMENT E

CITY OF LONG BEACH EMPLOYMENT FORECAST FORM

ATTACHMENT F

CITY OF LONG BEACH MONTHLY SECTION 3 HIRING REPORT

ATTACHMENT G

NOTICE OF JOB AND CONTRACTING OPPORTUNITIES
(EXAMPLES IN ENGLISH, SPANISH AND KHMER)

ATTACHMENT H

SECTION 3 BUSINESS TELEPHONE LOG
Section 3 Outreach Agency Log

ATTACHMENT I
ATTACHMENT I

SECTION 3 BUSINESS INFORMATION FORM
(EXAMPLES IN ENGLISH, SPANISH AND KHMER)

ATTACHMENT J -
ONE TIME SUBMITTAL

SECTION 3 SAMPLE LETTER TO UNION (UNION
CONTRACTORS)

ATTACHMENT K-
ONE TIME SUBMITTAL

SECTION 3 CRAFT REQUEST FORM (UNION CONTRACTOR)

ATTACHMENT L

SECTION 3 WORKER REQUEST FORM (NON-UNION
CONTRACTORS)

ATTACHMENT M

HUD APPENDIX TO SECTION 135

ATTACHMENT N



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD) INCOME LIMITS

Listed below are the current income limits that the City of Long Beach and its representatives will use to determine whether an individual or company meets the federal definition of “Section 3” eligibility. If you do not qualify based on your **current** income and family size, but you meet the requirements based on your income and family size **within the last three years**, you still qualify. **All income amounts are subject to adjustment by the City in accordance with HUD guidelines.**

FAMILY SIZE	INCOME CRITERIA (80% OF MEDIAN)
1	\$46,500
2	\$53,150
3	\$59,800
4	\$66,400
5	\$71,750
6	\$77,050
7	\$82,350
8	\$87,650

AS OF FY15

Attachment A



CITY OF LONG BEACH

HUD SECTION 3 AFFIDAVIT

Must be completed by the prime contractor and submitted with bid documents. Must be completed and submitted by all subcontractors prior to issuance of Notice to Proceed.

IMPORTANT NOTE: YOUR SIGNATURE BELOW INDICATES THAT YOU RECEIVED A COPY OF THE CITY'S SECTION 3 POLICY AND REQUIREMENTS AND THE HUD SECTION 3 COMPLIANCE CERTIFICATION (ATTACHMENT C) AND COMPLIANCE REQUIREMENTS STATED THEREIN.

I, THE UNDERSIGNED

OFFICER OR AUTHORIZED
AGENT OF COMPANY
(PRINT NAME)

SIGNATURE'S TITLE

SIGNATURE

PROJECT NAME:

COMPANY NAME:

ADDRESS:

TELEPHONE NUMBER:

E-MAIL ADDRESS:

DATE:

CITY STATE ZIP CODE

()

ATTACHMENT B

HUD SECTION 3 COMPLIANCE CERTIFICATION

Must be signed by prime contractor and all subcontractors prior to issuance of notice to proceed

The contract for this work will include the following clause (referred to as the HUD Section 3 clause):

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing. Consistent with 24 CFR §135.72(b), the City of Long Beach shall refrain from entering into a contract with any contractor after notification is received from HUD that the contractor has been found in violation of the Section 3 regulations. The City will also review past performance of contractors on Section 3 projects in determining contract awards. It is mandatory that all contractors seeking to be awarded a City of Long Beach Section 3 covered project attend the pre-bid conference.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- F. The contractor understands that non-compliance and willful violation of HUD's regulations in 24 CFR part 135 with respect to Section 3 and related regulations by itself, its sub-contractors and or lower tier contractors will result in corrective measures taken by the City of Long Beach to achieve compliance, including suspension or withholding of contractor payments.
- G. With respect to work performed in connection with Section 3 covered Indian housing assistance, Section 7 (b) of the Indian Self Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7 (b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment subcontracts shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7 (b) agree to the comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with Section 7 (b)

I, THE UNDERSIGNED, ON BEHALF OF THE COMPANY HEREBY CERTIFY THAT I HAVE RECEIVED, READ AND DO UNDERSTAND THE CONTENTS OF THE ABOVE STATED "SECTION 3" CLAUSE.

SIGNATURE

PRINT NAME

DATE

TITLE (OFFICER OR AUTHORIZED AGENT)

COMPANY NAME

ADDRESS

CITY

STATE

ZIP CODE



City of Long Beach

Existing Core Workforce List

Must be completed and submitted by prime contractor and all subcontractors prior to an issuance of Notice to Proceed

FIRM NAME: _____

PROJECT: _____ **CONTRACT NO.:** _____

SUBMITTED BY: _____ **TELEPHONE NO.:** _____

The following is a list of “Core Employees.” These employees, in accordance with the definition of an Existing Core Workforce, have been on the active payroll for fifty (50) out of the last one hundred (100) working days prior to the award. **The Contractor and subcontractor, at any tier, must submit this form prior to commencing work on the project.**

The Contractor and subcontractor(s) shall provide to the Section 3 Coordinator or designee proof of their “Core Workforce” upon request. Alternative worksheets may be submitted only if the same information shown below is contained.

Name	SSN (last 4 digits only)	Classification	Hire Date	Date Last Employed	Zip Code	Verified (office use only)

Certification:

I CERTIFY THAT THE INFORMATION CONTAINED HEREON IS TRUE AND CORRECT. IF IT IS DETERMINED THAT THE INFORMATION REPORTED HEREIN IS NOT TRUE AND CORRECT, I WILL NOT BE ALLOWED TO DO WORK (BEGIN, FINISH, COMPLETE) FOR THE CITY OF LONG BEACH.

City of Long Beach

Attention: Financial Management-Section 3
333 West Ocean Boulevard, 7th Floor
Long Beach, CA 90802
(562) 570-6200 Phone
(562) 570-5099 Fax

Signature: _____ **Date:** _____

Title: _____

ATTACHMENT D



CITY OF LONG BEACH

PROJECT EMPLOYEE SURVEY

To be completed by all new hires
Form to be submitted with certified payrolls every time an employee is hired
(This form is mandatory and must be completed by the prime contractor and all subcontractors as required.)

The sole purpose of this form is to calculate the number of Section 3 Residents working on construction projects. This form was not created by the I.R.S. (Internal Revenue Service). Please print or type.

COMPANY: _____

PROJECT: _____

NAME: _____

ADDRESS: _____ APT.: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE: () _____

NUMBER OF PEOPLE LIVING WITH YOU IN YOUR HOME: _____

FOR THE LAST THREE YEARS, PLEASE GIVE AN ESTIMATE OF YOUR GROSS ANNUAL INCOME **BEFORE**
BEING EMPLOYED ON THIS CONSTRUCTION PROJECT:

CURRENT YEAR ANNUAL INCOME : \$ _____

LAST YEAR ANNUAL INCOME: \$ _____

TWO (2) YEARS AGO INCOME: \$ _____

OR A PUBLIC HOUSING RESIDENT OR RECEIVE SECTION 8 ASSISTANCE

YES ☐

NO ☐

SIGNATURE

DATE

City of Long Beach
Attention: Financial Management-Section 3
333 West Ocean Boulevard, 7th Floor
Long Beach, CA 90802
(562) 570-6200 Phone
(562) 570-5099 Fax

ATTACHMENT E



CITY OF LONG BEACH

EMPLOYMENT FORECAST FORM

To be completed by the prime contractor and all subcontractors

To ensure efforts are made to reach the City of Long Beach's numerical goals for job placement of local low-income individuals, the prime contractor and all subcontractors shall provide the following employment forecasts for this project on a monthly basis (this document must be submitted with the certified payrolls). This is a mandatory monthly submittal.

Project: _____

Company: _____ Date: _____

Reported by: ☐ Prime Contractor _____ ☐ Subcontractor _____

Monthly Reporting Period: _____

TRADE	NUMBER OF EMPLOYEES NEEDED TO COMPLETE TASK	FORECASTED WORK HOURS BY TRADE
Overall Totals for All Trades		

ATTACHMENT F



CITY OF LONG BEACH

EMPLOYMENT SECTION 3

WORKFORCE

To ensure efforts are made to reach the City of Long Beach's numerical goals for job placement of local low-income individuals, the Contractor and all subcontractors shall provide the following employment information for this project on a monthly basis:

This is a mandatory monthly submittal for by all contractors (prime and subcontractors) and must be submitted with certified payrolls.

Project: _____

Company: _____

Reported by: ☐ Prime Contractor _____ ☐ Subcontractor _____

Monthly Reporting Period: _____

NAME OF NEW HIRE	HIRE DATE	OCCUPATION

ATTACHMENT G



NOTICE OF HUD SECTION 3 JOB AND CONTRACTING OPPORTUNITIES

LONG BEACH & SIGNAL HILL RESIDENTS MAY QUALIFY FOR EMPLOYMENT AND CONTRACTING OPPORTUNITIES ON THIS FEDERALLY FUNDED CONSTRUCTION PROJECT. LOW-INCOME AND VERY LOW-INCOME RESIDENTS AND BUSINESSES WILL RECEIVE HIRING PREFERENCE.

INTERESTED LONG BEACH & SIGNAL HILL RESIDENTS AND BUSINESSES SHOULD CONTACT THE DESIGNATED PERSON BELOW TO DETERMINE THEIR ELIGIBILITY FOR CURRENT AVAILABLE POSITIONS, POSSIBLE FUTURE POSITIONS OR OTHER EMPLOYMENT AND CONTRACTING INFORMATION.

	Contracting/ Business	Employment Opportunities
Contact	HUD Section 3 Coordinator	Sal Barajas
Phone	(562) 570-6200	(562) 570-3651
Address	City Hall 333 W. Ocean Blvd, 7th Fl, Long Beach, CA 90802	Pacific Gateway Network 3447 Atlantic Ave Long Beach, CA 90807
Email	lb purchasing@longbeach.gov	Salvador.barajas@pacific-gateway.org
Fax	(562) 570-5099	(562) 570-4551

THIS NOTICE COMPLIES WITH THE CITY OF LONG BEACH SECTION 3 ACTION PLAN.

ATTACHMENT H



AVISO DE OPORTUNIDADES DE TRABAJO Y CONTRATOS

LOS RESIDENTES Y NEGOCIOS DE LONG BEACH PUEDEN CALIFICAR PARA OPORTUNIDADES DE EMPLEO POR PARTE DEL PROGRAMA DE CONSTRUCCIÓN FUNDADO POR EL GOBIERNO FEDERAL. RESIDENTES DE BAJOS INGRESOS RECIBIRÁN PREFERENCIA PARA TRABAJOS Y CONTRATOS.

RESIDENTES Y NEGOCIOS DE LONG BEACH INTERESADOS, FAVOR DE PONERSE EN CONTACTO CON LA PERSONA DESIGNADA AL FONDO DE ESTA OJA, PARA DETERMINAR SU ELEGIBILIDAD PARA POSICIONES DISPONIBLES, FUTURAS POSICIONES POSIBLES Y OTRA INFORMACIÓN DE EMPLEO.

	Contracting/ Business	Employment Opportunities
Contact	HUD Section 3 Coordinator	Sal Barajas
Phone	(562) 570-6200	(562) 570-3651
Address	City Hall 333 W. Ocean Blvd., 7th Fl., Long Beach, CA 90802	Pacific Gateway Network 3447 Atlantic Ave Long Beach, CA 90807
Email	lbpurchasing@longbeach.gov	Salvador.barajas@pacific-gateway.org
Fax	(562) 570-5099	(562) 570-4551

Este aviso cumple con el plan de acción de la Sección 3 de la ciudad de Long Beach.

ATTACHMENT H



Section 3 Business Contact Log for documenting contact with: Section 3 & Local Businesses

PROJECT: _____

COMPANY: _____

This form must be submitted with the prime contractor's bid documents as evidence that good faith efforts were made **if unable to meet the 10% Section 3 Business Contracting Requirements** at the time of bid. This form must also be maintained during the entire period of construction for any contact with businesses.

Date/Time	Company	Mode of Contact	Contact Info	Contact Person	RESULTS OF CONVERSATION
Example: 1/12/06/ 2:00 p.m.	Example: ABC Contracting Co.	Example: Fax	Example: Fax: (562) 123-4567	Example: John Doe, Owner	Example: Fax was sent to John Doe contractor asking for their participation. John Doe called us and we inquired about their product experience. John Doe sent me a listing of their completed projects. This contractor thinks they may qualify as a Section 3 business. We will include them as part of our proposed team.



Section 3 Business Contact Log for documenting contact with: Outreach Agencies

PROJECT:_____

COMPANY:_____

Date/Time	Company	Mode of Contact	Contact Info	Contact Person	RESULTS OF CONVERSATION
Example: 1/12/06/ 2:00 p.m.	Example: ABC Contracting Co.	Example: Fax	Example: Fax: (562) 123-4567	Example: John Doe, Owner	Example: Fax was sent to John Doe contractor asking for their participation. John Doe called us and we inquired about their product experience. John Doe sent me a listing of their completed projects. This contractor thinks they may qualify as a Section 3 business. We will include them as part of our proposed team.

ATTACHMENT I



THE CITY OF LONG BEACH

HUD SECTION 3 BUSINESS INFORMATION FORM

Must be submitted with bid documents. To be completed by the prime contractor and all subcontractors. If not available with bid documents, this form must be received by the City by 10:00 a.m. of the next working day.

The sole purpose of this form is to calculate the number of Section 3 business enterprises working on construction projects. Please print or type.

COMPANY
NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE: () _____

FORM COMPLETED BY: _____

SERVICE OR PRODUCT: _____

IS 51% OR MORE OF YOUR BUSINESS
OWNED BY SECTION 3 RESIDENTS? YES ☐ No ☐

IS AT LEAST 30% OF YOUR WORKFORCE
(FULL TIME, PERMANENT STAFF) MADE UP OF
SECTION 3 RESIDENTS OR WERE THEY
SECTION 3 RESIDENTS WITHIN 3 YEARS OF
THEIR FIRST DATE OF EMPLOYMENT? YES ☐ No ☐

SIGNATURE _____

DATE _____

CITY OF LONG BEACH • DEPARTMENT OF FINANCIAL MANAGEMENT
333 WEST OCEAN BOULEVARD, 7TH FL • LONG BEACH, CA 90802
(562) 570-6200 FAX: (562) 570-5099

ATTACHMENT J



CITY OF LONG BEACH

SAMPLE SECTION 3 LETTER TO UNION

**Must be completed by the prime contractor and subcontractors prior to issuance of
Notice to Proceed.**

Contractor Information

Address

City, State, Zip

Telephone, Fax

California License #

Date

Union Hall

Address

City, State, Zip

Subject: Project Site-

Dear:

(Name of Contractor), is a subcontractor or contractor on the (Name of Project). This construction project falls under the United States Department of Housing and Urban Development (HUD) Section 3 regulations for the City of Long Beach.

The Section 3 regulation compliance requires that contractors to the greatest extent feasible hire low-income residents of Long Beach and Signal Hill for the project. We are asking for your cooperation in using your best efforts to dispatch workers from your union that reside in Long Beach and Signal Hill.

Please keep this letter on file. When we request that workers are dispatched to a job, we would appreciate your assistance in helping our company and the City of Long Beach meet the Section 3 local hiring requirements.

Sincerely,

(Person Name)

ATTACHMENT K

CITY OF LONG BEACH**WORKER REQUEST FORM FOR UNION CONTRACTORS****To the Contractor:**

Please complete and fax this form to the applicable union to request craft workers that fulfill all hiring requirements for this project. A duplicate fax request is to be sent to the Business Services Bureau, attention Section 3 Coordinator at (562) 570-5099. After faxing your request, please call the Local to verify receipt and substantiate their capacity to furnish workers as specified below. Please print your Fax Transmission Verification Reports and keep copies for your records.

To the Union:

Please complete the "Union Use Only" section and fax this form back to the requesting Contractor. **Please retain a copy of this form for your records and send a copy to the City of Long Beach Business Services Bureau at (562) 570-5099.**

To: Local # _____ Fax # () _____ Date: _____
 cc: **Pacific Gateway Network c/o Fax # (562) 570-4551**
 From (Company): _____ Person Sending: _____
 Contact Phone: _____ Contact Fax: _____

Please provide me with union craft workers. The City of Long Beach requires that 30% of project apprentice and journey-level hours be performed by residents of the cities of Long Beach and Signal Hill to the extent feasible.

Covered Zip Codes of Residence

90802	90803	90804	90805	90806	90807
90808	90810	90813	90814	90815	90755

1st Priority: Section 3 Local Requirement - Union craft employees, including apprentices, who reside in one of the local zip codes listed above, and are determined to be Section 3 eligible (80% of median income or less) should be dispatched first. The Workforce Investment Board can assist in determining Section 3 eligibility.

2nd Priority: Local Requirement - If insufficient union craft employees, including apprentices, who live in one of the zip codes listed above and are Section 3 eligible exist, other Long Beach and Signal Hill residents may fulfill hours to meet the requirements

General Dispatch - Union craft employees may be dispatched per normal dispatch procedures, notwithstanding the above Section 3 and local preferences.

Craft Employees Requested

Job/Craft Description	Journeyman or Apprenticeship Level	Number Requested	Report Date	Report Time
Total Workers Requested:				

Please have worker(s) report to the following work address indicated below:

Project & Site Address: _____ Report to (on-site contact): _____
 On-site Tel #: _____ Fax: _____ Comments or special requirements: _____

Union Use Only

(Please check boxes as appropriate)

Reception Date: _____ Dispatch Date: _____ Received By: _____

<u>Requested Dispatch</u>	<u>AVAILABLE FOR DISPATCH</u>	<u>Unavailable for Dispatch</u>	<u>Comments</u>
Section 3 <u>and</u> Local	<input type="checkbox"/>	<input type="checkbox"/>	
Local Only	<input type="checkbox"/>	<input type="checkbox"/>	
General Dispatch	<input type="checkbox"/>	<input type="checkbox"/>	



FOR NON-UNION CONTRACTOR USE

WORKER REQUISITION FORM

Contractor: Please call Salvador Barajas at (562) 570-3651; complete form and fax to the Pacific Gateway Network at (562) 570-4551 **AND** fax a duplicate to the Section 3 Coordinator at (562) 570-5099

CFW STAFF ONLY: _____

FOR INFORMATION CONTACT:

Salvador Barajas
EMAIL: Salvador.Barajas@pacific-gateway.org
PHONE: 562.570.3651
Fax 562.570.4551

Date: _____

Company Information

Phone: _____ **Fax:** _____ **E-mail** _____

Name: _____

Contact Person: _____ **Title:** _____

Address: _____

Construction Type: _____ **Years in Business** _____ **No. of employees:** _____

Benefits: None ☐ Med. ☐ Dental ☐ Vision ☐ Retirement ☐ Effective: _____

Other: _____

Position Title: _____ **Position Reports:** _____

Location of position (Project Site Name): _____ **Expected Start Date:** _____

Total Openings _____ **Project Name & Location** _____

SHIFT: M ☐ T ☐ W ☐ Th ☐ F ☐ S ☐ S ☐ Day ☐ Swing ☐ Night ☐ Flex ☐

Salary: _____/hr. mo., annual - **Salary** _____ + Commission **Hours** _____ to _____

Type of Position: Perm ☐ Temp ☐ F/T ☐ P/T ☐ Seasonal ☐

Required Skills: Experience, Education:

Job Description: _____

Referral Procedure: Refer /Pre-screen from CFWF ☐ Fax Resume ☐ Mail Resume ☐ E-mail ☐

Apply in person ☐ Call for appt. ☐ **Is this Company in the Enterprise Zone?** Yes ☐ No ☐

Refer to EDD CalJobs Yes ☐ No ☐ If Yes **Company CA Tax ID** _____



HUD APPENDIX TO PART 135

I. Examples of Efforts To Offer Training and Employment Opportunities to Section 3 Residents.

(1) and (2) *Intentionally Omitted*

(3) Establishing training programs, which are consistent with the requirements of the Department of Labor, for public and Indian housing residents and other section 3 residents in the building trades.

(4) Advertising the training and employment positions by distributing flyers (which identify the positions to be filled, the qualifications required, and where to obtain additional information about the application process) to every occupied dwelling unit in the housing development or developments where category 1 or category 2 persons (as these terms are defined in Sec. 135.34) reside.

(5) Advertising the training and employment positions by posting flyers (which identify the positions to be filled, the qualifications required, and where to obtain additional information about the application process) in the common areas or other prominent areas of the housing development or developments. For HAs, post such advertising in the housing development or developments where category 1 or category 2 persons reside; for all other recipients, post such advertising in the housing development or developments and transitional housing in the neighborhood or service area of the section 3 covered project.

(6) Contacting resident councils, resident management corporations, or other resident organizations, where they exist, in the housing development or developments where category 1 or category 2 persons reside, and community organizations in HUD-assisted neighborhoods, to request the assistance of these organizations in notifying residents of the training and employment positions to be filled.

(7) Sponsoring (scheduling, advertising, financing or providing in-kind services) a job informational meeting to be conducted by an HA or contractor representative or representatives at a location in the housing development or developments where category 1 or category 2 persons reside or in the neighborhood or service area of the section 3 covered project.

(8) Arranging assistance in conducting job interviews and completing job applications for residents of the housing development or developments where category 1 or category 2 persons reside and in the neighborhood or service area in which a section 3 project is located.

(9) Arranging for a location in the housing development or developments where category 1 persons reside, or the neighborhood or service area of the project, where job applications may be delivered to and collected by a recipient or contractor representative or representatives.

(10) and (11) *Intentionally Omitted*

(12) Consulting with State and local agencies administering training programs funded through JTPA, probation and parole agencies, unemployment compensation programs, community organizations and other officials or organizations to assist with recruiting Section 3 residents for the HA's or contractor's training and employment positions.

(13) *Intentionally Omitted*

(14) Employing a job coordinator, or contracting with a business concern that is licensed in the field of job placement (preferably one of the section 3 business concerns identified in part 135), that will undertake, on behalf of the HA, other recipient or contractor, the efforts to match eligible and qualified section 3 residents with the training and employment positions that the HA or contractor intends to fill.

(15) *Intentionally Omitted*

(16) Where there are more qualified section 3 residents than there are positions to be filled, maintaining a file of eligible qualified section 3 residents for future employment positions.

(17)-(20) *Intentionally Omitted*

II. Examples of Efforts To Award Contracts to Section 3 Business Concerns.

(1)-(8) *Intentionally Omitted*

(9) Carrying out workshops on contracting procedures and specific contract opportunities in a timely manner so that section 3 business concerns can take advantage of upcoming contracting opportunities, with such information being made available in languages other than English where appropriate.

(10) *Intentionally Omitted*

(11) Arranging solicitations, times for the presentation of bids, quantities, specifications, and delivery schedules in ways to facilitate the participation of section 3 business concerns.

(12) Where appropriate, breaking out contract work items into economically feasible units to facilitate participation by section 3 business concerns.

ATTACHMENT N

Equal Benefits Ordinance:

Bidders are advised that any contract awarded pursuant to this procurement process shall be subject to the applicable provisions of Long Beach Municipal Code Section 2.73 et seq., the Equal Benefits Ordinance. Bidders shall refer to Division C for further information regarding the requirements of the Ordinance.

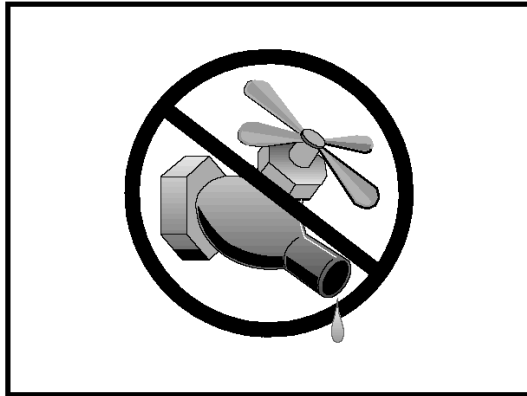
All Bidders shall complete and return, with their bid, the Equal Benefits Ordinance Compliance form contained in Division C. Unless otherwise specified in this procurement package, Bidders do not need to submit supporting documentation with their bids. However, supporting documentation verifying that the benefits are provided equally shall be required if the Bidder is selected for award of a contract.

DIVISION F
PERMITS & ATTACHMENTS
NOT USED

DIVISION G
BEST MANAGEMENT PRACTICES

Water Conservation Practices

NS-1



Description and Purpose

Water conservation practices are activities that use water during the construction of a project in a manner that avoids causing erosion and the transport of pollutants offsite. These practices can reduce or eliminate non-stormwater discharges.

Suitable Applications

Water conservation practices are suitable for all construction sites where water is used, including piped water, metered water, trucked water, and water from a reservoir.

Limitations

- None identified.

Implementation

- Keep water equipment in good working condition.
- Stabilize water truck filling area.
- Repair water leaks promptly.
- Washing of vehicles and equipment on the construction site is discouraged.
- Avoid using water to clean construction areas. If water must be used for cleaning or surface preparation, surface should be swept and vacuumed first to remove dirt. This will minimize amount of water required.

Objectives

EC	Erosion Control	✓
SE	Sediment Control	✓
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	✓
WM	Waste Management and Materials Pollution Control	

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None



NS-1

Water Conservation Practices

- Direct construction water runoff to areas where it can soak into the ground or be collected and reused.
- Authorized non-stormwater discharges to the storm drain system, channels, or receiving waters are acceptable with the implementation of appropriate BMPs.
- Lock water tank valves to prevent unauthorized use.

Costs

The cost is small to none compared to the benefits of conserving water.

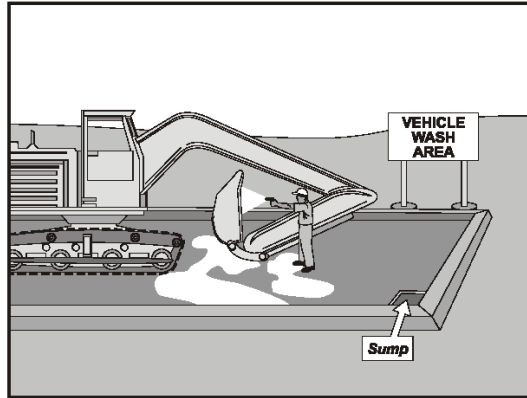
Inspection and Maintenance

- Inspect and verify that activity based BMPs are in place prior to the commencement of authorized non-stormwater discharges.
- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges are occurring.
- Repair water equipment as needed to prevent unintended discharges.
 - Water trucks
 - Water reservoirs (water buffalos)
 - Irrigation systems
 - Hydrant connections

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Vehicle and Equipment Cleaning NS-8



Description and Purpose

Vehicle and equipment cleaning procedures and practices prevent or reduce the discharge of pollutants to stormwater from vehicle and equipment cleaning by using offsite facilities; washing in designated, contained areas only; eliminating discharges to the storm drain by infiltrating the wash water; and training employees and subcontractors.

Suitable Applications

These procedures are suitable on all construction sites where vehicle and equipment cleaning is performed.

Limitations

Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades. Sending vehicles/equipment offsite should be done in conjunction with TC-1, Stabilized Construction Entrance/ Exit.

Implementation

Use an offsite commercial washing business as much as possible. These businesses are better equipped to handle and dispose of the wash waters properly. Performing this work offsite can also be economical by eliminating the need for a separate washing operation onsite.

- Use phosphate-free, biodegradable soaps.
- Educate employees and subcontractors on pollution prevention measures.

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	✓
WM	Waste Management and Materials Pollution Control	

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	
Metals	
Bacteria	✓
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



NS-8 Vehicle and Equipment Cleaning

- Do not permit steam cleaning onsite. Steam cleaning can generate significant pollutant concentrates.
- Cleaning of vehicles and equipment with soap, solvents or steam should not occur on the project site unless resulting wastes are fully contained and disposed of. Resulting wastes should not be discharged or buried, and must be captured and recycled or disposed according to the requirements of WM-10, Liquid Waste Management or WM-6, Hazardous Waste Management, depending on the waste characteristics. Minimize use of solvents. Use of diesel for vehicle and equipment cleaning is prohibited.
- All vehicles and equipment that regularly enter and leave the construction site must be cleaned offsite.
- When vehicle and equipment washing and cleaning must occur onsite, and the operation cannot be located within a structure or building equipped with appropriate disposal facilities, the outside cleaning area should have the following characteristics:
 - Located away from storm drain inlets, drainage facilities, or watercourses
 - Paved with concrete or asphalt and bermed to contain wash waters and to prevent runoff and runoff
 - Configured with a sump to allow collection and disposal of wash water
 - No discharge of wash waters to storm drains or watercourses
 - Used only when necessary
- When cleaning vehicles and equipment with water:
 - Use as little water as possible. High-pressure sprayers may use less water than a hose and should be considered
 - Use positive shutoff valve to minimize water usage
 - Facility wash racks should discharge to a sanitary sewer, recycle system or other approved discharge system and should not discharge to the storm drainage system, watercourses, or to groundwater

Costs

Cleaning vehicles and equipment at an offsite facility may reduce overall costs for vehicle and equipment cleaning by eliminating the need to provide similar services onsite. When onsite cleaning is needed, the cost to establish appropriate facilities is relatively low on larger, long-duration projects, and moderate to high on small, short-duration projects.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.

Vehicle and Equipment Cleaning NS-8

- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.
- Inspection and maintenance is minimal, although some berm repair may be necessary.
- Monitor employees and subcontractors throughout the duration of the construction project to ensure appropriate practices are being implemented.
- Inspect sump regularly and remove liquids and sediment as needed.
- Prohibit employees and subcontractors from washing personal vehicles and equipment on the construction site.

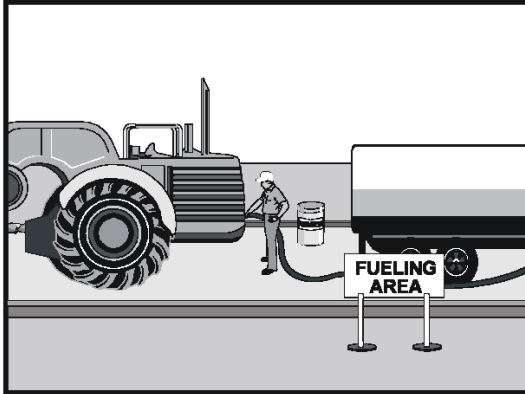
References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Swisher, R.D. Surfactant Biodegradation, Marcel Decker Corporation, 1987.

Vehicle and Equipment Fueling

NS-9



Description and Purpose

Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Suitable Applications

These procedures are suitable on all construction sites where vehicle and equipment fueling takes place.

Limitations

Onsite vehicle and equipment fueling should only be used where it is impractical to send vehicles and equipment offsite for fueling. Sending vehicles and equipment offsite should be done in conjunction with TC-1, Stabilized Construction Entrance/ Exit.

Implementation

- Use offsite fueling stations as much as possible. These businesses are better equipped to handle fuel and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate fueling area at a site.
- Discourage "topping-off" of fuel tanks.

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	✓
WM	Waste Management and Materials Pollution Control	

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	✓
Organics	

Potential Alternatives

None



NS-9

Vehicle and Equipment Fueling

- Absorbent spill cleanup materials and spill kits should be available in fueling areas and on fueling trucks, and should be disposed of properly after use.
- Drip pans or absorbent pads should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.
- Use absorbent materials on small spills. Do not hose down or bury the spill. Remove the adsorbent materials promptly and dispose of properly.
- Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and large excavators, most vehicles should be able to travel to a designated area with little lost time.
- Train employees and subcontractors in proper fueling and cleanup procedures.
- When fueling must take place onsite, designate an area away from drainage courses to be used. Fueling areas should be identified in the SWPPP.
- Dedicated fueling areas should be protected from stormwater runoff and runoff, and should be located at least 50 ft away from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas.
- Protect fueling areas with berms and dikes to prevent runoff, and to contain spills.
- Nozzles used in vehicle and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended.
- Use vapor recovery nozzles to help control drips as well as air pollution where required by Air Quality Management Districts (AQMD).
- Federal, state, and local requirements should be observed for any stationary above ground storage tanks.

Costs

- All of the above measures are low cost except for the capital costs of above ground tanks that meet all local environmental, zoning, and fire codes.

Inspection and Maintenance

- Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site.
- Keep ample supplies of spill cleanup materials onsite.
- Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.

Vehicle and Equipment Fueling

NS-9

References

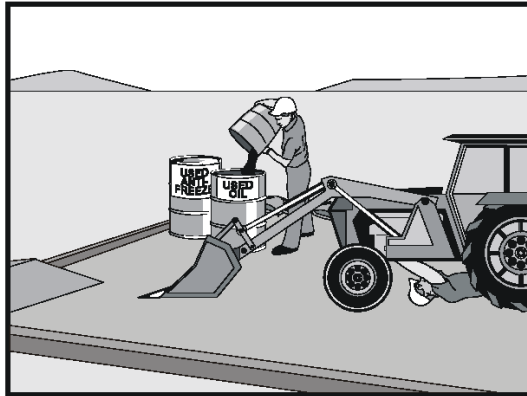
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Stormwater Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

Vehicle & Equipment Maintenance NS-10



Description and Purpose

Prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a "dry and clean site". The best option would be to perform maintenance activities at an offsite facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside, checking for leaks and spills, and containing and cleaning up spills immediately. Employees and subcontractors must be trained in proper procedures.

Suitable Applications

These procedures are suitable on all construction projects where an onsite yard area is necessary for storage and maintenance of heavy equipment and vehicles.

Limitations

Onsite vehicle and equipment maintenance should only be used where it is impractical to send vehicles and equipment offsite for maintenance and repair. Sending vehicles/equipment offsite should be done in conjunction with TC-1, Stabilized Construction Entrance/Exit.

Outdoor vehicle or equipment maintenance is a potentially significant source of stormwater pollution. Activities that can contaminate stormwater include engine repair and service, changing or replacement of fluids, and outdoor equipment storage and parking (engine fluid leaks). For further information on vehicle or equipment servicing, see NS-8, Vehicle and Equipment Cleaning, and NS-9, Vehicle and Equipment Fueling.

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	✓
WM	Waste Management and Materials Pollution Control	

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	
Nutrients	✓
Trash	✓
Metals	
Bacteria	
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



NS-10 Vehicle & Equipment Maintenance

Implementation

- Use offsite repair shops as much as possible. These businesses are better equipped to handle vehicle fluids and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate maintenance area.
- If maintenance must occur onsite, use designated areas, located away from drainage courses. Dedicated maintenance areas should be protected from stormwater runoff and runoff, and should be located at least 50 ft from downstream drainage facilities and watercourses.
- Drip pans or absorbent pads should be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable surface in a dedicated maintenance area.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- All fueling trucks and fueling areas are required to have spill kits and/or use other spill protection devices.
- Use adsorbent materials on small spills. Remove the adsorbent materials promptly and dispose of properly.
- Inspect onsite vehicles and equipment daily at startup for leaks, and repair immediately.
- Keep vehicles and equipment clean; do not allow excessive build-up of oil and grease.
- Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and transmission fluids. Provide secondary containment and covers for these materials if stored onsite.
- Train employees and subcontractors in proper maintenance and spill cleanup procedures.
- Drip pans or plastic sheeting should be placed under all vehicles and equipment placed on docks, barges, or other structures over water bodies when the vehicle or equipment is planned to be idle for more than 1 hour.
- For long-term projects, consider using portable tents or covers over maintenance areas if maintenance cannot be performed offsite.
- Consider use of new, alternative greases and lubricants, such as adhesive greases, for chassis lubrication and fifth-wheel lubrication.
- Properly dispose of used oils, fluids, lubricants, and spill cleanup materials.
- Do not place used oil in a dumpster or pour into a storm drain or watercourse.
- Properly dispose of or recycle used batteries.
- Do not bury used tires.
- Repair leaks of fluids and oil immediately.

Vehicle & Equipment Maintenance NS-10

Listed below is further information if you must perform vehicle or equipment maintenance onsite.

Safer Alternative Products

- Consider products that are less toxic or hazardous than regular products. These products are often sold under an “environmentally friendly” label.
- Consider use of grease substitutes for lubrication of truck fifth-wheels. Follow manufacturers label for details on specific uses.
- Consider use of plastic friction plates on truck fifth-wheels in lieu of grease. Follow manufacturers label for details on specific uses.

Waste Reduction

Parts are often cleaned using solvents such as trichloroethylene, trichloroethane, or methylene chloride. Many of these cleaners are listed in California Toxic Rule as priority pollutants. These materials are harmful and must not contaminate stormwater. They must be disposed of as a hazardous waste. Reducing the number of solvents makes recycling easier and reduces hazardous waste management costs. Often, one solvent can perform a job as well as two different solvents. Also, if possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous materials. For example, replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check the list of active ingredients to see whether it contains chlorinated solvents. The “chlor” term indicates that the solvent is chlorinated. Also, try substituting a wire brush for solvents to clean parts.

Recycling and Disposal

Separating wastes allows for easier recycling and may reduce disposal costs. Keep hazardous wastes separate, do not mix used oil solvents, and keep chlorinated solvents (like, trichloroethane) separate from non-chlorinated solvents (like kerosene and mineral spirits). Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around. Provide cover and secondary containment until these materials can be removed from the site.

Oil filters can be recycled. Ask your oil supplier or recycler about recycling oil filters.

Do not dispose of extra paints and coatings by dumping liquid onto the ground or throwing it into dumpsters. Allow coatings to dry or harden before disposal into covered dumpsters.

Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries, even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Costs

All of the above are low cost measures. Higher costs are incurred to setup and maintain onsite maintenance areas.

NS-10 Vehicle & Equipment Maintenance

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.
- Keep ample supplies of spill cleanup materials onsite.
- Maintain waste fluid containers in leak proof condition.
- Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site.
- Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.

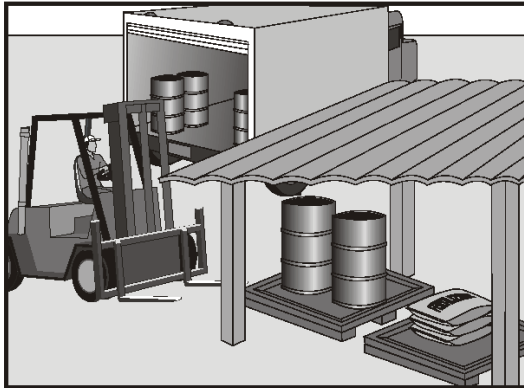
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Coastal Nonpoint Pollution Control Program; Program Development and Approval Guidance, Working Group, Working Paper; USEPA, April 1992.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Material Delivery and Storage WM-1



Description and Purpose

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

This best management practice covers only material delivery and storage. For other information on materials, see WM-2, Material Use, or WM-4, Spill Prevention and Control. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

These procedures are suitable for use at all construction sites with delivery and storage of the following materials:

- Soil stabilizers and binders
- Pesticides and herbicides
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and concrete components

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	✓

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



WM-1 Material Delivery and Storage

- Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Concrete compounds
- Other materials that may be detrimental if released to the environment

Limitations

- Space limitation may preclude indoor storage.
- Storage sheds often must meet building and fire code requirements.

Implementation

The following steps should be taken to minimize risk:

- Temporary storage area should be located away from vehicular traffic.
- Material Safety Data Sheets (MSDS) should be supplied for all materials stored.
- Construction site areas should be designated for material delivery and storage.
- Material delivery and storage areas should be located near the construction entrances, away from waterways, if possible.
 - Avoid transport near drainage paths or waterways.
 - Surround with earth berms. See EC-9, Earth Dikes and Drainage Swales.
 - Place in an area which will be paved.
- Storage of reactive, ignitable, or flammable liquids must comply with the fire codes of your area. Contact the local Fire Marshal to review site materials, quantities, and proposed storage area to determine specific requirements. See the Flammable and Combustible Liquid Code, NFPA30.
- An up to date inventory of materials delivered and stored onsite should be kept.
- Hazardous materials storage onsite should be minimized.
- Hazardous materials should be handled as infrequently as possible.
- During the rainy season, consider storing materials in a covered area. Store materials in secondary containments such as earthen dike, horse trough, or even a children's wading pool for non-reactive materials such as detergents, oil, grease, and paints. Small amounts of material may be secondarily contained in "bus boy" trays or concrete mixing trays.
- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and, when possible, in secondary containment.

Material Delivery and Storage WM-1

- If drums must be kept uncovered, store them at a slight angle to reduce ponding of rainwater on the lids to reduce corrosion. Domed plastic covers are inexpensive and snap to the top of drums, preventing water from collecting.
- Chemicals should be kept in their original labeled containers.
- Employees and subcontractors should be trained on the proper material delivery and storage practices.
- Employees trained in emergency spill cleanup procedures must be present when dangerous materials or liquid chemicals are unloaded.
- If significant residual materials remain on the ground after construction is complete, properly remove materials and any contaminated soil. See WM-7, Contaminated Soil Management. If the area is to be paved, pave as soon as materials are removed to stabilize the soil.

Material Storage Areas and Practices

- Liquids, petroleum products, and substances listed in 40 CFR Parts 110, 117, or 302 should be stored in approved containers and drums and should not be overfilled. Containers and drums should be placed in temporary containment facilities for storage.
- A temporary containment facility should provide for a spill containment volume able to contain precipitation from a 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest container within its boundary, whichever is greater.
- A temporary containment facility should be impervious to the materials stored therein for a minimum contact time of 72 hours.
- A temporary containment facility should be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills should be collected and placed into drums. These liquids should be handled as a hazardous waste unless testing determines them to be non-hazardous. All collected liquids or non-hazardous liquids should be sent to an approved disposal site.
- Sufficient separation should be provided between stored containers to allow for spill cleanup and emergency response access.
- Incompatible materials, such as chlorine and ammonia, should not be stored in the same temporary containment facility.
- Throughout the rainy season, each temporary containment facility should be covered during non-working days, prior to, and during rain events.
- Materials should be stored in their original containers and the original product labels should be maintained in place in a legible condition. Damaged or otherwise illegible labels should be replaced immediately.

WM-1 Material Delivery and Storage

- Bagged and boxed materials should be stored on pallets and should not be allowed to accumulate on the ground. To provide protection from wind and rain throughout the rainy season, bagged and boxed materials should be covered during non-working days and prior to and during rain events.
- Stockpiles should be protected in accordance with WM-3, Stockpile Management.
- Materials should be stored indoors within existing structures or sheds when available.
- Proper storage instructions should be posted at all times in an open and conspicuous location.
- An ample supply of appropriate spill clean up material should be kept near storage areas.
- Also see WM-6, Hazardous Waste Management, for storing of hazardous materials.

Material Delivery Practices

- Keep an accurate, up-to-date inventory of material delivered and stored onsite.
- Arrange for employees trained in emergency spill cleanup procedures to be present when dangerous materials or liquid chemicals are unloaded.

Spill Cleanup

- Contain and clean up any spill immediately.
- Properly remove and dispose of any hazardous materials or contaminated soil if significant residual materials remain on the ground after construction is complete. See WM-7, Contaminated Soil Management.
- See WM-4, Spill Prevention and Control, for spills of chemicals and/or hazardous materials.

Cost

- The largest cost of implementation may be in the construction of a materials storage area that is covered and provides secondary containment.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Keep an ample supply of spill cleanup materials near the storage area.
- Keep storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.

Material Delivery and Storage

WM-1

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

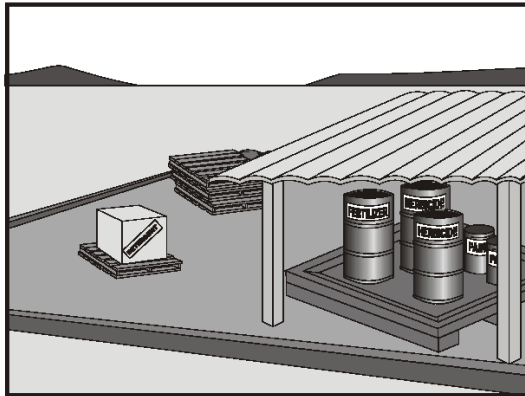
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Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practice, EPA 832-R-92005; USEPA, April 1992.

Material Use

WM-2



Description and Purpose

Prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.

Suitable Applications

This BMP is suitable for use at all construction projects. These procedures apply when the following materials are used or prepared onsite:

- Pesticides and herbicides
- Fertilizers
- Detergents
- Plaster
- Petroleum products such as fuel, oil, and grease
- Asphalt and other concrete components
- Other hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds
- Concrete compounds
- Other materials that may be detrimental if released to the environment

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	✓

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



WM-2

Material Use

Limitations

Safer alternative building and construction products may not be available or suitable in every instance.

Implementation

The following steps should be taken to minimize risk:

- Minimize use of hazardous materials onsite.
- Follow manufacturer instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
- Train personnel who use pesticides. The California Department of Pesticide Regulation and county agricultural commissioners license pesticide dealers, certify pesticide applicators, and conduct onsite inspections.
- Do not over-apply fertilizers, herbicides, and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over-application is expensive and environmentally harmful. Unless on steep slopes, till fertilizers into the soil rather than hydro seeding. Apply surface dressings in several smaller applications, as opposed to one large application, to allow time for infiltration and to avoid excess material being carried offsite by runoff. Do not apply these chemicals just before it rains.
- Train employees and subcontractors in proper material use.
- Supply Material Safety Data Sheets (MSDS) for all materials.
- Dispose of latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths, when thoroughly dry and are no longer hazardous, with other construction debris.
- Do not remove the original product label; it contains important safety and disposal information. Use the entire product before disposing of the container.
- Mix paint indoors or in a containment area. Never clean paintbrushes or rinse paint containers into a street, gutter, storm drain, or watercourse. Dispose of any paint thinners, residue, and sludge(s) that cannot be recycled, as hazardous waste.
- For water-based paint, clean brushes to the extent practicable, and rinse to a drain leading to a sanitary sewer where permitted, or into a concrete washout pit or temporary sediment trap. For oil-based paints, clean brushes to the extent practicable, and filter and reuse thinners and solvents.
- Use recycled and less hazardous products when practical. Recycle residual paints, solvents, non-treated lumber, and other materials.
- Use materials only where and when needed to complete the construction activity. Use safer alternative materials as much as possible. Reduce or eliminate use of hazardous materials onsite when practical.

- Require contractors to complete the "Report of Chemical Spray Forms" when spraying herbicides and pesticides.
- Keep an ample supply of spill clean up material near use areas. Train employees in spill clean up procedures.
- Avoid exposing applied materials to rainfall and runoff unless sufficient time has been allowed for them to dry.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
- Maintenance of this best management practice is minimal.
- Spot check employees and subcontractors throughout the job to ensure appropriate practices are being employed.

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

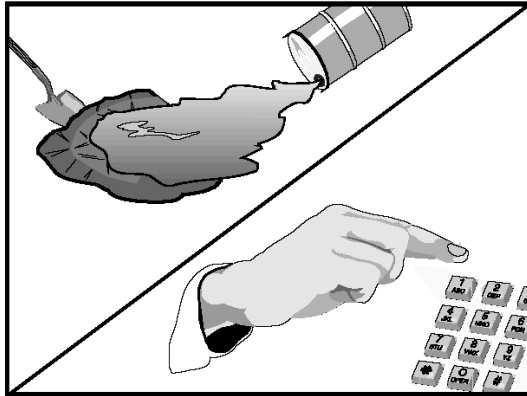
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Spill Prevention and Control

WM-4



Description and Purpose

Prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

This best management practice covers only spill prevention and control. However, WM-1, Materials Delivery and Storage, and WM-2, Material Use, also contain useful information, particularly on spill prevention. For information on wastes, see the waste management BMPs in this section.

Suitable Applications

This BMP is suitable for all construction projects. Spill control procedures are implemented anytime chemicals or hazardous substances are stored on the construction site, including the following materials:

- Soil stabilizers/binders
- Dust palliatives
- Herbicides
- Growth inhibitors
- Fertilizers
- Deicing/anti-icing chemicals

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	✓

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



Spill Prevention and Control

WM-4

- Fuels
- Lubricants
- Other petroleum distillates

Limitations

- In some cases it may be necessary to use a private spill cleanup company.
- This BMP applies to spills caused by the contractor and subcontractors.
- Procedures and practices presented in this BMP are general. Contractor should identify appropriate practices for the specific materials used or stored onsite

Implementation

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

- Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.
- Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110, 117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Designate responsible individuals to oversee and enforce control measures.
- Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean up activities.
- Do not bury or wash spills with water.

Spill Prevention and Control

WM-4

- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with WM-10, Liquid Waste Management.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- Clean up leaks and spills immediately.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
 - Contain the spread of the spill.
 - Recover spilled materials.
 - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

- Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spill Prevention and Control

WM-4

- Spills should be cleaned up immediately:
 - Contain spread of the spill.
 - Notify the project foreman immediately.
 - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
 - If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
 - If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

- For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps should be taken:
 - Notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
 - Notify the Governor's Office of Emergency Services Warning Center, (916) 845-8911.
 - For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
 - Notification should first be made by telephone and followed up with a written report.
 - The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
 - Other agencies which may need to be consulted include, but are not limited to, the Fire Department, the Public Works Department, the Coast Guard, the Highway Patrol, the City/County Police Department, Department of Toxic Substances, California Division of Oil and Gas, Cal/OSHA, etc.

Reporting

- Report significant spills to local agencies, such as the Fire Department; they can assist in cleanup.
- Federal regulations require that any significant oil spill into a water body or onto an adjoining shoreline be reported to the National Response Center (NRC) at 800-424-8802 (24 hours).

Use the following measures related to specific activities:

Spill Prevention and Control

WM-4

Vehicle and Equipment Maintenance

- If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- Place drip pans or absorbent materials under paving equipment when not in use.
- Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around
- Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- If fueling must occur onsite, use designate areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Discourage "topping off" of fuel tanks.
- Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Costs

Prevention of leaks and spills is inexpensive. Treatment and/ or disposal of contaminated soil or water can be quite expensive.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.

Spill Prevention and Control

WM-4

- Keep ample supplies of spill control and cleanup materials onsite, near storage, unloading, and maintenance areas.
- Update your spill prevention and control plan and stock cleanup materials as changes occur in the types of chemicals onsite.

References

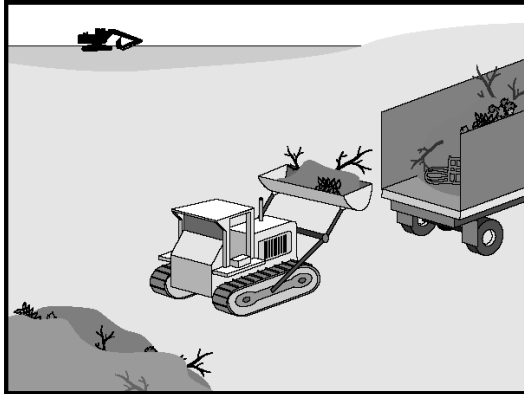
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Solid Waste Management

WM-5



Description and Purpose

Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid or construction waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.

Suitable Applications

This BMP is suitable for construction sites where the following wastes are generated or stored:

- Solid waste generated from trees and shrubs removed during land clearing, demolition of existing structures (rubble), and building construction
- Packaging materials including wood, paper, and plastic
- Scrap or surplus building materials including scrap metals, rubber, plastic, glass pieces and masonry products
- Domestic wastes including food containers such as beverage cans, coffee cups, paper bags, plastic wrappers, and cigarettes
- Construction wastes including brick, mortar, timber, steel and metal scraps, pipe and electrical cuttings, non-hazardous equipment parts, styrofoam and other materials used to transport and package construction materials

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	✓

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



WM-5

Solid Waste Management

- Highway planting wastes, including vegetative material, plant containers, and packaging materials

Limitations

Temporary stockpiling of certain construction wastes may not necessitate stringent drainage related controls during the non-rainy season or in desert areas with low rainfall.

Implementation

The following steps will help keep a clean site and reduce stormwater pollution:

- Select designated waste collection areas onsite.
- Inform trash-hauling contractors that you will accept only watertight dumpsters for onsite use. Inspect dumpsters for leaks and repair any dumpster that is not watertight.
- Locate containers in a covered area or in a secondary containment.
- Provide an adequate number of containers with lids or covers that can be placed over the container to keep rain out or to prevent loss of wastes when it is windy.
- Plan for additional containers and more frequent pickup during the demolition phase of construction.
- Collect site trash daily, especially during rainy and windy conditions.
- Remove this solid waste promptly since erosion and sediment control devices tend to collect litter.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling contractor.
- Arrange for regular waste collection before containers overflow.
- Clean up immediately if a container does spill.
- Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas.

Education

- Have the contractor's superintendent or representative oversee and enforce proper solid waste management procedures and practices.
- Instruct employees and subcontractors on identification of solid waste and hazardous waste.
- Educate employees and subcontractors on solid waste storage and disposal procedures.

Solid Waste Management

WM-5

- Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings).
- Require that employees and subcontractors follow solid waste handling and storage procedures.
- Prohibit littering by employees, subcontractors, and visitors.
- Minimize production of solid waste materials wherever possible.

Collection, Storage, and Disposal

- Littering on the project site should be prohibited.
- To prevent clogging of the storm drainage system, litter and debris removal from drainage grates, trash racks, and ditch lines should be a priority.
- Trash receptacles should be provided in the contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods.
- Litter from work areas within the construction limits of the project site should be collected and placed in watertight dumpsters at least weekly, regardless of whether the litter was generated by the contractor, the public, or others. Collected litter and debris should not be placed in or next to drain inlets, stormwater drainage systems, or watercourses.
- Dumpsters of sufficient size and number should be provided to contain the solid waste generated by the project.
- Full dumpsters should be removed from the project site and the contents should be disposed of by the trash hauling contractor.
- Construction debris and waste should be removed from the site biweekly or more frequently as needed.
- Construction material visible to the public should be stored or stacked in an orderly manner.
- Stormwater runoff should be prevented from contacting stored solid waste through the use of berms, dikes, or other temporary diversion structures or through the use of measures to elevate waste from site surfaces.
- Solid waste storage areas should be located at least 50 ft from drainage facilities and watercourses and should not be located in areas prone to flooding or ponding.
- Except during fair weather, construction and highway planting waste not stored in watertight dumpsters should be securely covered from wind and rain by covering the waste with tarps or plastic.
- Segregate potentially hazardous waste from non-hazardous construction site waste.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.

WM-5

Solid Waste Management

- For disposal of hazardous waste, see WM-6, Hazardous Waste Management. Have hazardous waste hauled to an appropriate disposal and/or recycling facility.
- Salvage or recycle useful vegetation debris, packaging and surplus building materials when practical. For example, trees and shrubs from land clearing can be used as a brush barrier, or converted into wood chips, then used as mulch on graded areas. Wood pallets, cardboard boxes, and construction scraps can also be recycled.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur
- Inspect construction waste area regularly.
- Arrange for regular waste collection.

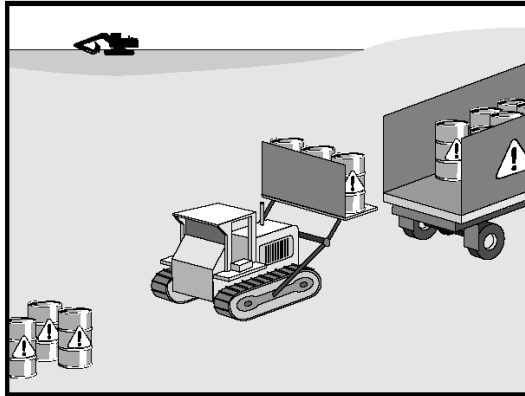
References

Processes, Procedures and Methods to Control Pollution Resulting from All Construction Activity, 430/9-73-007, USEPA, 1973.

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

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Hazardous Waste Management WM-6



Description and Purpose

Prevent or reduce the discharge of pollutants to stormwater from hazardous waste through proper material use, waste disposal, and training of employees and subcontractors.

Suitable Applications

This best management practice (BMP) applies to all construction projects. Hazardous waste management practices are implemented on construction projects that generate waste from the use of:

- Petroleum Products
- Concrete Curing Compounds
- Palliatives
- Septic Wastes
- Stains
- Wood Preservatives
- Asphalt Products
- Pesticides
- Acids
- Paints
- Solvents
- Roofing Tar
- Any materials deemed a hazardous waste in California, Title 22 Division 4.5, or listed in 40 CFR Parts 110, 117, 261, or 302

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	✓

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	✓
Metals	✓
Bacteria	✓
Oil and Grease	✓
Organics	✓

Potential Alternatives

None



Hazardous Waste Management WM-6

In addition, sites with existing structures may contain wastes, which must be disposed of in accordance with federal, state, and local regulations. These wastes include:

- Sandblasting grit mixed with lead-, cadmium-, or chromium-based paints
- Asbestos
- PCBs (particularly in older transformers)

Limitations

- Hazardous waste that cannot be reused or recycled must be disposed of by a licensed hazardous waste hauler.
- Nothing in this BMP relieves the contractor from responsibility for compliance with federal, state, and local laws regarding storage, handling, transportation, and disposal of hazardous wastes.
- This BMP does not cover aerially deposited lead (ADL) soils. For ADL soils refer to WM-7, Contaminated Soil Management.

Implementation

The following steps will help reduce stormwater pollution from hazardous wastes:

Material Use

- Wastes should be stored in sealed containers constructed of a suitable material and should be labeled as required by Title 22 CCR, Division 4.5 and 49 CFR Parts 172, 173, 178, and 179.
- All hazardous waste should be stored, transported, and disposed as required in Title 22 CCR, Division 4.5 and 49 CFR 261-263.
- Waste containers should be stored in temporary containment facilities that should comply with the following requirements:
 - Temporary containment facility should provide for a spill containment volume equal to 1.5 times the volume of all containers able to contain precipitation from a 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest tank within its boundary, whichever is greater.
 - Temporary containment facility should be impervious to the materials stored there for a minimum contact time of 72 hours.
 - Temporary containment facilities should be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills should be placed into drums after each rainfall. These liquids should be handled as a hazardous waste unless testing determines them to be non-hazardous. Non-hazardous liquids should be sent to an approved disposal site.
 - Sufficient separation should be provided between stored containers to allow for spill cleanup and emergency response access.

Hazardous Waste Management WM-6

- Incompatible materials, such as chlorine and ammonia, should not be stored in the same temporary containment facility.
- Throughout the rainy season, temporary containment facilities should be covered during non-working days, and prior to rain events. Covered facilities may include use of plastic tarps for small facilities or constructed roofs with overhangs.
- Drums should not be overfilled and wastes should not be mixed.
- Unless watertight, containers of dry waste should be stored on pallets.
- Do not over-apply herbicides and pesticides. Prepare only the amount needed. Follow the recommended usage instructions. Over application is expensive and environmentally harmful. Apply surface dressings in several smaller applications, as opposed to one large application. Allow time for infiltration and avoid excess material being carried offsite by runoff. Do not apply these chemicals just before it rains. People applying pesticides must be certified in accordance with federal and state regulations.
- Paint brushes and equipment for water and oil based paints should be cleaned within a contained area and should not be allowed to contaminate site soils, watercourses, or drainage systems. Waste paints, thinners, solvents, residues, and sludges that cannot be recycled or reused should be disposed of as hazardous waste. When thoroughly dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths should be disposed of as solid waste.
- Do not clean out brushes or rinse paint containers into the dirt, street, gutter, storm drain, or stream. "Paint out" brushes as much as possible. Rinse water-based paints to the sanitary sewer. Filter and reuse thinners and solvents. Dispose of excess oil-based paints and sludge as hazardous waste.
- The following actions should be taken with respect to temporary contaminant:
 - Ensure that adequate hazardous waste storage volume is available.
 - Ensure that hazardous waste collection containers are conveniently located.
 - Designate hazardous waste storage areas onsite away from storm drains or watercourses and away from moving vehicles and equipment to prevent accidental spills.
 - Minimize production or generation of hazardous materials and hazardous waste on the job site.
 - Use containment berms in fueling and maintenance areas and where the potential for spills is high.
 - Segregate potentially hazardous waste from non-hazardous construction site debris.
 - Keep liquid or semi-liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.

Hazardous Waste Management WM-6

- Clearly label all hazardous waste containers with the waste being stored and the date of accumulation.
- Place hazardous waste containers in secondary containment.
- Do not allow potentially hazardous waste materials to accumulate on the ground.
- Do not mix wastes.
- Use all of the product before disposing of the container.
- Do not remove the original product label; it contains important safety and disposal information.

Waste Recycling Disposal

- Select designated hazardous waste collection areas onsite.
- Hazardous materials and wastes should be stored in covered containers and protected from vandalism.
- Place hazardous waste containers in secondary containment.
- Do not mix wastes, this can cause chemical reactions, making recycling impossible and complicating disposal.
- Recycle any useful materials such as used oil or water-based paint.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- Arrange for regular waste collection before containers overflow.
- Make sure that hazardous waste (e.g., excess oil-based paint and sludge) is collected, removed, and disposed of only at authorized disposal areas.

Disposal Procedures

- Waste should be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms.
- A Department of Health Services certified laboratory should sample waste to determine the appropriate disposal facility.
- Properly dispose of rainwater in secondary containment that may have mixed with hazardous waste.
- Attention is directed to "Hazardous Material", "Contaminated Material", and "Aerially Deposited Lead" of the contract documents regarding the handling and disposal of hazardous materials.

Hazardous Waste Management WM-6

Education

- Educate employees and subcontractors on hazardous waste storage and disposal procedures.
- Educate employees and subcontractors on potential dangers to humans and the environment from hazardous wastes.
- Instruct employees and subcontractors on safety procedures for common construction site hazardous wastes.
- Instruct employees and subcontractors in identification of hazardous and solid waste.
- Hold regular meetings to discuss and reinforce hazardous waste management procedures (incorporate into regular safety meetings).
- The contractor's superintendent or representative should oversee and enforce proper hazardous waste management procedures and practices.
- Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.
- Warning signs should be placed in areas recently treated with chemicals.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- If a container does spill, clean up immediately.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur
- Hazardous waste should be regularly collected.
- A foreman or construction supervisor should monitor onsite hazardous waste storage and disposal procedures.
- Waste storage areas should be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.
- Hazardous spills should be cleaned up and reported in conformance with the applicable Material Safety Data Sheet (MSDS) and the instructions posted at the project site.

Hazardous Waste Management WM-6

- The National Response Center, at (800) 424-8802, should be notified of spills of federal reportable quantities in conformance with the requirements in 40 CFR parts 110, 117, and 302. Also notify the Governors Office of Emergency Services Warning Center at (916) 845-8911.
- A copy of the hazardous waste manifests should be provided.

References

Blueprint for a Clean Bay: Best Management Practices to Prevent Stormwater Pollution from Construction Related Activities; Santa Clara Valley Nonpoint Source Pollution Control Program, 1995.

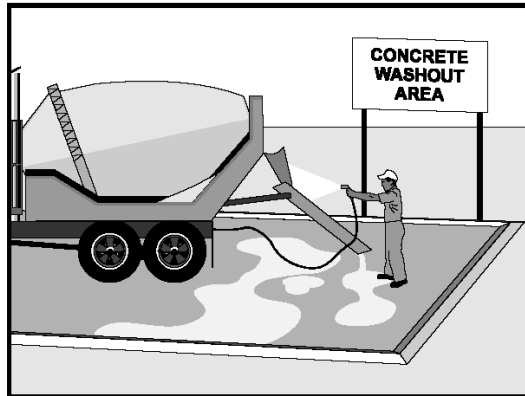
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Concrete Waste Management

WM-8



Description and Purpose

Prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employee and subcontractors.

Suitable Applications

Concrete waste management procedures and practices are implemented on construction projects where:

- Concrete is used as a construction material or where concrete dust and debris result from demolition activities
- Slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from saw cutting, coring, grinding, grooving, and hydro-concrete demolition
- Concrete trucks and other concrete-coated equipment are washed onsite
- Mortar-mixing stations exist
- See also NS-8, Vehicle and Equipment Cleaning

Limitations

- Offsite washout of concrete wastes may not always be possible.

Objectives

EC	Erosion Control	
SE	Sediment Control	
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	✓

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	
Trash	
Metals	✓
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None



WM-8

Concrete Waste Management

Implementation

The following steps will help reduce stormwater pollution from concrete wastes:

- Discuss the concrete management techniques described in this BMP (such as handling of concrete waste and washout) with the ready-mix concrete supplier before any deliveries are made.
- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks offsite or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite, except in designated areas.
- For onsite washout:
 - Locate washout area at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
 - Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.
- Avoid creating runoff by draining water to a bermed or level area when washing concrete to remove fine particles and expose the aggregate.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.

Education

- Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.
- Arrange for contractor's superintendent or representative to oversee and enforce concrete waste management procedures.

Concrete Slurry Wastes

- PCC and AC waste should not be allowed to enter storm drains or watercourses.
- PCC and AC waste should be collected and disposed of or placed in a temporary concrete washout facility.
- A sign should be installed adjacent to each temporary concrete washout facility to inform concrete equipment operators to utilize the proper facilities.

Concrete Waste Management

WM-8

- Below grade concrete washout facilities are typical. Above grade facilities are used if excavation is not practical.
- A foreman or construction supervisor should monitor onsite concrete working tasks, such as saw cutting, coring, grinding and grooving to ensure proper methods are implemented.
- Saw-cut PCC slurry should not be allowed to enter storm drains or watercourses. Residue from grinding operations should be picked up by means of a vacuum attachment to the grinding machine. Saw cutting residue should not be allowed to flow across the pavement and should not be left on the surface of the pavement. See also NS-3, Paving and Grinding Operations; and WM-10, Liquid Waste Management.
- Slurry residue should be vacuumed and disposed in a temporary pit (as described in OnSite Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures, below) and allowed to dry. Dispose of dry slurry residue in accordance with WM-5, Solid Waste Management.

Onsite Temporary Concrete Washout Facility, Transit Truck Washout Procedures

- Temporary concrete washout facilities should be located a minimum of 50 ft from storm drain inlets, open drainage facilities, and watercourses. Each facility should be located away from construction traffic or access areas to prevent disturbance or tracking.
- A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Temporary concrete washout facilities should be constructed above grade or below grade at the option of the contractor. Temporary concrete washout facilities should be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.
- Temporary washout facilities should have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
- Washout of concrete trucks should be performed in designated areas only.
- Only concrete from mixer truck chutes should be washed into concrete wash out.
- Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed of offsite.
- Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of per WM-5, Solid Waste Management. Dispose of hardened concrete on a regular basis.
- Temporary Concrete Washout Facility (Type Above Grade)
 - Temporary concrete washout facility (type above grade) should be constructed as shown on the details at the end of this BMP, with a recommended minimum length and

WM-8

Concrete Waste Management

minimum width of 10 ft, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations.

- Straw bales, wood stakes, and sandbag materials should conform to the provisions in SE-9, Straw Bale Barrier.
- Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.
- Temporary Concrete Washout Facility (Type Below Grade)
 - Temporary concrete washout facilities (type below grade) should be constructed as shown on the details at the end of this BMP, with a recommended minimum length and minimum width of 10 ft. The quantity and volume should be sufficient to contain all liquid and concrete waste generated by washout operations.
 - Lath and flagging should be commercial type.
 - Plastic lining material should be a minimum of 10 mil polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

Removal of Temporary Concrete Washout Facilities

- When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of.
- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Costs

All of the above are low cost measures.

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 in. for above grade facilities and 12 in. for below grade facilities. Maintaining temporary concrete washout facilities should include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials should be removed and disposed of.
- Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.

Concrete Waste Management

WM-8

References

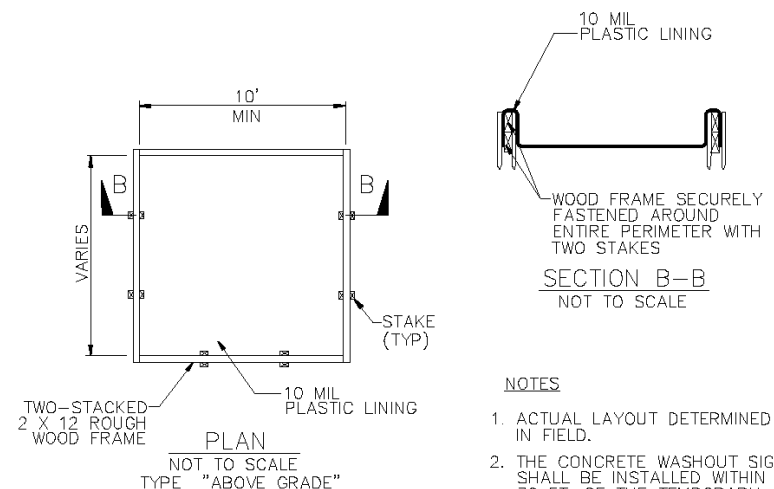
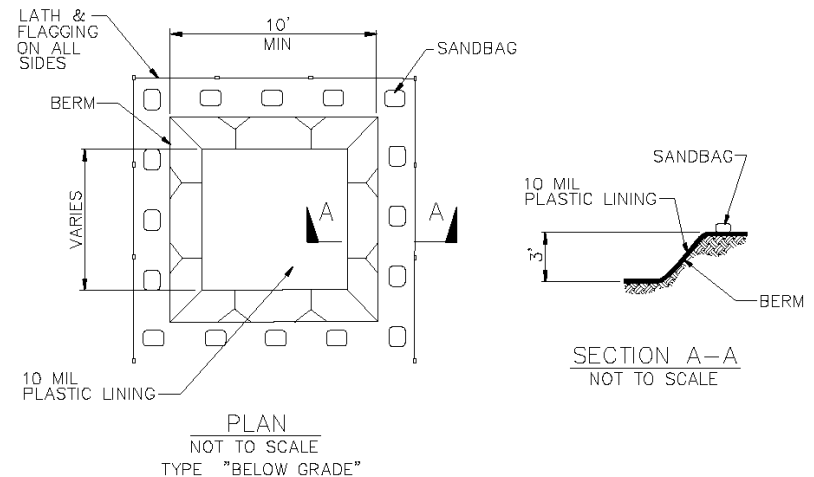
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WM-8

Concrete Waste Management

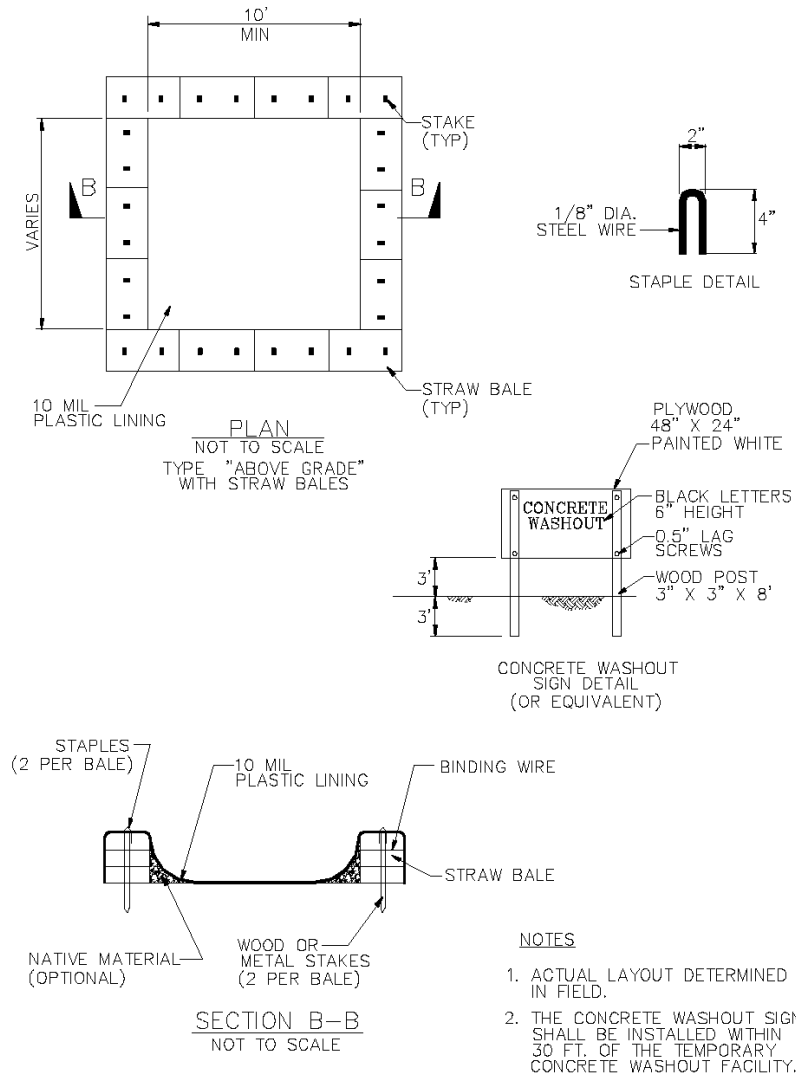


NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

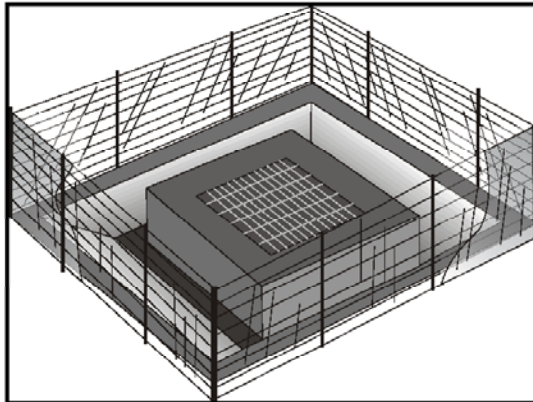
Concrete Waste Management

WM-8



Storm Drain Inlet Protection

SE-10



Description and Purpose

Storm drain inlet protection consists of a sediment filter or an impounding area around or upstream of a storm drain, drop inlet, or curb inlet. Storm drain inlet protection measures temporarily pond runoff before it enters the storm drain, allowing sediment to settle. Some filter configurations also remove sediment by filtering, but usually the ponding action results in the greatest sediment reduction.

Suitable Applications

Every storm drain inlet receiving sediment-laden runoff should be protected.

Limitations

- Drainage area should not exceed 1 acre.
- Straw bales, while potentially effective, have not produced in practice satisfactory results, primarily due to improper installation.
- Requires an adequate area for water to pond without encroaching into portions of the roadway subject to traffic.
- Inlet protection usually requires other methods of temporary protection to prevent sediment-laden stormwater and non-stormwater discharges from entering the storm drain system.
- Sediment removal may be difficult in high flow conditions or if runoff is heavily sediment laden. If high flow conditions are

Objectives

EC	Erosion Control	
SE	Sediment Control	✓
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

- ✓ Primary Objective
- ✓ Secondary Objective

Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

- SE-1 Silt Fence
- SE-5 Fiber Rolls
- SE-6 Gravel Bag Berm
- SE-8 Sandbag Barrier
- SE-9 Straw Bale Barrier



SE-10

Storm Drain Inlet Protection

expected, use other onsite sediment trapping techniques in conjunction with inlet protection.

- Frequent maintenance is required.
- For drainage areas larger than 1 acre, runoff should be routed to a sediment-trapping device designed for larger flows. See BMPs SE-2, Sediment Basin, and SE-3, Sediment Traps.
- Excavated drop inlet sediment traps are appropriate where relatively heavy flows are expected, and overflow capability is needed.

Implementation

General

Large amounts of sediment may enter the storm drain system when storm drains are installed before the upslope drainage area is stabilized, or where construction is adjacent to an existing storm drain. In cases of extreme sediment loading, the storm drain itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

Inlet control measures presented in this handbook should not be used for inlets draining more than one acre. Runoff from larger disturbed areas should be first routed through SE-2, Sediment Basin or SE-3, Sediment Trap. Different types of inlet protection are appropriate for different applications depending on site conditions and the type of inlet. Inlet protection methods not presented in this handbook should be approved by the local stormwater management agency.

Design and Layout

Identify existing and planned storm drain inlets that have the potential to receive sediment-laden surface runoff. Determine if storm drain inlet protection is needed and which method to use.

- Limit upstream drainage area to 1 acre maximum. For larger drainage areas, use SE-2, Sediment Basin, or SE-3, Sediment Trap, upstream of the inlet protection device.
- The key to successful and safe use of storm drain inlet protection devices is to know where runoff will pond or be diverted.
 - Determine the acceptable location and extent of ponding in the vicinity of the drain inlet. The acceptable location and extent of ponding will influence the type and design of the storm drain inlet protection device.
 - Determine the extent of potential runoff diversion caused by the storm drain inlet protection device. Runoff ponded by inlet protection devices may flow around the device and towards the next downstream inlet. In some cases, this is acceptable; in other cases, serious erosion or downstream property damage can be caused by these diversions. The possibility of runoff diversions will influence whether or not storm drain inlet protection is suitable; and, if suitable, the type and design of the device.
- The location and extent of ponding, and the extent of diversion, can usually be controlled through appropriate placement of the inlet protection device. In some cases, moving the

Storm Drain Inlet Protection SE-10

inlet protection device a short distance upstream of the actual inlet can provide more efficient sediment control, limit ponding to desired areas, and prevent or control diversions.

- Four types of inlet protection are presented below. However, it is recognized that other effective methods and proprietary devices exist and may be selected.
 - Filter Fabric Fence: Appropriate for drainage basins with less than a 5% slope, sheet flows, and flows under 0.5 cfs.
 - Excavated Drop Inlet Sediment Trap: An excavated area around the inlet to trap sediment (SE-3).
 - Gravel bag barrier: Used to create a small sediment trap upstream of inlets on sloped, paved streets. Appropriate for sheet flow or when concentrated flow may exceed 0.5 cfs, and where overtopping is required to prevent flooding.
 - Block and Gravel Filter: Appropriate for flows greater than 0.5 cfs.
- Select the appropriate type of inlet protection and design as referred to or as described in this fact sheet.
- Provide area around the inlet for water to pond without flooding structures and property.
- Grates and spaces around all inlets should be sealed to prevent seepage of sediment-laden water.
- Excavate sediment sumps (where needed) 1 to 2 ft with 2:1 side slopes around the inlet.

Installation

- **DI Protection Type 1 - Filter Fabric Fence** - The filter fabric fence (Type 1) protection is shown in the attached figure. Similar to constructing a silt fence; see BMP SE-1, Silt Fence. Do not place filter fabric underneath the inlet grate since the collected sediment may fall into the drain inlet when the fabric is removed or replaced.
 1. Excavate a trench approximately 6 in. wide and 6 in. deep along the line of the silt fence inlet protection device.
 2. Place 2 in. by 2 in. wooden stakes around the perimeter of the inlet a maximum of 3 ft apart and drive them at least 18 in. into the ground or 12 in. below the bottom of the trench. The stakes must be at least 48 in.
 3. Lay fabric along bottom of trench, up side of trench, and then up stakes. See SE-1, Silt Fence, for details. The maximum silt fence height around the inlet is 24 in.
 4. Staple the filter fabric (for materials and specifications, see SE-1, Silt Fence) to wooden stakes. Use heavy-duty wire staples at least 1 in. in length.
 5. Backfill the trench with gravel or compacted earth all the way around.
- **DI Protection Type 2 - Excavated Drop Inlet Sediment Trap** - The excavated drop inlet sediment trap (Type 2) is shown in the attached figures. Install filter fabric fence in

SE-10 Storm Drain Inlet Protection

accordance with DI Protection Type 1. Size excavated trap to provide a minimum storage capacity calculated at the rate 67 yd³/acre of drainage area.

- **DI Protection Type 3 - Gravel bag** - The gravel bag barrier (Type 3) is shown in the figures. Flow from a severe storm should not overtop the curb. In areas of high clay and silts, use filter fabric and gravel as additional filter media. Construct gravel bags in accordance with SE-6, Gravel Bag Berm. Gravel bags should be used due to their high permeability.
 1. Use sand bag made of geotextile fabric (not burlap) and fill with 0.75 in. rock or 0.25 in. pea gravel.
 2. Construct on gently sloping street.
 3. Leave room upstream of barrier for water to pond and sediment to settle.
 4. Place several layers of sand bags – overlapping the bags and packing them tightly together.
 5. Leave gap of one bag on the top row to serve as a spillway. Flow from a severe storm (e.g., 10 year storm) should not overtop the curb.
- **DI Protection Type 4 - Block and Gravel Filter** - The block and gravel filter (Type 4) is shown in the figures. Block and gravel filters are suitable for curb inlets commonly used in residential, commercial, and industrial construction.
 1. Place hardware cloth or comparable wire mesh with 0.5 in. openings over the drop inlet so that the wire extends a minimum of 1 ft beyond each side of the inlet structure. If more than one strip is necessary, overlap the strips. Place filter fabric over the wire mesh.
 2. Place concrete blocks lengthwise on their sides in a single row around the perimeter of the inlet, so that the open ends face outward, not upward. The ends of adjacent blocks should abut. The height of the barrier can be varied, depending on design needs, by stacking combinations of blocks that are 4 in., 8 in., and 12 in. wide. The row of blocks should be at least 12 in. but no greater than 24 in. high.
 3. Place wire mesh over the outside vertical face (open end) of the concrete blocks to prevent stone from being washed through the blocks. Use hardware cloth or comparable wire mesh with 0.5 in. opening.
 4. Pile washed stone against the wire mesh to the top of the blocks. Use 0.75 to 3 in.

Costs

- Average annual cost for installation and maintenance (one year useful life) is \$200 per inlet.

Inspection and Maintenance

- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.

Storm Drain Inlet Protection

SE-10

- **Filter Fabric Fences.** If the fabric becomes clogged, torn, or degrades, it should be replaced. Make sure the stakes are securely driven in the ground and are in good shape (i.e., not bent, cracked, or splintered, and are reasonably perpendicular to the ground). Replace damaged stakes.
- **Gravel Filters.** If the gravel becomes clogged with sediment, it must be carefully removed from the inlet and either cleaned or replaced. Since cleaning gravel at a construction site may be difficult, consider using the sediment-laden stone as fill material and put fresh stone around the inlet. Inspect bags for holes, gashes, and snags, and replace bags as needed. Check gravel bags for proper arrangement and displacement.
- **Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness.** Sediment should be removed when the sediment accumulation reaches one-third of the barrier height. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.
- **Remove storm drain inlet protection once the drainage area is stabilized.**
 - Clean and regrade area around the inlet and clean the inside of the storm drain inlet as it must be free of sediment and debris at the time of final inspection.

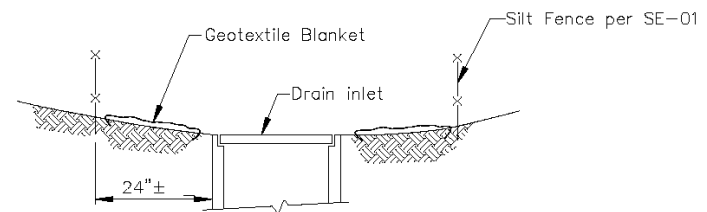
References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

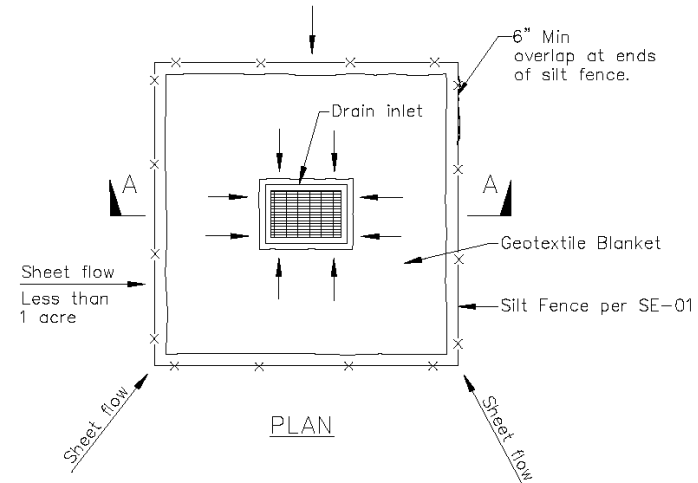
Stormwater Management Manual for The Puget Sound Basin, Washington State Department of Ecology, Public Review Draft, 1991.

SE-10

Storm Drain Inlet Protection



SECTION A-A



PLAN

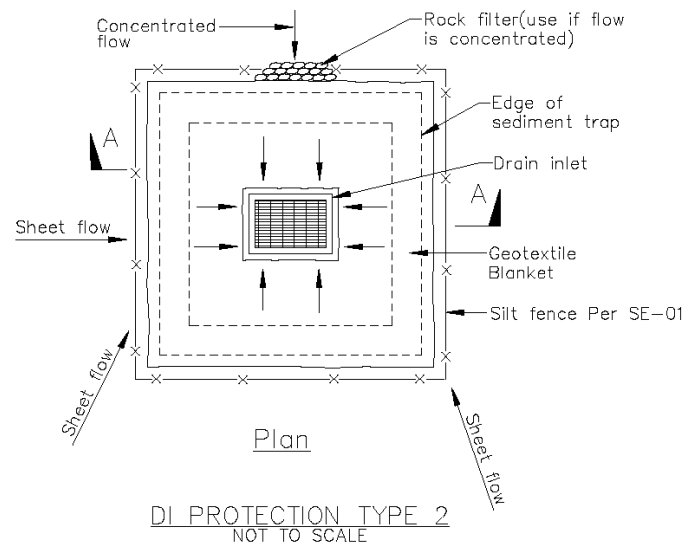
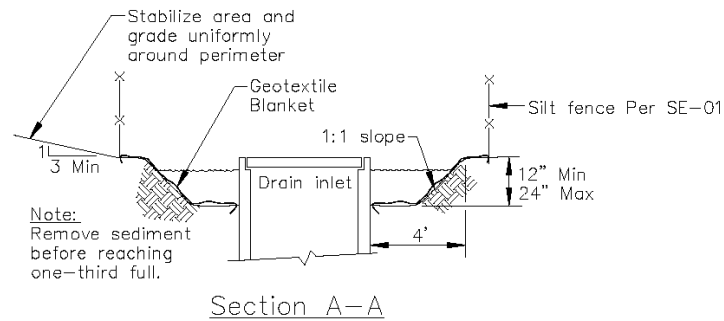
DI PROTECTION TYPE 1
NOT TO SCALE

NOTES:

1. For use in areas where grading has been completed and final soil stabilization and seeding are pending.
2. Not applicable in paved areas.
3. Not applicable with concentrated flows.

Storm Drain Inlet Protection

SE-10

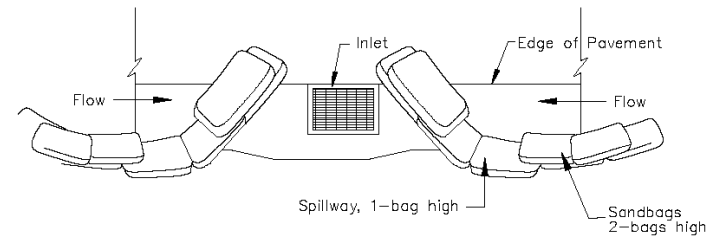


Notes

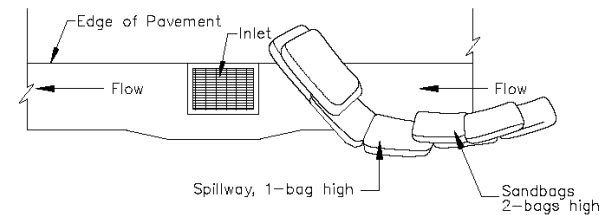
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

SE-10

Storm Drain Inlet Protection



TYPICAL PROTECTION FOR INLET ON SUMP



TYPICAL PROTECTION FOR INLET ON GRADE

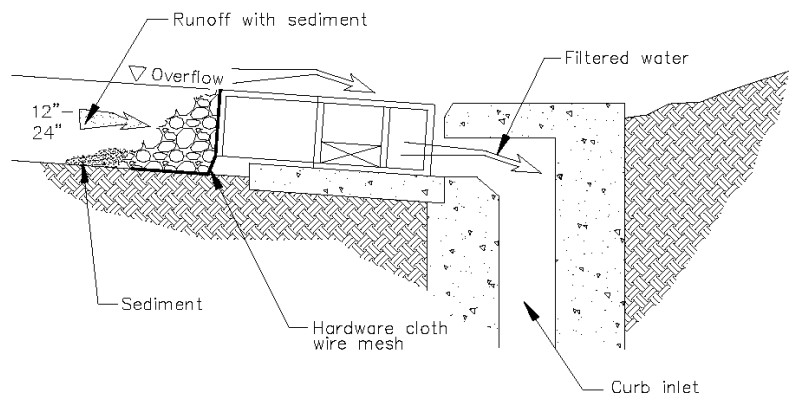
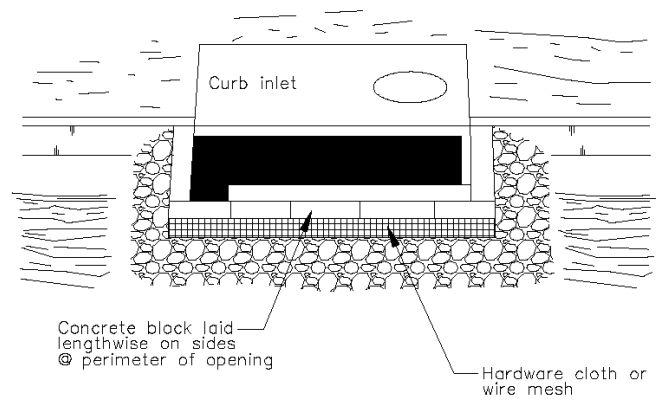
NOTES:

1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

Storm Drain Inlet Protection

SE-10



DI PROTECTION — TYPE 4
NOT TO SCALE

DIVISION H
GENERAL REQUIREMENTS

DIVISION H GENERAL REQUIREMENTS

STANDARD SPECIFICATIONS

These provisions are modifications of the Standard Specifications for Public Works Construction, 2015 Edition, called the Standard Specifications. The Standard Specifications are a part of the Work's Specifications.

The Standard Specifications are written and promulgated by Public Works Standards, Incorporated. Copies of the Standard Specifications are available from the publisher, Building News, Incorporated, 1612 South Clementine Street, Anaheim, California 92802, telephone (714) 517-0970.

PART 1

GENERAL PROVISIONS

SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

1-2 TERMS AND DEFINITIONS.

Agency – See “City.”

Board – The City Council of the City of Long Beach, California, or its designated agencies and boards.

Engineer – The City Engineer of the City of Long Beach, California, and his designated representatives.

Plans – The Plans for this Work consist of Long Beach Drawing B-_____ -OR- C-_____ on file at the office of the City Engineer. A copy is included in the Specifications.

Standard Plans – The City’s Standard Plans published by the Department of Public Works. The version of each standard plan to be used shall be the most recent version available at the time of Bid opening.

Working Day – Any day within the period between the date of the start of the Contract time as specified in 6-1 and the date of field acceptance of the Work by the Engineer, other than:

- a) Saturday,
- b) Sunday,
- c) Any day designated as a holiday by the City, including New Year’s holiday, Martin Luther King Jr. Day, President’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day following Thanksgiving Day, and Christmas Day.
- d) Any other day designated as a holiday in a Master Labor Agreement entered into by the Contractor or on behalf of the Contractor as an eligible member of a contractor’s association,
- e) Any day the Contractor is prevented from working at the beginning of the workday for cause as specified in 6-6.1, or
- f) Any day the Contractor is prevented from working during the first 5 hours with at least 60 percent of the normal work force for cause as specified in 6-6.1.

City – The City of Long Beach, California, its Boards and Commissions, and their officials, employees, and agents.

Major Bid Item – A single Contract item constituting 10% or more of the original Contract Price.

1-3 ABBREVIATIONS.

1-3.2 Common Usage.

<u>Abbreviation</u>	<u>Word or Words</u>
AB	Anchor bolt
AC	Asphalt concrete, advisory circular
Ave	Avenue
BCR	Begin Curb Return
BD	Bottom of Driveway
Bldg	Building
Blvd	Boulevard
BM	Benchmark
BMP	Best Management Practice
BW	Back of Walk
C	Conduit
CB	Catch Basin
CLB, COLB	City of Long Beach
C&G	Curb and Gutter
CMP	Corrugated metal pipe
CW	Cold water
D	Curvature Degree
D.F.	Drinking fountain
D/F	Double faced
DWY	Driveway
ECR	End Curb Return
Elec	Electrical
Elev	Elevation
E.P.	Each plant
E/S	East Side
Ex, Exist	Existing
(F)	Denotes "Final Pay Quantity" in the Bid
FH	Fire Hydrant
FL	Flow Line
FS	Finished Surface
GB	Greenbook, Grade Break
HW	Hot water
L	Length
Lav	Lavatory
LB	Long Beach
LD	Local Depression
L&I	Landscape and irrigation

<u>Abbreviation</u>	<u>Word or Words</u>
LP	Light Pole
Ltg	Lighting
m	Meter
mm	Millimeter
m ²	Square meter
m ³	Cubic meter
Mfr	Manufacturer
MH	Manhole
MLLW	Mean lower low water (survey datum)
Mon	Monument
MSL	Mean sea level
N	North
No.	Number
N/S	North Side
NS-n, SE-n, or WM-n	Best Management Practice description from the California Stormwater Quality Association BMP Handbook. The letter "n" denotes the description number.
NTS	Not to Scale
PB	Pull Box
PP	Power Pole
PVMT	Pavement
QA/QC	Quality assurance / quality control
QC	Quick coupler
R	Radius
Rd	Road
Rwy	Runway
R/W	Right of Way
S	South
(S)	Denotes "Specialty Item" in the Bid
S/S	South Side
Sch	Schedule
SF	Square foot
S/F	Single faced
SL	Street Light
SNB	Select natural base
S/S	South Side
ST	Street
STA	Station
Std	Standard
SW	Sidewalk
TD	Top of Driveway
T	Tangent
TC	Top of Curb
Tonne	Metric ton, equals 1,000 kilograms
Typ	Typical

<u>Abbreviation</u>	<u>Word or Words</u>
Twy	Taxiway
UON	Unless otherwise noted
W	Width / West
WC	Water closet
WH	Weep Hole
W/S	West Side
WV	Water Valve
WWM	Welded wire mesh

1-4 UNITS OF MEASURE.

1-4.1 General.

The Contractor shall use U.S. Standard Measures for construction unless otherwise noted in the specifications for the Work.

SECTION 2 – SCOPE AND CONTROL OF THE WORK

2-3 SUBCONTRACTS.

2-3.1 General.

To the extent that Subsection 2-3.1 is inconsistent with Long Beach Municipal Code Sections 2.87.010 through 2.87.080, the Long Beach Municipal Code supersedes Subsection 2-3.1.

2-4 CONTRACT BONDS.

Sureties that are not listed in the latest revision of the United States Department of the Treasury Circular 570 shall nevertheless be admitted to issue bonds in the State of California.

2-5 PLANS AND SPECIFICATIONS.

2-5.3 Submittals. *Supplement Table 2-5.3.2(A), untitled, and the listing shown in Subsection 2-5.3.4, "Supporting Information," with the following combined table:*

TABLE 2-5.3(A), Submittals

Item	Section Number	Title	Subject
18	2-5.4	Record Drawings	Record Drawings
19	2-9	Surveying	Survey Records
20	4-1.4	Test of Materials	List of Materials
21	4-1.5	Certification	Certifications
22	6-1	Construction Schedule and Commencement of Work	Construction Schedule

Item	Section Number	Title	Subject
24	7-2.2	Labor	Labor Compliance documentation
25	7-3 and 7-4	Liability and Workers' Compensation Insurance	Insurance documentation
27	7-9	Protection and Restoration of Existing Improvements	Traffic Sign and Curb Marking Inventory
28	9-2	Lump Sum Work	Lump Sum Details
29	201-1.1	Requirements	Concrete Mix Designs
30	203-6.1	General	Asphalt Concrete Mix Designs
31	600-1.1	Public Convenience and Safety	Traffic Control Plan

This table is not comprehensive: additional submittal items may be listed in other sections of the Specifications.

2-5.3.1 General.

Deliver submittals to:

Department of Public Works, City of Long Beach
Bureau of Engineering, 10th Floor City Hall
333 W. Ocean Blvd.
Long Beach, CA 90802
Attn.: Chief Construction Inspector
Project Title: Daisy – Myrtle Bicycle Boulevards

The Contractor shall not begin Work until the Engineer has approved relevant submittals in writing. The City will not make final payment before the Contractor delivers all required Work submittals.

2-5.4 Record Drawings.

The Contractor shall keep one complete set of the Plans, reserved for use as record drawings, at the Work site at all times. The Contractor shall maintain on these drawings a currently updated record of all construction changes and variations from the Plans, including all underground and surface improvements installed in locations other than those indicated on the Plans. The Contractor shall enter the record information in red. Where a Plan does not exist, the Contractor shall submit an accurate and detailed sketch. The Contractor shall properly dimension and locate all changes and variations to the Plans.

The Contractor shall submit the record drawings to the Engineer prior to final acceptance of the Work.

2-9 SURVEYING.

2-9.1 Permanent Survey Markers.

The Contractor shall be responsible for the preservation and perpetuation of all existing monuments which control subdivisions, tracts, boundaries or rights-of-way, or which provide survey control, including benchmarks, which will be disturbed by the Contractor's activities.

After receiving the Notice to Proceed, the Contractor, using the services of a surveyor licensed in California, shall submit to the City preliminary Corner Records for those monuments that were found in the area of construction. The Contractor will not be given authorization for any removals until the City's Surveyor has accepted and approved the preliminary Corner Records.

Prior to removals, the Contractor shall request the City of Long Beach Surveyor to transfer to temporary bench marks the elevation for any bench marks to be reset, and provide a brass disc for the City Surveyor to stamp. When the discs are stamped and returned to the Contractor, the Contractor shall construct the bench marks at locations marked out by the City Surveyor.

The Contractor's surveyor shall set new ties for any monuments whose ties are disturbed, and prepare preliminary Corner Records for the new ties.

After construction and before final payment, the Contractor's surveyor shall submit to the City for its review the preliminary Corner Records for any monuments replaced or constructed, or whose ties are reset. The City will not approve preliminary Corner Records showing "No Reference" unless the Contractor can demonstrate that a diligent effort was made to find a reference. After the City's approval, the Contractor's surveyor shall file Corner Records for those monuments in the Office of the County Surveyor and shall provide the City with a copy of all Corner Records filed.

Payment for monument preservation and perpetuation by the Contractor shall be considered as included in the prices bid for the various items of Work, and the City will make no additional payment therefor.

2-9.2 Survey Service.

The Contractor shall set and maintain all stakes and marks necessary for the construction of the Work and perform any additional design surveys that may be required. Except for the survey control data provided on the plans, all calculations, surveying and measures required for setting and maintaining the necessary lines and grades shall be performed by the Contractor.

Surveys performed by the Contractor shall conform to the California Land Surveyor's Act. In accordance with the Act, "responsible charge" for surveying shall reside with a licensed land surveyor or a civil engineer qualified to practice land surveying in California.

The minimum standard of survey quality shall be that of similar surveys performed by the City of Long Beach.

The Contractor shall provide to the Engineer copies of all calculations, survey notes, and staking data when requested by the Engineer. The Engineer shall decide all questions which may arise as to the quality or acceptability of deliverables furnished and surveying performed for this Work, and the Engineer's decision shall be final.

The Contractor shall verify layout information shown on the Plans before proceeding with layout of construction features.

The Contractor shall record deviations from the required lines and levels and shall advise the Engineer promptly upon detecting deviations exceeding indicated or recognized tolerances. Record deviations which are accepted (not corrected) shall be shown on the as-built record drawings. Before final acceptance of the Work, the Contractor shall provide to the Engineer all computations, survey notes, and other survey data used to accomplish the Work, which shall become the property of the City. Construction stakes shall be removed from the Work when no longer needed.

Payment for surveying by the Contractor shall be considered as included in the prices bid for the various items of Work, and the City will make no additional payment therefor.

2-10 AUTHORITY OF BOARD AND ENGINEER.

The Engineer will interpret the meaning of the Plans and Specifications, and the Engineer's decision will be final.

If there appears to be any error or discrepancy in or between the Plans and Specifications, the Contractor shall refer the matter to the Engineer for adjustment before proceeding with the Work. If the Contractor proceeds with the Work without referring the matter, the Contractor does so at its own risk and must bear any additional cost incurred as a result of failure to refer.

SECTION 3 – CHANGES IN WORK

3-2 CHANGES INITIATED BY THE AGENCY.

3-2.2 Contract Unit Prices.

3-2.2.1 General. :

If the Engineer orders a change in quantity of an item of Work, and the change does not involve a substantial change in character of the Work from that shown in the Plans or Specifications, the City will adjust the total payment to be made for the item of Work by multiplying the amount authorized and installed by the Contract Unit Price. This amount may be greater or less than the amount shown in the Bid.

If the total quantity of a Major Bid Item is changed, only changes within 25% of the quantity shown in the Bid, either more or less, will be adjusted at the Contract Unit Price. If the total quantity of a Major Bid Item is changed in excess of 25%, the adjustment in payment will be made per 3-2.4. The adjustment in payment will be made only for the

quantity of the Major Bid Item that exceeds 25%, either increase or decrease.

3-2.2.2 Increases of More Than 25%. *Replace this subsection with the following:*

If the total quantity of a Major Bid Item is increased in excess of 25% more than the quantity shown in the Bid, and if the City and the Contractor cannot agree upon an adjustment in Contract Unit Price, the Work shall proceed according to 3-3, and as follows:

The costs determined for the item of Work shall not include fixed costs. Fixed costs shall be deemed to have been recovered by the Contractor through payment for 125% of the Bid quantity at the Contract Unit Price.

3-2.2.3 Decreases of More Than 25%.

If the total quantity of a Major Bid Item is decreased in excess of 25% less than the quantity shown in the Bid, no adjustment in the Contract Unit Price will be made unless so requested in writing by the Contractor. If the Contractor so requests, the adjustment in payment will be made per 3-2.4. If no adjustment in Contract Unit Price can be agreed upon by the City and the Contractor, the Work shall proceed according to 3-3, and as follows:

In no case will payment be less than would be made for the actual quantity at the Contract Unit Price, nor more than would be made for 75% of the Bid quantity at the Contract Unit Price.

3-3 EXTRA WORK.

3-3.2 Payment.

3-3.2.3 Markup.

3-3.2.3.1 Work by Contractor.

The following percentages shall be added to the Contractor's costs and shall constitute the markup for all overhead and profit:

Labor	20%
Materials	15%
Equipment Rentals	15%
Other Contractor's costs	15%

One percent (1%) may also be added to the sum of costs and markups as compensation for the Contractor's bond premium.

3-3.2.3.2 Work by Subcontractor. *Replace this subsection with the following:*

When a subcontractor performs all or any part of the extra work, the markups in 3-3.2.3.1 shall be added to the subcontractor's actual cost of such work. The Contractor may add an additional markup of 10% of the first \$5,000 of the subcontracted portion of the extra work and 5% on work added in excess of \$5,000 of the subcontracted portion of work.

SECTION 4 – CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP

4-1.2 Protection of Work and Materials.

The Contractor shall remove and replace materials damaged by the Contractor's operations at the Contractor's sole expense before the final inspection and acceptance.

4-1.4 Test of Materials.

The Contractor shall submit samples of materials, at the Contractor's sole expense, as the Engineer may require, 15 days in advance of being incorporated in the Work to a testing laboratory designated by the City.

Samples of materials to be tested shall be properly identified and shall establish exact nature and character of materials. The City may reject any material or part thereof that proves defective as a result of testing and requires satisfactory replacement.

4-1.6 Trade Names or Equals.

Where a specific manufacturer is noted on the Plans or listed in the Specifications, unless otherwise noted, an "approved equal" item may be substituted.

If a Bidder desires to bid an "approved equal" item, the Bidder shall submit a request to do so to the Engineer in writing by the time and as shown in the Instructions to Bidders.

SECTION 5 – UTILITIES

5-1 LOCATION.

The City has determined the locations of all known existing subsurface facilities from records and field investigations and these facilities are shown on substructure drawings, which are available for review in the office of the City Engineer. However, the City does not guarantee the accuracy of the indicated locations or that all facilities are shown.

The Contractor shall request Underground Service Alert and conduct potholing at least two weeks prior to any other excavation. Any discrepancies between field conditions and the Plans and Specifications shall be submitted to the Engineer in writing for review.

5-3 REMOVALS.

The Contractor shall remove interferences shown on the Plans, other than utilities, to clear construction by at least 12 inches.

5-4 RELOCATION.

The Contractor shall perform work on utilities only when authorized by the utility's owner and only using the services of firms pre-qualified by the owner.

5-4.1 Resetting Vaults and Other Appurtenances.

Certain manholes, vaults, valve boxes or other appurtenances belonging to utility companies or others may need resetting to grade. The City does not guarantee that all such items are shown on the Plans. The Contractor is not required to do the work of resetting such to grade, except sewer and storm drain manholes, Long Beach Gas & Oil Department and Long Beach Water Department valve boxes and meter boxes, and City-owned communications vaults; however, the Contractor shall notify the owners at least one week in advance of construction to give them opportunity to perform the necessary work in conjunction with Work performed by the Contractor.

5-7 UNKNOWN FACILITIES.

If the Contractor encounters any unknown facility, or if any known facility's actual location is greatly different than the Plans indicate, the Contractor shall immediately notify the Engineer and not disturb the facility except in the presence of the Engineer.

5-8 FACILITIES REQUIRING SPECIAL PRECAUTIONS.

The Contractor's attention is directed to the existence of certain underground facilities that may require that Contractor take special precautions to protect the health, safety and welfare of workers and the public. Facilities requiring special precautions include but are not limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipelines; underground electric supply system conductors or cables either directly buried or in duct or conduit which do not have concentric neutral conductors or other effectively grounded metal shields or sheaths; and underground electrical conductors with a potential-to-ground of more than 300 volts. The Contractor shall notify the Engineer at least 48 hours before performing any Work in the vicinity of such facilities.

If such facilities are not located on the Plans in both alignment and elevation, the Contractor shall perform no Work in the vicinity of these facilities until the owner, or its representative, has located the facility by potholing, probing, as-built plans or other means that will locate and identify the facility.

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

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.

6-1.1 Construction Schedule.

6-1.1.1 Terms and Definitions. The following terms and their respective definitions are in addition to those specified in 1-2.

As-Built Schedule – The final updated Construction Schedule that reflects actual construction progress throughout the entire duration of the Project.

Baseline Schedule – The original Construction Schedule used as the basis for measuring construction progress and Contract performance.

Constraint – A requirement that restricts or dictates the Construction Schedule.

Construction Schedule – The schedule of construction activities that reflects the means and methods, planned sequencing, duration, and Milestone dates for the completion and acceptance of the Work. Types include the Baseline Schedule, Weekly Schedule Update, Monthly Schedule Update, and the As-Built Schedule.

Critical Path – The sequence of activities shown on the Construction Schedule which adds up to the longest overall duration.

Data Date – The latest date through which the activities shown on the Construction Schedule have been updated.

Milestone – A schedule activity that has zero duration and which graphically represents the start or finish of a portion of the Work.

Monthly Schedule Update – An updated Construction Schedule submitted every month that compares actual construction progress versus the progress planned on the Baseline Schedule.

Total Float - the maximum amount of time an activity can be delayed from its early start without delaying the completion of the Work. Float shall be an expiring resource available to both the Contractor and the Agency. Float shall not be for the exclusive use or benefit of either the Agency or the Contractor.

Weekly Schedule Update – An updated Construction Schedule submitted every week that reflects the status of construction activities from the past week and also includes construction activities scheduled in detail for the following 2 weeks.

6-1.1.2 General. Construction schedules shall conform to the following requirements:

- a) The Construction Schedule shall be prepared using the latest version of Primavera "Suretrak", Microsoft "Project Professional", Primavera "Project Planner (P6)", or Agency-approved equal.
- b) The Construction Schedule shall be prepared using the Critical Path Method (CPM) illustrating the chronological relationship and sequence of work activities. Activities on the Critical Path shall be clearly delineated.
- c) Work activities shall be based on the Bid items listed in the Schedule of Prices in the Bid Proposal and the following:

- i) Bid Items shall be subdivided into those portions to be constructed during each stage or phase of construction, or portions which do not exceed 20 Working Days, whichever is less.
- ii) Each activity shall be identified with its corresponding Bid item number(s) or Change Order item number(s) listed in the Engineer's Monthly Estimate.
- iii) Each submittal, and the corresponding Agency review period, shall be shown as an individual activity.
- iv) Submittals which must be accepted prior to issuance of the NTP shall be identified.
- v) The procurement of construction materials and equipment shall be identified and shown as individual activities.
- vi) Work to be performed by subcontractors shall be identified and shown as individual activities.
- vii) NTP requirements shall be shown as individual activities.
- vii) Each submittal of the Equal Employment Opportunity Form per 7-2.6 shall be shown as a separate activity
- d) Start and completion dates of each work activity shall be illustrated.
- e) The Construction Schedule shall commence on the date of issuance of the NTP and end on the date of fulfillment of all of the requirements in the Contract Documents.
- f) Change Orders, including number, description, approval date, and duration shall be shown as individual activities.
- g) The schedule shall reflect the following Constraints:
 - i) Utility relocations per 5-4.
 - ii) Schedule impacts due to the protection, removal, or relocation of utilities per 5-5.
 - iii) The Sequence of Work per 6-2.3
 - iv) Temporary traffic control requirements per Section TTC of the Special Provisions.
 - v) The Time of Completion per 6-7. A Baseline Schedule submitted showing completion earlier or later than the time of completion specified will not be

accepted.

h) The schedule activities shall include the following information:

- i) Activity ID
- ii) Bid Item No(s).
- iii) Activity Name
- iv) Original Duration
- v) Actual Duration
- vi) Start Date
- vii) Finish Date
- viii) Actual Start Date
- ix) Actual Finish Date
- x) Total Float

6-1.1.3 Submittals.

a) Baseline Schedule.

Within 10 Days of issuance of the NTP, the Contractor shall submit a Baseline Schedule for review and acceptance by the Engineer in accordance with 2-5.3 and 6-1.1.3.

The Baseline Schedule submittal shall include a portable document file (pdf) and a program file, accessible using the latest version of Primavera "Suretrak", Microsoft "Project Professional", Primavera "Project Planner (P6)", or Agency-approved equal. The schedule may be emailed to the Engineer or submitted on a compact disc (CD) along with 2 printed color copies on 11-inch x 17-inch sheets.

b) Bi-weekly Schedule Updates. During the bi-weekly on-site management meetings, the Contractor shall submit Weekly Schedule Updates using the same software used to prepare the Baseline Schedule. The schedule updates will be used to manage, coordinate, and schedule all upcoming Contract activities. These detailed schedules may be submitted in bar chart format and shall reflect the logic and sequence used for the accepted Baseline Schedule. The Weekly Schedule Update shall include the following:

- i) Status of the construction activities of the past week, scheduled vs. actual.

ii) An explanation for deviations from planned activities, together with actions taken or planned to recover lost time, if applicable.

iii) Two-week "look-ahead" Schedule detailing all work activities planned for the next 2 weeks, including all work to be performed by others. Activities included in the Baseline Schedule shall be further broken down into detailed activities, by specific task, by specific area, at the crew level or lower.

c) As-Built Schedule. Within 7 Days after completion of the Work per 6-8.1, the Contractor shall prepare and submit an As-Built Construction Schedule using the same software used to prepare the Baseline Schedule. The Engineer will not submit the final progress payment for processing until the schedule has been submitted. The schedule may be emailed to the Engineer or submitted on a CD with 2 printed color copies on 11-inch x 17-inch sheets.

The As-Built Schedule shall reflect the actual progress of the Work from the date of issuance of the NTP through the date of completion. Should the As-Built Schedule not reflect the actual start and finish dates of all work activities, the schedule will be returned to the Contractor for revision and re-submittal.

The schedule shall be submitted with a written certificate signed by the Contractor's Authorized Representative stating:

"To my knowledge and belief, the enclosed As-Built Schedule reflects the actual start and finish dates of the actual work activities for the Contract contained herein."

6-1.1.4 Payment. Payment for preparation of Schedule shall be considered as included in the prices for the various items of Work, and the City will make no additional payment therefor.

No separate or additional payment will be made for preparation of each Bi-weekly Schedule Update.

6-1.2 Commencement of Work.

The Contractor shall commence work on the date to be specified in a written "Notice to Proceed" from the City and complete all Work within the time stated in Division B. The Contractor shall begin the procurement of materials within 5 working days after approval by the Engineer of shop drawings and submittals relating to equipment and materials.

The time of completion shall not include the 30 days required for the maintenance and plant establishment period as specified in Section 308-6, "Maintenance and Plant Establishment," of the Standard Specifications.

After the award of contract and approval of shop drawings, the City will issue to the Contractor a written "Notice to Procure" for all {traffic equipment and} materials

necessary to construct the Work. Within five working days after receipt of this Notice, the Contractor shall place orders for {signal standards, mast arms, solid-state traffic-actuated controllers, and electrical service cabinets}. [Modify as appropriate.] Within the same five days, the Contractor shall submit copies of the orders to the City, along with the manufacturer's estimated delivery dates.

As soon as the Contractor receives notification of delivery of the equipment and materials, the Contractor shall notify the City and submit a construction schedule.

The Contractor shall submit a written proposed construction schedule to the Engineer at the preconstruction conference required in Subsection 6-1.3. The Contractor shall submit updated construction schedules biweekly.

6-1.3 Preconstruction Conference.

Prior to the commencement of Work and after execution of the Contract, the City will contact the Contractor to participate and make arrangements for a preconstruction conference with all interested parties.

:

6-1.4 Notices.

The Contractor shall give advance notice, shown below, to the proper office prior to the time each of the following operations is to be commenced.

Operation	Office	Phone	Advance Notice
Start of Work	Inspection Section	(562) 570-5160	2 working days
Shutdown of work or resumption of work after shutdown	Inspection Section	(562) 570-5160	2 working days
Layout & Stakes	Inspection Section	(562) 570-5160	2 working days
Closing of Streets	L.B. Police Department* L.B. Fire Department*	(562) 570-7241 (562) 591-7631	24 hours
Traffic Striping and Signs	Inspection Section	(562) 570-5160	3 working days
Traffic Signals & Loop Detectors	Inspection Section	(562) 570-5160	3 working days
Bus Stops	Long Beach Public Transportation Company*	(562) 808-8801	1 week
Tree Pruning	Inspection Section	(562) 570-5160	2 working days

*Notify the Inspection Section before notifying these offices.

The Contractor shall notify the owners of all utilities at least 48 hours before any excavation or work adjacent to utility structures. The utility companies listed below can be contacted as indicated.

1. Underground Service Alert (USA/SC)
Telephone: 1-800-227-2600
2. City of Long Beach Water Department or USA/SC
(Water, Sewer and Storm Drain Facilities)
Operations Service Center
Telephone: (562) 570-2389 or (562) 570-2390
3. City of Long Beach Gas and Oil Department or USA/SC
Chuck Querido
Telephone: (562) 570-2036
4. Southern California Edison Company or USA/SC
Telephone: 1-800-655-4555
5. Frontier Communications
Neil Aliberti
Telephone: (714) 375-6705
6. City of Long Beach Bureau of Traffic and Transportation
Traffic Signal Coordinator, Operations Division
Mike Sickles
Telephone: (562) 570-3263
7. City Light and Power, Inc.
(Street Light Facilities)
2961 Redondo Avenue
Kevin Bredenkamp
Telephone: (562) 983-2000
8. All other utilities:
City of Long Beach, Bureau of Engineering
Telephone: (562) 570-5160

6-1.5 Bi-weekly Update Meetings. The Agency will schedule and conduct weekly meetings for the purposes of construction management as well as assessing the status of the informal partnership. The weekly meetings will have a set agenda, including, but not limited to, a report and discussion of the status of the following:

- a) Weekly Detailed Schedule per 6-1.1(d).
- b) Quality assurance/quality control

- c) BMPs/SWPPP Compliance
- d) Site operations, including coordination of work by others
- e) Community/public relations
- f) Change Orders
- g) Submittals
- h) RFI's

6-7 TIME OF COMPLETION.

6-7.4 Additional Requirements.

The Contractor shall perform no Work on days other than Working Days or outside of normal working hours (defined as the hours between 7:00 a.m. to 4:00 p.m.) without the consent of the Engineer, unless otherwise specified. In any event, all Work shall be subject to approval of the Engineer. Before starting such work, the Contractor shall make arrangements with the Engineer for the continuous or periodic inspection of the work and tests of materials, when necessary. If the Contractor requests permission to outside of the above time periods and if the City grants such request, the Contractor shall pay all extra expense to the City for inspection and other incidental expenses caused by such overtime work. If the City requests the Contractor to work overtime or if overtime work is specifically required by these Specifications, the City will pay all extra expense of inspection.

If the Contractor finds it necessary, in order to complete the work according to schedule, to perform certain of its operations outside of Working Days or normal working hours, these operations shall be performed as part of the Work included in the Contract Price and shall not constitute a basis for additional payments.

6-8 COMPLETION, ACCEPTANCE, AND WARRANTY.

Upon acceptance by the Engineer, the Engineer will file a Notice of Completion with Los Angeles County Recorder. The date the Notice of Completion is filed will be the date of acceptance of the Work and the date the Contractor is relieved from responsibility to protect the Work.

The acceptance of the Work or the payment of any money by the City shall not operate as a waiver of any provision of the Contract, or of any power reserved to the City, or of any right to damages or indemnity provided in the Contract. The waiver of any breach of the Contract, or any default hereunder, shall not be held to be a waiver of any other or subsequent breach or default.

The Contractor shall guarantee all Work against failure due to defective materials and faulty workmanship for a period of 1 year after the date of acceptance of the Work by the City, unless some longer period is expressly set forth in any manufacturer's warranty or within the Specifications.

When the City discovers defective material or workmanship that requires repair or replacement under guarantee, the Contractor shall furnish all necessary labor, materials, and equipment to correct and make good, at no expense to the City, all such defects.

The Contractor shall commence repair or replacement within 24 hours after receiving written notice from the Engineer, and diligently and continuously perform the Work until the repair or replacement is completed and the City has accepted it.

6-9 LIQUIDATED DAMAGES.

The City will assess liquidated damages at the rate of \$36,456 per calendar day that the Contractor exceeds the specified time of completion.

6-11 CLAIMS RESOLUTION.

6-11.1 Compliance with Mandatory Procedures. Contractor's use of the claims resolution process available in Public Contract Code Section 9204 (as set forth below in Section 6-11.2) shall not satisfy or otherwise excuse Contractor's compliance with the mandatory notice and claim presentation procedures pursuant to Chapter 5 (commencing with Section 930) of Part 3 of Division 3.6 of Title 1 of the California Government Code.

6-11.2 Public Contract Code Section 9204.

Section 9204 is added to the Public Contract Code, to read:

The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a Contractor in connection with a public works project.

For purposes of this section:

1. "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:
 - (a) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.
 - (b) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.
 - (c) Payment of an amount that is disputed by the public entity.

2. "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.
3. "Public entity" means, without limitation, except as provided in subparagraph 4. below, a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.
4. "Public entity" shall not include the following:
 - (a) The Department of Water Resources as to any project under the jurisdiction of that department.
 - (b) The Department of Transportation as to any project under the jurisdiction of that department.
 - (c) The Department of Parks and Recreation as to any project under the jurisdiction of that department.
 - (d) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
 - (e) The Military Department as to any project under the jurisdiction of that department.
 - (f) The Department of General Services as to all other projects.
 - (g) The High-Speed Rail Authority.
5. "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.
6. "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

The claimant shall furnish reasonable documentation to support the claim.

If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph 3, below, shall apply.

1. If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.
2. Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

3. Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.
4. Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.
5. If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

This section applies to contracts entered into on or after January 1, 2017.

Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

This section shall remain in effect only until January 1, 2020, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2020, deletes or extends that date.

SECTION 7 – RESPONSIBILITIES OF THE CONTRACTOR

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES.

7-1.1 General.

The Contractor shall provide and maintain enclosed toilets for the use of its employees engaged in the Work. These accommodations shall be maintained in a neat and sanitary condition. They shall also comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation of dwellings and camps.

7-1.2 Temporary Utility Services. :

The Contractor shall make arrangements and pay for telephone and gas during construction, including necessary service lines to the nearest point of takeoff.

The Contractor shall use potable water for the Work. Water may be obtained from the Long Beach Water Department by applying for temporary water service at the Water Department offices at 1800 Wardlow Road, Long Beach. The Long Beach Water Department will provide a construction meter at the nearest fire hydrant available. The City will charge for water service at the standard established rates of the Long Beach Water Department.

7-2 LABOR.

7-2.2 Prevailing Wages.

The contractor shall cause all work performed in connection with construction of the Work to be performed in compliance with all applicable federal and state labor standards, including the prevailing wage provisions of sections 1770 *et seq.* of the California Labor Code. The Contractor shall indemnify, defend and hold the City, its Boards, Commissions, and their officials, employees and agents ("Indemnified Parties") harmless from any and all claims, causes of action or liabilities that may be asserted against or incurred by Indemnified Parties with respect to or in any way arising from the Work's compliance with or failure to comply with applicable federal and state labor requirements including, without limitation, the requirements of California Labor Code section 1770 *et seq.*

Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, travel time, and subsistence pay, as provided for in the Labor Code of the State of California.

The Contractor and its subcontractors shall pay directly to each worker employed by them on the Work, who is not a member of an organization having a recognized collective bargaining agreement for that particular craft or work classification, or to make such payments irrevocably to a trustee or to a third person, pursuant to a fund, plan or program for the benefit of employees, their families and dependents, the full value of the employer payments identified in the preceding paragraphs as being included as a part of per diem wages.

(b) Apprentice Employment. The Contractor shall comply with Section 1777.5 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under the Contractor and, by submitting a Bid and executing the Contract, the Contractor stipulates that it shall so comply.

Section 1777.5, as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site that administers the apprenticeship program in that trade for a certificate of approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the Contract. The ratio of apprentices to journeymen in such cases shall be not less than one to five except as specified by law.

The Contractor shall contribute to funds established for the administration of apprenticeship programs if the Contractor employs registered apprentices, or journeymen in an apprenticeable trade, and if other contractors on the site are making such contributions.

Information on apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards branch office, located at 320 West 4th Street, Room 950, Los Angeles, CA

7-2.5 Drug-Free Awareness Program.

Bidders are notified that the Work is funded in whole or in part by a grant from the State of California. If awarded a construction contract, the Contractor will be required to certify in accordance with State requirements that: the Contractor has established a Drug-Free Awareness Program in compliance with Government Code Section 8355; the Contractor has given a copy of the Program to each employee performing Work notifying the employee that compliance with the Program is a condition of employment; and the Contractor has published a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited, and action will be taken against violators.

7-2.6 Housing and Urban Development Act Section 3 Compliance.

Bidders are advised that the Work is subject to Section 3 of the Housing and Urban Development (HUD) Act of 1968 [24 CFR Part 135]. The Section 3 program requires that recipients of certain HUD financial assistance, to the greatest extent possible, provide job training, employment, and contract opportunities for low-income residents in connection with projects and activities in

their neighborhoods. A mandatory Pre-bid Conference to address Section 3 requirements will be held as shown elsewhere in these Special Provisions. The Contractor shall use its best efforts to meet Section 3 requirements. The Contractor shall cooperate with the City and its representatives regarding compliance with Section 3 [24 CFR Part 135] and shall cause its employees and subcontractors to cooperate with the City in complying with Section 3. For more information regarding Section 3, please visit HUD's website at <http://www.hud.gov/offices/fheo/section3/section3.cfm>. The City will provide assistance to Contractor in complying with the program. If you have any questions regarding Section 3, please contact the Business Relations Bureau at 562-570-6200.

7-3 LIABILITY AND WORKERS' COMPENSATION INSURANCE.

The Contractor shall comply with the following requirements and the City of Long Beach Certificate of Insurance and Endorsements.

The Contractor shall, at its sole cost and expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, Contractor's agents, representatives, officers, employees, or subcontractors. Payment for insurance shall be considered as included in the various items of Work as bid or in the lump sum price bid (as the case may be), and no additional payment will be made.

7-3.1 Minimum Insurance Requirements.

7-3.1.1 Commercial general liability insurance equivalent in scope to Insurance Services Office (ISO) form number CG 00 01 11 85 or CG 00 01 11 93 in an amount not less than \$5,000,000 per occurrence and \$5,000,000 general aggregate. Such coverage shall include but shall not be limited to broad form contractual liability, XCU (explosion, underground, and collapse) perils, products and completed operations liability, independent contractors liability, and cross liability protection. The City, its Boards and Commissions, and their officials, employees, and agents shall be named as additional insureds by endorsement equivalent in scope to ISO form CG 20 10 11 85 or to both CG 20 10 10 01 and CG 20 37 10 01. There shall be no limitations on the coverage afforded to the City, its Boards and Commissions, and their officials, employees, and agents.

7-3.1.2 Commercial automobile liability insurance equivalent in scope to ISO form CA 00 01 06 92 covering symbol 1, "Any Auto" in an amount not less than \$1,000,000 combined single limit. The City, its Boards and Commissions, and their officials, employees, and agents shall be named as additional insureds by endorsement. There shall be no limitation of coverage afforded to the City, its Boards and Commissions, and their officials, employees, and agents.

7-3.1.3 Workers' compensation insurance as required by the California Labor Code and employer's liability insurance in an amount of not less than \$1,000,000 per accident

or occupational illness.

7-3.2 Acceptability of Insurers

The insurance required herein must be placed with carriers as follows:

7-3.2.1 Non-admitted in California and subject to Section 1763 of the Insurance Code (a current list of eligible surplus lines insurers is maintained by the California Department of Insurance at <http://www.slacal.org/resources/insurer-member-lookup> with a current financial responsibility rating of A (Excellent) or better and a current financial size category (FSC) of VIII (capital surplus and conditional surplus funds of greater than \$100 million) or greater as reported by A.M. Best company or equivalent, or

7-3.2.2 Admitted (licensed) in the State of California with a current financial responsibility rating of A (Excellent) or better and a current financial size category (FSC) of V (capital surplus and conditional surplus funds of greater than \$10 million) or greater as reported by A.M. Best Company or equivalent, or

7-3.2.3 For Worker's Compensation only, admitted (licensed) in the State of California.

7-3.3 Verification of Coverage.

The Contractor shall furnish to the City the documentation set forth in paragraph D below prior to the effective date of the Contract and, at least 30 days prior to expiration of the insurance required herein, furnish to the City renewal documentation. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf.

The City reserves the right to require complete, certified copies of all insurance required herein at any time.

The Contractor shall notify the City in writing within five business days if any insurance required herein is voided by the insurer or cancelled by the insured. This notice shall be sent by certified mail, return receipt requested, and shall include a certificate of insurance and the required endorsements for the replacement coverage.

7-3.4 Documentation Required.

The certificates and endorsements shall be on forms provided by the City and shall be received and approved by the City before Work commences. As an alternative, the Contractor may submit certified copies of any policy that includes the required endorsement language set forth in 7-3.4.2, 7-3.4.3, and 7-3.4.4.

7-3.4.1 Certificates of insurance evidencing the required general liability insurance, automobile liability insurance, and workers' compensation insurance required hereunder.

7-3.4.2 General liability insurance endorsements.

(a) ADDITIONAL INSURED endorsement equivalent in scope to ISO form CG 20 10 11 85 or to both CG 20 10 10 01 and CG 20 37 10 01 naming the City, its Boards and

Commissions, and their officials, employees, and agents as additional insureds.

(b) CANCELLATION endorsement which provides that the City is entitled to 30 days prior written notice of cancellation or nonrenewal of the policy, or reduction in coverage, by certified mail, return receipt requested.

(c) CONTRIBUTION NOT REQUIRED endorsement which provides that the insurance afforded by the general liability policy is primary to any insurance or self-insurance of the City, its Boards or Commissions, or their officials, employees, or agents as respects operations of the Named Insured. Any insurance maintained by the City, its Boards or Commissions, or their officials, employees, or agents shall be in excess of Contractor's insurance and shall not contribute to it.

(d) SEVERABILITY OF INTEREST endorsement which provides that Contractor's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(e) ADDITIONAL INSURED COVERAGE NOT AFFECTED BY INSURED'S DUTIES AFTER ACCIDENT OR LOSS endorsement. The policy must be endorsed to provide that any failure to comply with the reporting provisions of the policy shall not affect coverage to the City, its Boards or Commissions, or their officials, employees, or agents.

7-3.4.3 Automobile liability insurance endorsements.

(a) ADDITIONAL INSURED endorsement naming the City, its Boards and Commissions, and their officials, employees, and agents as additional insureds with respect to any auto owned, leased, hired, borrowed or used by the Named Insured, in connection with this Contract.

(b) CANCELLATION endorsement which provides that the City is entitled to 30 days prior written notice of cancellation or nonrenewal of the policy, or reduction in coverage, by certified mail, return receipt requested.

(c) CONTRIBUTION NOT REQUIRED endorsement which provides that the insurance afforded by the general liability policy is primary to any insurance or self-insurance of the City, its Boards or Commissions, or their officials, employees, or agents as respects operations of the Named Insured. Any insurance maintained by the City, its Boards or Commissions, or their officials, employees, or agents shall be in excess of the Contractor's insurance and shall not contribute to it.

(d) SEVERABILITY OF INTEREST endorsement, which provides that the Contractor's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(e) ADDITIONAL INSURED COVERAGE NOT AFFECTED BY INSURED'S DUTIES AFTER ACCIDENT OR LOSS endorsement. The policy must be endorsed to provide that any failure to comply with the reporting provisions of the policy shall not affect coverage to the City, its Boards or Commissions, or their officials, employees, or agents.

7-3.4.4 Workers' compensation and employer's liability insurance endorsements.

(a) CANCELLATION endorsement which provides that the City is entitled to 30 days prior written notice of cancellation or nonrenewal of the policy, or reduction in coverage, by certified mail, return receipt requested.

(b) WAIVER OF SUBROGATION endorsement which provides that the insurer will waive its right of subrogation against the City, its Boards and Commissions, and their officials, employees and agents with respect to any losses paid under the terms of the workers' compensation and employer's liability insurance policy which arise from work performed by the Named Insured for the City.

7-3.5 Self-insured programs, self-insured retentions, deductibles.

7-3.5.1 Approval. Any self-insurance program, self-insured retention, or deductible must be approved separately in writing by the City's Risk Manager or designee and shall protect the City, its Boards and Commissions, and their officials, employees, and agents in the same manner and to the same extent as they would have been protected had the policy or policies not contained such self-insurance, self-insured retention, or deductible provisions.

7-3.5.2 Legal Defense. The Contractor is expressly obligated to provide for the legal defense and investigation of any claim against the City as an additional insured and for all costs and expense incidental to such defense or investigation.

7-3.5.3 Certification. The Contractor shall, upon request, complete the City's self-insurance questionnaire and required certification by the Contractor's financial officer.

7-3.6 Subcontractors.

The Contractor shall require that all subcontractors meet the requirements of this Section unless otherwise agreed in writing by the City's Risk Manager or designee.

7-5 PERMITS.

The Contractor shall procure all necessary licenses and permits, including City of Long Beach permits, and give all notices necessary and incidental to the performance of the Work. However, permits or authorizations from agencies other than the City of Long Beach whose jurisdiction is applicable to City projects will be procured by the City of Long Beach. The Contractor shall cooperate with the City's procurement of those permits by supplying all required information, and arranging delivery and execution of any required construction-period permit supplements or insurance certifications.

The City will pay all fees for permits including plan checking, unless otherwise shown in these Special Provisions.

The Contractor shall not start any phase of the Work requiring a permit until that permit has been obtained.

7-8 WORK SITE MAINTENANCE.

7-8.1 Cleanup and Dust Control.

The Contractor shall include all cleanup costs in its Bid. The City will make no additional payment for this work.

7-8.3 Noise Control.

The Contractor shall keep the noise level resulting from Work operations to a minimum at all times, especially during the morning hours.

Noise control is subject to the provisions of Long Beach Municipal Code section 8.80, "Noise."

7-8.6 Water Pollution Control.

Best Management Practices (BMPs) shall be defined as any program, technology, process, operating method, measure, or device that controls, prevents, removes, or reduces pollution.

At a minimum, the Contractor shall implement the following BMPs in conjunction with the Work:

Title	Number
General Site Management	
Water Conservation	NS-1
Vehicle and Equipment Cleaning	NS-8
Vehicle and Equipment Fueling	NS-9
Vehicle and Equipment Maintenance	NS-10
Employee/Subcontractor Training	—
Construction Materials and Waste Management	
Material Delivery and Storage	WM-1
Material Use	WM-2
Spill Prevention and Control	WM-4
Solid Waste Management	WM-5
Hazardous Waste Management	WM-6
Concrete Waste Management	WM-8
Erosion/Sediment Control	
Storm Drain Inlet Protection	SE-10

A description of each BMP is included in these Specifications. The Contractor shall have at least two readily accessible copies of these descriptions at the Work site at all times.

The Contractor shall continuously implement BMPs during the Work. The Contractor shall implement BMPs for erosion control and sedimentation during the period from October 1st to April 15th and whenever the National Weather Service predicts rain within 24 hours.

The Contractor shall conduct all aspects of the Work performed pursuant to these Plans and Specifications in accordance with all state and federal laws and regulations, including but not limited to all environmental laws and regulations, Order No. R4-2014-0024 of the California Regional Water Quality Control Board, Los Angeles Region ("Waste

Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the City of Long Beach"), and related BMPs. The City will deduct from the money due or to become due to the Contractor the total amount of any fines levied on the City, plus legal and staff costs, as a result of the Contractor's failure to comply with these provisions or less than complete implementation of the specified BMPs. In addition, the Contractor shall defend, indemnify, and hold the City harmless for any liability, loss, damage, fines, penalties, actions, costs and expenses related to the Contractor's (or its subcontractors) failure to comply with these laws and regulations.

Full payment for the implementation of BMPs, including the construction, removal, and furnishing of all necessary labor, equipment, and materials, shall be considered as included in the unit prices bid for the various items of Work or the lump sum bid (as the case may be), and no additional payment will be made.

7-8.8 Vermin Control.

At the time of acceptance, structures entirely constructed under the Contract shall be free of rodents, insects, vermin and pests. The Contractor shall arrange and pay for necessary extermination work as part of the Work within the Contract time. The Contractor shall use the services of a licensed exterminator in accordance with the requirements of the governing authorities. The Contractor shall be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.

Payment for vermin control shall be considered as included in the prices for the various items of Work, and the City will make no additional payment therefor.

7-8.9 Graffiti Removal.

Throughout all phases of construction, including suspension of Work, and until final acceptance of the Work, the Contractor shall keep the Work site free from graffiti, at the Contractor's sole cost. If graffiti appears on the Work site, the Contractor shall cover, repaint, or otherwise remove the graffiti within 24 hours of discovery. If the Contractor fails to do so, the City may take steps to remove the graffiti and the City's cost in doing so shall be deducted from the Contract Price.

Payment for graffiti removal shall be considered as included in the prices for the various items of Work, and the City will make no additional payment therefor.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.

The Contractor shall become familiar with all existing improvements and facilities, both public and private, on the Work site and provide adequate safeguards to prevent damage to existing structures and improvements. The Contractor shall repair any damage to property from any cause that might have been prevented by the Contractor, the Contractor's employees, agents or subcontractors within five calendar days after such damage occurs, at the Contractor's sole cost and expense. The Contractor shall repair water service breaks the same day. In the event that the Contractor fails to repair such damages, the City will make the repairs, or cause them to be made, and will deduct the

cost of repairs from the money due or to become due to the Contractor.

Prior to constructing asphalt or concrete pavement, the Contractor shall mark on the curb face, based on actual field measurements, the location of all manhole and utility covers, valve and meter boxes, and monuments. No guarantee is made that all such items are shown on the Plans and, if shown on the Plans, may not be shown at the correct location.

The Contractor shall protect walks and masonry paving by installing only chalk-based temporary markings in those areas.

The Contractor shall remove utility identification and other temporary markings after completion of the related Work. The City will not accept the Work until this removal is done.

The Contractor shall inventory existing signs and curb markings that are to be removed for construction. The Contractor shall bring signs or posts that are deteriorated or defaced to the attention of the Engineer. The Contractor shall reinstall signs and curb markings at their same location unless otherwise directed by the Engineer, at no additional cost to the City.

In accordance with the requirements of Section 21464 of the Vehicle Code of the State of California, no person shall without lawful authority remove any official traffic control device, guidepost or signpost placed or erected as authorized or required by law. Therefore, the Contractor shall not remove or relocate any such existing traffic control device, guidepost or signpost located within the alignment of or interfering with the new construction work required herein without first obtaining permission to do so from the Police Department of the City of Long Beach.

7-10 PUBLIC CONVENIENCE AND SAFETY.

7-10.1 Traffic and Access.

The Contractor shall maintain a minimum of one lane of traffic in each direction with left-turn pockets from 8:30 a.m. to 3:30 p.m.

The Contractor shall maintain a minimum of one lane of traffic in each direction with left turn pockets during the workday and a minimum of two lanes of traffic in each direction with left turn pockets, except in reconstruction areas, at all other times. The Contractor shall maintain all minimum traffic lanes on existing or new pavement at all times, unless otherwise authorized by the Engineer. The Contractor shall not return pavement that has been cold-milled to traffic use until new pavement has been constructed.

The Contractor shall submit to the Engineer, for approval, a traffic control and detour plan for each phase of construction.

The Contractor shall give one-week advance notice prior to the start of construction to all residences and businesses facing or siding on the construction area. The notice shall be in writing on the Contractor's letterhead and shall explain in concise terms the extent and nature of the Work, the anticipated schedule, and office and emergency

telephone numbers where the Contractor's representative can be reached.

The Contractor shall provide and maintain temporary ramps for pedestrians, driveways and for street ramps at intersections. The Contractor shall construct temporary driveway and curb ramps with crushed miscellaneous base and steel plates as directed by the Engineer. When vehicular access to the area cannot be maintained during the workday due to the nature of the Work, The Contractor shall notify residents of affected properties two working days in advance of the time access to the area will be cut off.

The Contractor shall conduct operations such that fire hydrants, meter vaults, water and gas shutoff valves, and similar facilities are not buried during the course of the Work and so as to offer the least possible obstruction and inconvenience to public traffic and to properties fronting the construction areas. The Contractor shall maintain adequate access to affected businesses and residences.

Parking may be prohibited by means of tie-on temporary "No Parking" signs during construction. The Contractor shall remove tie-on signs as soon as construction is completed. The Contractor shall use signs furnished by the Engineer.

Bus service will be maintained on bus routes with posted bus stops and the Contractor shall maintain adequate all weather landings for bus patrons. To the extent necessary, the Contractor shall locate temporary landings adjacent to the traveled lane and provide adequately lighted barricades to provide easy and safe access to the landing from the walk area. The Contractor shall notify the Long Beach Public Transportation Company before moving the location of any bus stop.

Where traffic is directed around or adjacent to the construction area, the Contractor shall provide, install, maintain and remove temporary striping, delineators, barricades, lights, signs, and other devices required for the control of traffic as required by the applicable City and State traffic regulations and the 2001 edition of "Work Area Traffic Control Handbook." The City shall have the right to relocate traffic control devices.

The City will allow reflectorized temporary road signs, if the Contractor maintains them in good condition at all times.

After the devices have been installed the Contractor shall, at its sole expense, maintain and keep them in good repair until the acceptance of the Work. The Contractor shall also, during the term of the Contract, pay the cost of replacing such devices that are lost or damaged to such an extent as to require replacement, regardless of the cause of such loss or damage. The Contractor shall remove temporary and existing striping not obliterated by new construction, as required for temporary traffic control, by sandblasting as directed by the Engineer. The Contractor shall remove by sandblasting existing pavement markings, where temporary pavement markings are provided. The Contractor shall not cover these markings.

If the Contractor fails to take necessary precautions to provide for proper public convenience and safety, the City may take necessary corrective action including the erection of suitable and sufficient barriers, signs, lights and other protective devices. The City will, upon completion of any such work, notify the Contractor in writing of the character and extent of, and reason for, the work. The City will deduct the cost of the work from the money due or to become due to the Contractor.

The Contractor shall commence placement of the permanent traffic striping and pavement markings on the calendar day following completion of final roadway paving, unless otherwise authorized by the Engineer, and diligently perform the Work to completion. In any event, the Contractor shall complete all permanent traffic striping and pavement markings within two calendar weeks following completion of final roadway paving. The Contractor's attention is directed to the Special Provisions concerning public convenience and safety during the time period in which the existing pavement markings are obliterated by new construction.

Full payment for temporary traffic control devices, including furnishing, installing, maintaining and removing said devices, sandblasting existing markings, flagging, if required, and giving advance notices will be made at the lump sum price bid.

If itemized in the Bid, the Contractor shall provide and maintain electronic changeable message board trailers on-site for the duration of the Work. The Engineer will direct the placement of the trailers and the messages to be displayed. Payment for the changeable message board trailers will be made at the unit price shown in the Bid.

7-10.3 Haul Routes.

Haul routes shall be determined by the Contractor and approved by the Engineer.

7-10.4 Safety.

At Contractor's sole expense, the Contractor shall take such precautions as are necessary to protect workers engaged in the performance of the Work and prevent accidents or injury to workers and others. The Contractor shall comply with all safety orders of the Division of Industrial Safety of the State of California as well as applicable Federal regulations insofar as they pertain to the Contractor's operations. If any unusual or hazardous condition exists by reason of the Work or if any unusual or hazardous condition arises out of the performance of the Work, or if a condition involving a peculiar risk of bodily harm to workers or others arises, then the Contractor shall take all precautions necessary to protect workers and others.

7-10.6 Construction Area Information Sign.

The Contractor shall furnish and install construction area information signs per Standard Plan 136. The type of work, estimated date of completion, and contact telephone number shall be attached to each sign by aluminum overlay plates as shown on the Standard Plan. The Contractor shall post the signs along each street under construction, one at each end of construction and one at each side street entering each street under construction. The Contractor shall also post the signs along streets where traffic controls will impose traffic disruptions or delays or as shown on the Plans. The Contractor shall post the signs whenever traffic controls will be in place for two weeks or longer.

When traffic controls have been removed, The Contractor shall deliver the signs to a site specified by the Engineer.

Payment for the construction area information signs shall be considered as included in the lump sum price bid for temporary traffic controls no additional payment will be made.

7-15 TAXES.

Bidders shall make no mention in the Bid of sales tax, use tax, or any other tax, as all amounts bid will be deemed to include all taxes.

The Contractor shall pay all sales, consumer, use, and other taxes required to be paid in accordance with the laws and regulations of the place of the Work that are applicable during the performance of the Work. The City is not exempt from sales tax.

The Contractor shall cooperate with the City to the full extent possible to maximize the local allocation of California sales and use tax to the City. Such cooperation shall include but not be limited to:

(a) Use Tax Direct Payment Permits. The Contractor shall apply for, obtain and utilize, to the maximum extent reasonable, a California Use Tax Direct Payment Permit. The application for such permit is available from (and a copy of each quarterly tax return shall be sent to):

City Controller
City of Long Beach
333 W. Ocean Boulevard, 6th Floor
Long Beach, CA 90802

(b) Purchases of \$500,000 or More. The Contractor shall require vendors and suppliers located outside California from whom the Contractor makes purchase of \$500,000 or more to allocate the use tax to the City.

Additional information regarding use tax and the Permit can be found in the State of California Board of Equalization, Sales and Use Tax Regulations, Regulation 1699.6, Use Tax Direct Payment Permits, or on the web site for the Board of Equalization at <http://www.boe.ca.gov/sutax/sutprograms.htm>.

7-16 INDEMNIFICATION.

7-16.1 General. The Contractor shall indemnify, hold harmless, and protect City, its Boards, Commissions, and their officials, employees and agents ("Indemnified Parties") from and against any and all demands, liability, loss, suit, claim, action, cause of action, damage, cost, judgment, settlement, decree, arbitration award, stop notice, penalty, loss of revenue, and expense (including, but not limited to, any fees of accountants, attorneys, experts or other professionals, and costs of investigation, mediation, arbitration, litigation and appeal), in law or in equity, of every kind and nature whatsoever, arising out of or in connection with, resulting from or related to, or claimed to be arising from the Contract or the Work performed by Contractor, or any of its officers, agents, employees, subcontractors of any tier, material suppliers, or any person for whose acts any of them may be liable, regardless of whether such claim, suit or demand is caused, or alleged to be caused, in part, by an Indemnified Party including, but not limited to, liability arising from:

- a) Bodily or personal injury, emotional injury, sickness or disease, or death to

any persons;

- b) Damage to property, including property under the care and custody of City;
- c) Civil fines or penalties;
- d) Any dangerous, hazardous, unsafe or defective condition of, in or on the Work site, of any nature whatsoever, which may exist by reason of any act, omission, neglect, or any use or occupation of the Work site by Contractor, its officers, agents, employees or subcontractors;
- e) Any operation conducted upon or any use or occupation of the Work site by Contractor, its officers, agents, employees, or subcontractors under or pursuant to the provisions of the Contract or otherwise;
- f) Any act, omission or negligence of Contractor, its officers, agents, employees, or subcontractors;
- g) Infringement of any patent rights, licenses, copyrights or intellectual property which may be brought against the Contractor or City arising out of Contractor's Work, for which the Contractor is responsible;
- h) Any and all claims against City seeking compensation for labor performed or materials used or furnished to be used in the Work or alleged to have been furnished, including all incidental or consequential damages resulting to City from such claims;
- i) Failure to comply with any applicable law, statute, code, ordinance, regulation, permit, or orders, including, without limitation, all applicable federal and state labor standards, including the prevailing wage provisions of sections 1770 *et seq.* of the California Labor Code;
- j) Any misrepresentation, misstatement or omission with respect to any statement made in or any document furnished by the Contractor in connection therewith;
- k) Any breach of any duty, obligation, or requirement under the Contract Documents.

All of the above are collectively hereafter referred to as "Claims" and individually as a "Claim".

7-16.2 Defense of Claims, Enforcement and Restrictions.

a) In addition to Contractor's duty to indemnify, Contractor shall have a separate and wholly independent duty to defend Indemnified Parties against all Claims. If any Claim is alleged or brought against Indemnified Parties, Contractor shall defend Indemnified Parties at Contractor's expense by legal counsel approved by City and shall continue this defense until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or judgment of negligence, fault, breach, or the like on the part of Contractor shall be required for the duty to defend to arise. City shall notify Contractor of any Claim, shall tender the defense of the Claim to Contractor, and shall assist Contractor, as may be reasonably requested, in the defense.

b) Contractor's obligations under this Section 7-16 shall apply regardless of whether or not such Claim was caused in part or contributed to by any actual or alleged negligent act or omissions of an Indemnified Party.

c) If a court of competent jurisdiction determines that a Claim was caused by the active negligence, sole negligence or willful misconduct of Indemnified Parties, Contractor's costs of defense and indemnity shall be (1) reimbursed in full if the court determines sole negligence by the Indemnified Parties, or (2) reduced by the percentage of active negligence and/or willful misconduct attributed by the court to the Indemnified Parties.

d) If this Contract includes work or services performed by a design professional, such as an architect, landscape architect, professional engineer or professional land surveyor, subject to California Civil Code Section 2782.8, Contractor shall defend and indemnify Indemnified Parties against design-related Claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Contractor or a subcontractor.

e) Contractor agrees to obtain executed indemnity agreements with provisions identical to those set forth in this section from each and every subcontractor in performance of the Contract.

f) Failure of City to monitor compliance with these requirements imposes no additional obligations on City and will in no way act as a waiver of any rights hereunder. In the event of any claim, suit or demand made against any Indemnified Parties, the City may in its sole discretion reserve, retain, or apply any monies due to the Contractor under the Contract for the purpose of resolving such claims; provided, however, that the City may release such funds if the Contractor provides the City with reasonable assurance of protection of the City's interests. The City shall in its sole discretion determine whether such assurances are reasonable. Contractor's obligations under this Section 7-16 extend to claims occurring after termination of the Contractor's performance of the Contract or final payment to the Contractor.

7-16.3 No Limitations. Contractor's obligations under this Section 7-16 are in addition to any other rights or remedies which the Indemnified Parties may have under the law or under the Contract Documents. Contractor's indemnification and defense obligations set forth in this Section 7-16: (i) are separate and independent from the insurance provisions set forth above; and (ii) do not limit, in any way, the applicability, scope, or obligations set forth in the insurance provisions. In claims, suits, or demands against any Indemnified Party by an employee of the Contractor, a subcontractor, anyone directly or indirectly, employed by them, or anyone for whose acts they may be liable, the Contractor's indemnification and defense obligations shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

SECTION 8 – FACILITIES FOR AGENCY PERSONNEL

No facilities for City personnel are required for this Work.

SECTION 9 – MEASUREMENT AND PAYMENT

9-3 PAYMENT.

9-3.1 General.

The quantities stated herein are only estimates. The Contractor shall furnish whatever quantities are actually needed to complete the Work, whether the quantities are more or less than the estimates, at the unit prices bid. There is no guarantee that the total amount bid will be reached, and it may be exceeded.

The City will make payment in the due course of its payments.

9-3.2 Partial and Final Payment.

From each progress payment, 5 percent will be deducted and retained by the City. The City will withhold up to 5 percent of the total Contract amount until acceptance of the Work.

The City reserves the right to delay partial and final payments until the Contractor submits documentation required in these Specifications, including Labor Compliance documentation (see Subsection 7-2.2) and construction schedule updates (see Section 6-1).

9-4 Mobilization.

Mobilization: Operations necessary for movement of personnel, equipment, supplies and incidentals to work site; for establishment of all temporary offices, buildings and other facilities necessary for work on project; and for all other work and operations which must be performed or are incidental to beginning work including all temporary utility connections.

Work for mobilization as specified in this Section consists of pre-construction expenses and activities for preparatory work and operations performed at the start of the Contract work and removal of work.

Demobilization: Completion and approval of project record documents and operations and maintenance data, operations necessary for removal of personnel, equipment, supplies, property of the Contractor's employees and all subcontractors, suppliers, and their employees, and incidentals from work site, Contractor-owned structures, facilities, materials and debris; and for all other work and operations which must be performed or are incidental to completion of work of various contract items, specifically including the achievement of Substantial Completion, completion of all punch list items, and satisfactory completion of Project Record Documents.

Payment – Payment for MOBILIZATION AND DEMOBILIZATION shall be paid at the lump sum (LS) unit price as stated in the Bid for the satisfactorily completed work described in this Section. No separate measurement will be made for incidental work associated with this Bid item or described herein.

Payment for MOBILIZATION AND DEMOBILIZATION shall not exceed fifty percent (50%) of the amount stated in the Bid Forms for Mobilization and Demobilization,

payable in three equal monthly payments commencing the first full calendar month after issuance of Notice-to-Proceed. Payment will be made at the discretion of Engineer and will be subject to implementation of mobilization schedule and mobilization plan review and other Contract requirements.

DIVISION I
TECHNICAL REQUIREMENTS

DIVISION I TECHNICAL REQUIREMENTS

PART 2 CONSTRUCTION MATERIALS

Mobilization & Demobilization

Mobilization: Operations necessary for movement of personnel, equipment, supplies and incidentals to work site; for establishment of all temporary offices, buildings and other facilities necessary for work on project; and for all other work and operations which must be performed or are incidental to beginning work including all temporary utility connections.

Work for mobilization as specified in this Section consists of pre-construction expenses and activities for preparatory work and operations performed at the start of the Contract work and removal of work.

Demobilization: Completion and approval of project record documents and operations and maintenance data, operations necessary for removal of personnel, equipment, supplies, property of the Contractor's employees and all subcontractors, suppliers, and their employees, and incidentals from work site, Contractor-owned structures, facilities, materials and debris; and for all other work and operations which must be performed or are incidental to completion of work of various contract items, specifically including the achievement of Substantial Completion, completion of all punch list items, and satisfactory completion of Project Record Documents.

Payment – Payment for MOBILIZATION AND DEMOBILIZATION shall be paid at the lump sum (LS) unit price as stated in the Bid for the satisfactorily completed work described in this Section. No separate measurement will be made for incidental work associated with this Bid item or described herein.

Payment for MOBILIZATION AND DEMOBILIZATION shall not exceed fifty percent (50%) of the amount stated in the Bid Forms for Mobilization and Demobilization, payable in three equal monthly payments commencing the first full calendar month after issuance of Notice-to-Proceed. Payment will be made at the discretion of Engineer and will be subject to implementation of mobilization schedule and mobilization plan review and other Contract requirements.

SECTION 200 – ROCK MATERIALS

200-2.4 Crushed Miscellaneous Base (CMB).

200-2.4.2 Grading.

The material shall be uniformly graded and shall conform to one of the following gradations:

TABLE 200-2.4.2 (A)

Sieve Size	Percentage Passing Sieve	
	Coarse	Fine
2 inch	100	
1-1/2 inch	85-100	100
3/4 inch	58-78	85-100
3/8 inch		55-75
No. 4	27-47	30-50
No. 30	12-28	10-30
No. 200	2-12	2-10
ASTM C 131 Test Grading	A	B

200-2.4.3 Quality Requirements.

This material shall conform to the following:

TABLE 200-2.4.3 (A)

Tests	Test Method No.	Requirements
R-value	California 301	80 Minimum
Sand Equivalent	California 217	35 Minimum
Percentage Wear	ASTM C131	
100 Revolutions		15 Maximum
500 Revolutions		52 Maximum

The R-value requirement will be waived, provided the material has an SE of 40 or more.

The Engineer may waive the percentage wear requirements, providing the material has a minimum durability of 40 in accordance with California Test 229. Any discrepancies or changes shall be as directed by the City Engineer.

PAYMENT - The ton (TON) unit price shown in the Bid will be paid for CMB and shall be full compensation for furnishing all labor, materials, equipment and incidentals.

SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS**201-1 PORTLAND CEMENT CONCRETE.****201-1.1 Requirements.**

This item shall include the construction of Portland Cement Concrete sidewalks, medians, curb ramps, curb, curb and gutter, spandrels, driveways, mountable curb, curb ramps, stamped concrete, bioswale and detention basin curb inlets, and items specified on the Plans. Included is PCC work in front of private property, those listed in the bid

schedules and other miscellaneous locations, to be determined by the City's Public Works Inspector, excluding drive approaches.

This item shall also include all rough and fine grading required to provide finish subgrade, any removal of existing improvements (existing substandard sidewalk, fences, shrubbery, irrigation, walls, etc.) needed to install new PCC, and shall also include any private walks, which need adjusting to join new public sidewalks. Also included is any grading and removal of dirt to provide for the improvements. Clean backfill, as approved by the Public Works Inspector, must be placed behind newly constructed sidewalk.

Concrete shall be 5.5 sacks per cubic yard and construction shall be in accordance with City Standard C-213 and Section 400-3 of the "Greenbook" Standard Specifications, and the color shall be selected by the City Engineer. It shall be the Contractor's responsibility to protect newly placed concrete from vandalism. Any damage occurring shall be replaced at Contractor's expense.

Handicap ramps shall be per City of Long Beach or Standards or details shown on the Plans.

Curb inlets for bioswales and detention basins shall be constructed with PCC and according to the detail on the Plans. Bioswale inlets shall be 3 feet wide and detention basin inlets will be 3 feet wide at its widest point. Inlets shall be flush with gutter elevation.

201-1.1.2-1 Concrete Type.

Concrete for sidewalks, medians, curb ramps, curb, curb and gutter, spandrels, driveways, mountable curb, curb ramps, stamped concrete, bioswale and detention basin curb inlets shall be 520-C-2500 (310-C-17).

201-1.1.5 Test for Portland Cement Concrete.

Concrete represented by compressive strength tests that fail to meet the requirements of this subsection shall be removed from the Work. Place reinforcing steel in accordance to the requirements of Manual of Standard Practice of the Concrete Reinforcing Steel Institute.

201-2 REINFORCEMENT FOR CONCRETE.

Mountable curbs for round roundabouts shall be constructed using #4 reinforced steel bars at 24 inches on center. Mountable curbs for elliptical roundabouts shall be constructed using #6 reinforced steel bars at 24 inches on center.

Reinforcing steel shall be either Grade 40 (300) or Grade 60 (400) billet steel conforming to ASTM A615/A615M and shall be approved by the City Engineer.

201-8 CURB RAMP DETECTABLE WARNING SURFACE.

Curb ramps shall be constructed with detectable warning surface panels complying with California Building Code Title 24. Detectable warning surface panels shall consist of vitrified polymer composite, with at least 25% by weight aluminum oxide, nominally 0.20" thick, colorfast and UV stable. Panels may be bolt-down type or embedded. Embedded panels shall have perforated embedment ribs at 3" on center, at least 1" deep. Curb ramps and pedestrian crossing must comply with the most current Americans with Disabilities Act (ADA) regulations outlined under Title II of the ADA.

Other physical properties shall be as follows:

Compressive Strength	Greater than 18,000 psi	ASTM D 695
Flexural Strength	Greater than 24,000 psi	ASTM D 790
Tensile Strength	Greater than 10,000 psi	ASTM D 638
Water Absorption	Less than 0.35%	ASTM D 570
Slip Resistance	Greater than 0.80	ASTM C 1028
Flame Spread Index	Less than 25	ASTM E 84
Salt Spray	No Change (200 hours)	ASTM B 117
Chemical Stain Testing	No Deterioration	ASTM 1308
Abrasion Resistance	Less than 0.030 (1,000 cycles)	ASTM D 2386
Accelerated Weathering	No Damage (2,000 hours)	ASTM G 29
Load Bearing at 16,000 lbs.	No Damage	AASHTO-H20
Freeze / Thaw / Heat	No Disintegration	ASTM C 1026

The color of the panels shall be yellow. The Contractor shall install panels in accordance with manufacturer's recommendations.

Where shown on the plans or otherwise specified, curb ramps shall be constructed with detectable warning surface coating composed of resins, reactive monomers, pigments, glass beads and fillers. The surface coating shall have the following properties:

Viscosity, Brookfield #2 spindle @ 20 rpm, 77°F	6000 – 12000 cps	ASTM D2196
Tracking, 50 mils wet , 77°F	None after 60 minutes	ASTM D711
VOC	25 g/L, max.	ASTM D2205
Hardness, Shore Durometer, A-1	80 minimum after 24 hours	
Tensile Strength	125 psi minimum at break	ASTM D638

Percent Elongation	20% minimum	ASTM D638
Water Absorption	Maximum 0.5%	ASTM D570
Chemical Resistance, 7 day immersion in Motor oil, Anti-freeze, Transmission fluid, Gasoline, and Diesel fuel	No effect	
Adhesion to portland cement	200 psi	
Skid Resistance, British pendulum	45, minimum	ASTM E303
Reflectivity	200 millicandela, minimum initial reading	
Color	Yellow	

Detectable warning surface coating shall be installed per manufacturer's recommendations.

Detectable warning surface coating shall have a 5-year warranty against more than 5% loss of surface installation/adhesion, color and non-skid characteristics.

Payment – Payment for DETECTABLE WARNING SURFACE shall be paid by the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

SECTION 202 – MASONRY MATERIALS

SECTION 202 – MASONRY MATERIALS

202-1 BRICK.

In the event the City decides to install brick pavers instead of stamped concrete at traffic circle, roundabout, or median refuge locations, the Contractor shall get prior approval from the City regarding color.

PAYMENT - Payment for BRICK PAVERS shall be at the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

SECTION 203 – BITUMINOUS MATERIALS

SECTION 203 – BITUMINOUS MATERIALS

Asphalt concrete pavement for pavement asphalt shall be 520-A-2500 (310-A-17).

203-1.3 Test Reports and Certification.

Paving asphalt shall be supplied by vendors approved by the California Department of Transportation. At delivery time, the supplying vendor will deliver to the purchaser certified copies of the test report. This report shall indicate the vendor's name, grade of asphalt, date and point of delivery, quantity delivered, ticket number, purchase order number, and results of specified tests. The certified test report and the testing required in connection with this report shall be submitted to the Agency in accordance with 2-5.3.4.

SECTION 212 – LANDSCAPE AND IRRIGATION MATERIALS

212-1 LANDSCAPE MATERIALS.

212-1.1 Topsoil.

212-1.1.1 General. Topsoil shall be Class "A" topsoil in accordance with the requirements of 212-1.1.2.

212-1.2 Soil Fertilizing and Conditioning Materials.

212-1.2.3 Commercial Fertilizer. Pre-plant commercial fertilizer shall be granular 12-12-12 (N-P-K). Post plant fertilizer shall be 14-7-3. Planting tablets shall be compressed, slow-release fertilizer tablets (20-10-5) in 21-gram sizes.

Agricultural grade gypsum shall be a calcium sulfate product (-94.3%). Ninety percent shall pass a No. 50 mesh screen.

212-1.2.4 Organic Soil Amendment. Type 1 organic soil amendment shall be used. The Contractor shall supply the City Engineer with a sample of the proposed amendment accompanied by a laboratory analysis from a testing agency registered by the State, which states that the amendment complies with the specifications for approval by the City Engineer prior to installation.

212-1.2.5 Mulch. Bark mulch shall be shredded cedar, pine, or fir bark or equal commercial product. Typical mulch size shall be 3" x ½". Submit two samples to the City Engineer for approval prior to installation. The material shall be free of seeds, debris, and deleterious materials, and shall have a rich brown color when supplied.

212-1.2.6 Herbicides and Pesticides. Herbicides and pesticides shall be used in their appropriate applications with strict adherence to manufacturers' specifications and instructions and shall be approved by the City Engineer prior to use.

Post-emergent herbicide shall be Roundup, Diquat, Montar, or approved equal.

Pre-emergent herbicide shall be Treflan, Surflan, Eptan, or approved equal.

212-1.4 Plants.

212-1.4.1 General. Plants shall be inspected for approval by the City Engineer upon delivery to the site. The Contractor may submit photographs of the plant specimens to be used for review by the City Engineer prior to delivery to the work site. If requested by the City Engineer, the project Landscape Architect can either visit the nursery to review the plant material or review the plant material on-site prior to installation. The photograph review cannot be used to approve plant material and only serves as an indicator of available materials.

The Contractor shall notify the City Engineer a minimum of 48 hours prior to plant material delivery to schedule the inspection. Any construction delays caused by the Contractor failing to give the 48-hour notice shall be at the Contractor's sole expense.

All plants furnished by the Contractor shall be true to type or name as shown on the Plans and shall be tagged in accordance with the standard practice recommended by the Agricultural Code of the State of California.

All plants shall have been grown in nurseries that have been inspected by the governing authorities. Inspection of plant materials required by County, State, or Federal authorities shall be the responsibility of the Contractor, and it shall have secured permits or certificates prior to delivery of plants to site. Certificates of inspection shall be filed with the City Engineer.

The Contractor shall obtain clearance from the County Agricultural Commissioner, as required by law, before planting plants delivered from outside the County in which they are to be planted. Evidence that such clearance has been obtained shall be filed with the City Engineer.

Plants shall be subject to inspection and approval or rejection by the City Engineer upon delivery to the site at any time before or during progress of the work. Inspections may include:

- a) Quantity, quality, size, and variety;
- b) Root condition;
- c) Latent defects and injuries resulting from handling, disease and insects; and installation.
- d) Uniformity of plant materials.
- e) Branching structure.

All plants that are rejected shall be immediately removed from the project site and

replaced with new plants at the Contractor's expense.

212-1.4.2 Trees. Trees shall be of the type and size as shown on the Plans or specified in the Specifications.

Tree trunks shall be straight, slightly tapered at the crown, free of disfigurements or gnarls and well hardened off. The tree shall be free of disease and parasites.

212-1.5 Headers, Stakes, and Ties.

212-1.5.3 Tree Stakes. Tree stakes shall be a 2" diameter lodge pole pine, 10' length, treated with copper nanthanate or pressure treated with chromated copper arsenate, and pointed on one end.

Tree ties shall be commercially manufactured ties made from split plastic hose with a minimum length of 20". Split plastic hose ties shall be "Cinch-tie" by V.I.T. or approved equal.

212-1.6 Horizontal Root Control Barrier.

212-1.6.1 General. Root barriers shall be a root control system consisting of fabric of long chain synthetic polyolefins (at least 95% by weight) and a UV stabilizer. They shall be formed into a stable network such that the filaments or yarns retain their dimensional stability relative to each other. Within the fabric there shall be nodules consisting of trifluralin, carbon black, and polyethylene compounded in a patented method utilizing time-released characteristics that are permanently attached to the substrate fabric on 1-1/2" centers by a through injection molding process.

The horizontal root barrier shall be Bio-Barrier by Typar Geosynthetics or approved equal.

212-1.7 Landscape Boulder

212-1.7.1 General. Provide to the site and set boulders in conformance with the Drawings and under the direction of the Engineer.

Within 14 calendar days after the Contractor has received the Notice to Proceed, submit:

1. Materials list of items proposed to be provided under this Section.
2. Submit full-size color photos of boulders of proposed sizes to Engineer for approval before start of work.

Boulders: Pepper Red
Supplier: Decorative Stone Solutions (800) 699-1878.
Finish: Angular.

Size: 4'x1.5', 3'x2' and 2'-2'.

Boulders must be angular and free of cracking and flaking.

212.1.8 Moisture Barrier

212-2 IRRIGATION SYSTEM MATERIALS.

212-2.1 Pipe and Fittings.

212-2.1.3 Plastic Pipe for Use with Solvent Weld or Threaded Fittings.

Schedule 40 pipe shall be used for installation on the discharge side Class 315 pipe shall be used for continuously pressurized pipe on the supply side of the control valves. Schedule 40 pipe shall be used for all pipe and irrigation wire sleeves. Schedule 80 fittings shall be used.

All PVC pipe must bear the following markings:

- a) Manufacturer's name
- b) Nominal pipe size
- c) Schedule or class
- d) Pressure rating in P.S.I.
- e) NSF (National Sanitation Foundation) approval
- f) Date Extrusion
- g) 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.

212-2.2 Valves and Valve Boxes.

212-2.2.4 Remote Control Valves. Remote control valves shall be electrically operated. They shall be industrial-strength glass-filled nylon (plastic) valves, equipped with flow control adjustment and capability for manual operation. They shall be made so that they may be readily disassembled for servicing.

212-2.2.6 Quick-Coupling Valves and Assemblies.

Quick-coupling valves shall be brass or bronze with built-in flow control and self-closing valve and supplied in the sizes shown on the Construction Drawings.

212-2.2.7 Valve Boxes. Valve boxes in paving areas shall be precast Portland cement concrete. Valve boxes in planting areas shall be made of durable, weather-resistant plastic material resistant to sunlight and chemical action of soils. The valve box cover shall be secured with a hidden latch mechanism or bolts. The cover and box shall be capable of sustaining a load of 1,500 pounds. Valve box extensions shall be by the same manufacturer as the valve box.

Automatic control valves shall be 16"x11"x12" rectangular size. Valve box covers shall be marked "RCV" with the valve identification number "heat branded" onto the cover with 2-inch high letters/numbers.

Gate/ball valve and quick coupler valve boxes shall be 10" circular size. Valve box covers shall be marked with either "BV" or "QCV" "heat branded" onto the cover in 2" high letters.

212.2.3 Backflow Preventer Assembly. The backflow preventer assembly shall be a reduced pressure principle type of the model, size, and type indicated on the Plans. The backflow preventer assembly shall include any additional or optional equipment indicated on the Plans.

212-2.3.1 Backflow Preventer Enclosure. The backflow preventer enclosure shall be constructed of stainless steel #9 expanded metal with an angle iron frame. The enclosure shall be bolted to a concrete pad using galvanized steel hardware. Enclosure shall have a hinge on one end that allows for the removal of the enclosure for backflow service.

212-2.4 Sprinkler Equipment.

All sprinkler heads shall be pop-up types of the model, size, and type indicated on the Plans.

212-3 ELECTRICAL MATERIALS.

212-3.2 Conduit and Conductors.

212-3.2.1 Conduit. Conduit and sweeps shall be Schedule 40 PVC, gray in color, and specifically manufactured for use as electrical installation. The conduits shall be sized twice the diameter of the wire bundle to be carried within. All ends of conduit in valve and pull boxes shall be sealed using a waterproof material that can be easily removed from the conduit openings for the purpose of pulling wire through the conduit.

212-3.2.2 Conductors. All wire splices shall be made using a direct burial waterproof wire connection, Pen-Tite or approved equal.

Low voltage control wires shall have a single solid copper conductor with colored PVC coating. The pilot control wires shall be color-coded a specific color per controller

and the common wires color coded white with a stripe matching the color of the pilot wires.

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 bolt. Pilot wires shall be a different color wire for each automatic controller. Install in accordance with valve manufacturer's specifications and wire chart. In no case shall wire be sized less than #14.

212-3.3 Controller Unit. LEIT 4000 Solar Powered Automatic Irrigation Controller by DIG Corporation.

PART 3 CONSTRUCTION METHODS

SECTION 300 – EARTHWORK

300-1 CLEARING AND GRUBBING.

300-1.1 General.

Clearing and grubbing will conform to the Standard Specifications, including provisions of Section 300-1, "Clearing and Grubbing."

In addition to the work outlined in Section 300-1, the following items of work are included under clearing and grubbing unless otherwise covered by a specific bid item.

- 1) Replacing and reconstructing the irrigation system and landscaping not identified for improvement on the project plans which are damaged as the result of construction.
- 2) Removing existing tree branches and roots that interfere with construction of the proposed improvements.
- 3) Removal and replacement of blue pavement markers.
- 4) Utility coordination and potholing to determine existing utility depths and horizontal locations, and coordination for utility adjustments and relocations as necessary for construction and as directed by the Engineer.
- 5) Trimming and disposal of trees and shrubs within the project site as

directed by the Engineer.

- 6) Re-establish existing pipe curb drains per City Standard Drawings as necessary and as directed by the Engineer.
- 7) Obtaining no fee permits from the City and any other agencies.
- 8) Preservation of the existing monumentation and re-establishment of the monumentation that is disturbed during the construction.
- 9) Protection of utilities, structures, improvements, and other facilities within the construction zone, except those specifically shown on the plans to be removed or relocated.
- 10) Removal, storage, and relocation of existing landscaping, irrigation systems, lights, planters, ornamental designs, and other private improvements as required for construction of this project shall be performed as directed by the City Engineer. This also includes the removal of existing concrete curb, gutter, sidewalk, A.C. pavement, shrubbery, driveways, cross gutters, handicap ramps, spandrels, retaining walls, garden walls, gates, fencing, trimming trees, removing bushes and removing trees necessary to accommodate the construction. Existing private improvements (shrubbery, garden walls, fencing, etc.) shall be removed, stored, relocated, and reinstalled by the Contractor and as directed by the Public Works Inspector and paid for under Clearing and Grubbing, in accordance with Section 7-9 of the Greenbook Standard Specifications. If the existing improvement is in substandard condition, the Contractor shall replace it to the Public Works Inspector's satisfaction and at no cost to the City.
- 11) Protection of existing asphalt concrete pavement within the travel-ways of the project streets unless specifically indicated to be removed. The Contractor shall exercise extreme care with his operations so as not to damage the existing pavement. The Contractor shall repair, at his own expense, all pavement deemed solely by the Agency to have been damaged during the project by the Contractor.

Clearing and grubbing items do not include trees and/or planters to be removed as shown on the Plans.

This item will also be interpreted to include the removal and disposal of any additional items not specifically mentioned herein which may be found within the work limits.

PAYMENT - Payment for CLEARING AND GRUBBING shall be at the lump sum (LS) contract price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

300-1.2 Preservation of Property.

300-1.2.1 Repair of Parkway Improvements.

(a) Lawn. The Contractor shall re-sod in accordance with 308-4.8.3 areas where lawn is removed for construction. Thickness and type of sod shall match removed lawn.

(b) Private Sprinklers and Improvements. The Contractor shall coordinate Work with adjacent property owners. The Contractor shall test and document the condition of existing improvements before beginning required removals or excavation. The Contractor shall restore private improvements to documented conditions after completing adjacent Work.

300-1.2.2 Payment.

The City will include payment for protection or restoration of private sprinklers and improvements, 300-1.2.1(b), in the various items of Work and will make no separate payment for that effort.

300-1.3 Removal and Disposal of Materials.

300-1.3.1 General.

The materials to be removed for this Work generally consist of asphalt pavement, concrete improvements, soil, shrubbery, and trees. Other removal items are detailed hereafter or are shown on the Plans.

300-2 UNCLASSIFIED EXCAVATION.

300-2.1 General.

Unclassified excavation shall include removal of existing pavement by sawcutting, cold planing, and grinding for improvements at roundabouts.

Unclassified Excavation shall also include excavating, loading, stockpiling, hauling, and disposing of surplus material to the subgrade depth indicated on the plans or in the specifications, regardless of the thickness, or as directed by the City Engineer. It shall also include loading, hauling, placing and compacting of fill as required by Specifications and Appendix, or as directed by the City Engineer.

Excavated soil shall be considered selected material and shall be used in on-site fills in preference to importing soil under 300-5, unless the Engineer determines that the excavated soil is unsuitable. Excavated soil shall not be used for topsoil. Excavated soil to be removed from the construction site is deemed property of the Contractor.

The areas and quantities shown on the plans or specifications are given only for the Contractor's aid in planning the work and/or preparing bids. The City Engineer shall designate the limits to be removed and these designated areas shall be considered to take precedence 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 City Engineer. Spilled or loose blocks of pavement and pavement cracks wider than 3/8 inch will be deemed justification for extending or adding to the removal and replacement of asphalt concrete pavement.

300-2.8 Measurement.

The City will measure unclassified excavation based on its volume before excavation.

300-2.9 Payment.

PAYMENT - Payment for UNCLASSIFIED EXCAVATION (AC GRINDING) shall be at the cubic yard (CY) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for SAWCUT AND REMOVE EXISTING AC TO EXISTING SOIL BASE shall be at the square feet (SF) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for REMOVE TREE AND/OR PLANTER shall be at each (Ea) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for REMOVE EXISTING PCC CURB ONLY shall be at the each (Ea) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for REMOVE EXISTING PCC CURB & GUTTER shall be at the linear feet (LF) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for REMOVE EXISTING SIDEWALK shall be at the square feet (SF) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for REMOVE EXISTING DRIVEWAY shall be at the square feet (SF) unit price shown in the Bid which shall be full compensation for all necessary labor, materials, equipment and incidentals.

300-7.4 Fill and Backfill.

At the direction of the City Engineer, excavated material from Project construction sites will be used as fill and backfill for new construction. Fill and backfill must conform to material standards specified in the Technical Requirements and will be subject to material sampling and testing specified in Section 302-4.9-1.

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

301-1 SUBGRADE PREPARATION.

301-1.6.1 Adjustment of Sewer Manholes to Grade. Existing manholes and cleanouts shall be adjusted to grade or $\frac{1}{2}$ " above the surrounding surface at locations determined by the Public Works Inspector. Concrete collars, 12" high and 12" wide, shall be formed around all manhole covers and cleanouts and shall be inspected by the Public Works Inspector. All manhole rings will be cement lined and mortared and all manholes shall be cleaned of all debris.

PAYMENT – Payment for ADJUST MANHOLE FRAME AND COVER TO GRADE shall be paid by each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all labor, materials, equipment and incidentals necessary for adjustment to grade.

301-1.6.1 Adjustment or Replacement of Water Valves and Meter Boxes. The Contractor shall prepare and adjust existing Long Beach water valve covers and meter boxes to grade during each phase of construction and paving. The Contractor shall not bury or otherwise leave the valve covers enclosed meters, and valves inaccessible at any time. The Contractor shall maintain all valves immediately accessible for shut-off at all times.

The Contractor shall replace existing valves and meters that are broken or not suitable for adjustment with new valves or meters. The Long Beach Water Department will furnish any required new valves or boxes at no cost to the Contractor, available at one of its regular supply depots within the City. The Long Beach Water Department may, at its option, do any required corrective work or replacement of water valve or meter box installations prior to adjustment by the Contractor. The Contractor shall notify the Long Beach Water Department one week before starting any construction adjacent to or adjustment of water valves and meter boxes. The Contractor shall cooperate and coordinate with the Long Beach Water Department whenever it is necessary for the Water Department to perform work at its installations. The Contractor shall not activate or disturb any water valves.

Details of adjusting and reconstructing water valves for typical conditions anticipated to be encountered in the Work are shown on City of Long Beach Standard Plan 126. The City does not guarantee that these details cover all conditions that may exist within the Work site.

Relocation of the fire hydrant at Linden Ave. and Bixby Rd. shall be completed by Long Beach Water Department. The Contractor shall coordinate relocation efforts and work nearby the fire hydrant with the Long Beach Water Department. No separate compensation shall be provided for fire hydrant relocation by the City.

PAYMENT – Payment for ADJUST WATER VALVE AND COVER OR METER BOX AND COVER TO GRADE shall be paid by each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all labor, materials, equipment and incidentals necessary for adjustment to grade.

PAYMENT – Payment for ADJUST GAS VALVE TO GRADE shall be paid by each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all labor, materials, equipment and incidentals necessary for adjustment to grade.

301-1.6.2 Replacement of Traffic Signal Pull Boxes. The Contractor shall remove the existing pull box and install a new pull box where shown on the Plans or where the Engineer otherwise designates traffic signal pull boxes for grade adjustment. Traffic signal pull boxes shall be No. 6 size at 24" deep unless otherwise noted. The Contractor shall install traffic signal pull boxes in accordance with State Standard Plan No. ES-8 and Section 86-06, "Pull Boxes," of the State Standard Specifications. The Contractor shall place the drain hole required in the grout bottom of the pull box at the lowest point of the grout bottom. The Contractor shall construct aggregate ballast and grout bottom. The Contractor shall vertically adjust connecting conduit to a distance of 15 feet in each direction from the pull box.

PAYMENT - Payment for ADJUST PULL BOX TO GRADE shall be paid by each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all labor, materials, equipment and incidentals necessary for adjustment to grade.

301-1.7 Payment.

The City will pay for the Work shown in 301-1.6.1 and 301-1.6.2 at the unit prices shown in the Bid.

The City will include full payment for adjusting gate and valve boxes in the unit prices shown in the Bid, regardless of actual conditions encountered, and will make no separate payment for efforts required by conditions the Contractor could reasonably have determined before submitting its Bid.

The City will include payment for adjusting meter boxes to grade in the amounts paid for the various items of Work and will make no separate payment for such effort.

The City will include full payment for all other effort required for adjusting conduit in the price paid for adjusting the adjacent pull box to grade, and will make no separate payment for such effort.

301-2 UNTREATED BASE.

301-2.1 General.

Untreated base shall be crushed miscellaneous base conforming to 200-2.4, as shown on the Plans or in the Bid. Base material shall not be crushed at the Work site. Base material shall have a fine gradation.

301-2.3 Compaction.

Where asphalt concrete pavement is required to be constructed on existing aggregate base, the Contractor shall compact and grade the existing base per this Subsection.

Rolling shall always be commenced along the edge of the area to be compacted and the roller shall gradually advance toward the center of the area to be compacted.

Rollers shall be operated along lines parallel or concentric with the centerline of the road being constructed, and no material variation therefrom will be permitted. All rollers must be maintained in good mechanical condition.

The relative compaction of each layer of compacted base material shall not be less than 95 percent, except in the areas back of curb (under sidewalks and driveways). Compaction in the excepted areas shall be as specified in Section 211-1 with each layer of compacted base material having a minimum relative compaction of 90 percent.

The surface of the finished CMB at any point shall not vary more than 6 mm (0.02 foot) above or below the grade established by the City Engineer.

Base which does not conform to the above requirements shall be reshaped or reworked, watered, and thoroughly re-compacted to conform to the specified requirements.

301-2.2 Spreading.

Imported CMB bases shall be delivered to the roadbed as uniform mixtures and each layer shall be spread in one operation. Segregation shall be avoided and the base shall be free from pockets of coarse or fine material.

CMB shall be deposited on the roadbed at a uniform quantity per linear meter (foot), which quantity will provide the required compacted thickness within the tolerances specified herein without resorting to spotting, picking up, or otherwise shifting the aggregate base material. At the time CMB is spread, it shall have a moisture content sufficient to obtain the required compaction. Such moisture shall be uniformly distributed throughout the material.

Where the required thickness is 150 mm (6 inches) or less, the base material may be spread and compacted in one layer. Where the required thickness is more than 150 mm (6 inches) the base material shall be spread and compacted in two or more layers of approximately equal thickness, and the maximum compacted thickness of any one layer shall not exceed 150 mm (6 inches). Each layer shall be spread and compacted in a similar manner. The compacted surface shall not deviate from the planned base course elevation by more than 6 mm (1/4 in).

The use of motor-grader will be permitted during depositing, spreading and compacting operations, except when self-propelled spreaders are specified.

When the subgrade for CMB consists of cohesion less sand and written permission is granted by the City Engineer, a portion of the CMB may be dumped in piles upon the subgrade and spread from the dumped material in sufficient quantity to stabilize the subgrade. Segregation of aggregates shall be avoided and the material as spread shall be free from pockets of coarse or fine material.

301-2.4 Measurement and Payment.

The City will pay for the Work shown in 301-2 at the unit price shown in the Bid.

The City will include payment for compaction of existing subgrade under new asphalt in the amounts paid for the various items of Work and will make no separate payment for such effort.

SECTION 302 - ROADWAY SURFACING

302-1 COLD MILLING OF EXISTING PAVEMENT.

302-1.1 General.

The street locations to be cold planed will be as directed by the City's Public Works Inspector. A strip of five feet (5') minimum width of existing pavement along the gutter shall be planed by a continuous moving asphalt cold planer. A strip of five feet (5') minimum width of existing pavement across the pavement shall be planed by a continuous moving asphalt cold planer for header cuts. This strip shall be tapered from

3/4 inch below the gutter lip to zero, providing a key for construction of asphalt concrete resurfacing and to create a smooth transition at the gutter. The surface of pavement after planing shall be uniformly rough grooved or ridged. The grade shall not deviate from a suitable straight edge more than 3/8 inch at any point. The machine used for cold planing shall have performed satisfactorily on similar work prior to this project and meet the following requirements:

The planing machine shall be specifically designed and built to perform cold planing of bituminous pavement with the ability to plane concrete patches; the cutting drum shall be a minimum 60" wide with carbide tip cutting teeth placed in variable placing pattern to produce a grooved, but uniform finish. The machine shall be capable of operation at speeds from 0 to 40 FPM. It shall be self-propelled and have a water spray at the cutting drum to minimize dust; the machine shall be capable of removing the material adjacent to the concrete gutter. The planer shall be so designed that the operator thereof can at all times observe the planing operation without leaving the controls. The cutting drum shall be adjustable as to slope and depth, and shall deep cut in one pass a maximum of three inches (3") without producing fumes or smoke.

The Contractor shall provide a smaller machine to trim areas inaccessible to the larger machine at curb returns and intersections. The smaller machine shall be maneuverable and shall be equipped with a 12" wide cutting drum mounted on a 3-wheel chassis allowing it to be positioned without interrupting traffic or pedestrian flow.

During and after the planing operation, the Contractor shall sweep the street with mechanical equipment and remove all loosened material from planed areas. The Contractor shall abate dust nuisance by cleaning, sweeping and sprinkling with water and other means as necessary.

Locations for cold planing shall be as directed by the City's Public Works Inspector and as shown on the approved plans.

The contractor shall avoid cold planing the area where traffic signal loops exist, unless otherwise specified.

All excess milled material to be removed are deemed property of the Contractor.

PAYMENT - The unit price paid for Cold Planing/Asphalt Grinding shall be included in the cubic yard (CY) unit price for Unclassified Excavation shown in the Bid and shall include full compensation for furnishing all labor, materials, equipment necessary for grinding AC, and transportation to deliver the materials to a storage area designated by the City.

302-5 ASPHALT CONCRETE PAVEMENT.

302-5.1 General.

Asphalt concrete pavement shall consist of a mixture of paving asphalt and graded aggregate as specified in Section 203-6, "Asphalt Concrete," or Section 203-7, "Recycled Asphalt Concrete-Hot Mixed," of the Standard Specifications.

The asphalt concrete overlay shall consist of a 1½ - 2" thick surface course. The Contractor shall construct the surface course on new or repaired pavement together with that on any adjacent pavement to be resurfaced.

The asphalt concrete surface course shall be C2-AR 4000 and approved by the City Engineer.

The asphalt concrete for leveling course and surface course feathering and leveling and joining of existing pavement, if required and where directed by the Engineer, shall be Class D1-PG64-10.

302-5.1.1 Preparation for Resurfacing. The Contractor shall remove existing pavement markers flush with the existing pavement before constructing asphalt concrete pavement.

The Contractor shall remove asphalt upheaval at cracks in areas scheduled to be resurfaced and not removed by cold milling using crack sealing or other approved methods, leaving the upheaval areas flush with adjacent pavement.

The Contractor shall clean and fill cracks or holes 1/4 inch or wider with liquid asphalt, cold mix, hot mix or as directed by the Engineer. The Contractor shall clean vegetation only from cracks smaller than 1/4 inch wide.

302-5.1.2 Measurement and Payment for Crack Preparation.

If no specific item for crack preparation is shown in the Bid, the City will include payment for crack preparation in the payment for the various other items of Work, and the City will make no separate payment for that effort.

302-5.4 Tack Coat.

The Contractor shall use a tack coat bond when constructing asphalt concrete pavement directly on top of an existing hard-surfaced pavement according to Greenbook standards. The tack coat shall be SS-1h emulsified asphalt in accordance with Section 302-5.4. The pavement surface to be covered shall be free of water, foreign material, vegetation or dust before application of the tack coat.

The tack coat shall be sprayed at a minimum rate of 0.05 gallon per square yard with an asphalt distributor. Hand spraying shall be kept at a minimum. Prior to the application of the tack coat, existing cracks or holes 1/4" or larger shall be cleaned of all dirt and filled or repaired with slurry or a combination of AR4000 liquid asphalt and sand as approved by the City Engineer. Said tack coat shall not be applied until completion and curing of crack sealing.

302-5.5 Distribution and Spreading.

The Contractor shall spread the surface course and base course of the asphalt concrete pavement with a self-propelled mechanical spreading and finishing machine. The spreading and finishing machine used to construct the asphalt concrete surface course shall be equipped with an automatic screed control at least 30 feet long.

At those locations where new asphalt concrete pavement overlay joins existing asphalt pavement, the Contractor shall rake out all aggregate 3/8-inch or larger and feather the new paving to form a smooth transition to join the existing pavement. For entire new sections of A.C. and base (as shown in Exhibit "A") saw cutting shall be required and included in the A.C. Pavement/Overlay, Bid Item Price. The saw cutting will occur at a minimum (Public Works Inspector determines) 12 inches from the edge of pavement where the new street section is to be constructed. All edges shall be tack coated.

The Contractor shall use sufficient workers and equipment to accomplish proper placement and compaction of the asphalt concrete pavement to the satisfaction of the Engineer.

The Contractor shall pour curb and gutter prior to new asphalt concrete and base material in areas of dirt that will be graded and filled with base material and asphalt concrete.

302-5.9 Measurement and Payment.

PAYMENT - Payment for OVERLAY 1 ½-2" AC PAVEMENT OVER LEVELING COURSE shall be at the ton (TON) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

SECTION 303 - CONCRETE AND MASONRY CONSTRUCTION

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

303-5.1 Requirements.

303-5.1.1 General.

The Contractor shall construct portland cement concrete improvements in accordance with the details shown on the Plans and the City of Long Beach Standard Plans.

Portland cement concrete shall not contain fly ash.

Where constructing portland cement concrete curb or curb and gutter improvements next to existing asphalt concrete pavement, the Contractor shall join the asphalt concrete with slot paving as shown on City of Long Beach Standard Plan 116. The Contractor shall use full-depth asphalt concrete pavement. Depths of asphalt concrete and crushed miscellaneous base per plan.

303-5.1.4 Parkway Grading. After constructing curb and parkway improvements, the Contractor shall place backfill, then blade and bring parkway areas to an even surface. For backfill, the Contractor shall use select materials from excavation areas within the Work.

303-5.1.5 Curb Ramps. This item shall include removing any existing improvement (including dirt, non-conforming ramps, grass, walls, fences, etc.) and preparing the subgrade, placing and finishing Portland Cement Concrete sidewalk returns to provide the required configuration and finish for crosswalk ramps. Crosswalk ramps will be constructed according to details shown on the Contract Drawings.

The Contractor shall construct crosswalk ramps with yellow detectable warning surfacing. Crosswalk ramps and pedestrian crossing must comply with the most current Americans with Disabilities Act (ADA) regulations outlined under Title II of the ADA. Crosswalk ramps must be constructed having detectable warning surfaces. 3" of CMB shall be placed under the crosswalk ramp.

303-5.1.6 Mountable Curb

This item shall include preparing the subgrade, placing and finishing Portland Cement Concrete mountable curb to provide the required configuration and finish for. Mountable curbs shall be constructed according to details shown on the Contract Drawings.

303-6 Stamped Concrete.

The Contractor shall construct stamped concrete, except where identified by the City Engineer, at roundabout and median locations, in accordance with the Plans. The color and pattern of stamped concrete shall be determined and approved by the City Engineer prior to construction.

Work under this category includes two types of stamped concrete. 6" stamped concrete with #4 bar at 24" on center over 6" CMB will be constructed at roundabouts. 6" stamped concrete over 6" CMB will be constructed at median islands. Work includes integral concrete pavement color, pattern, textural surface, dry-shake color hardener, test slabs, application of a sealant solution, and furnishing and installing joints in accordance with the plans and specification.

Concrete must have a minimum 28-day compressive strength of 4500 psi at roundabouts, with a maximum aggregate size of ½". Cement must be from the same mill, raw material type, and brand to make colors uniform.

303-6.1 Test Slabs.

The Contractor shall provide a minimum 5' x 5' cast of stamped and colored concrete test slab to show the pattern, texture relief, surface finish, color, and standard workmanship to be tested and approved by the City. Stamped concrete for the project shall have uniform and consistent color and pattern as the approved slab.

303-6.2 Measurement and Payment.

Payment for INSTALL 4" PCC SIDEWALK OVER 3" CMB shall be at the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL 6" PCC CURB & GUTTER OVER 6" CMB shall be at the linear feet (LF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL 6" PCC CURB OVER 6" CMB shall be at the linear feet (LF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL PCC MOUNTABLE CURB OVER 6" CMB shall be at the linear feet (LF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL 6" STAMPED CONCRETE WITH #4 BAR 24" O.C. OVER 6" CMB (ROUNDBOUT) shall be at the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL 6" STAMPED CONCRETE OVER 6" CMB (MEDIAN) shall be at the square feet (SF) contract unit price shown in the Bid which shall be full

compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL CROSSWALK RAMP OVER 3" CMB shall be at the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals. CMB material under this section shall be included in the ton (TON) unit bid price for Crushed Miscellaneous base (CMB).

Payment for INSTALL BIOSWALE CURB CUT shall be at each (Ea) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for INSTALL DETENTION BASIN EXTENSION INLET shall be at each (Ea) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for REBUILD DRIVEWAY PER MODIFIED DRIVEWAY DETAIL shall be at the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for REBUILD DRIVEWAY PER COLB STD PLAN NO. 105 shall be at the square feet (SF) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for INSTALL CATCH BASIN LOCAL DEPRESSION EXTENSION shall be at each (Ea) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for RECONSTRUCT CATCH BASIN shall be at each (Ea) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for RECONSTRUCT SPANDREL shall be at each (Ea) contract unit price shown in the Bid which shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

SECTION 307 - STREET LIGHTING AND TRAFFIC SIGNALS

307-1 GENERAL. The Work under this Section consists of furnishing and installing all equipment and materials necessary for traffic signal system and street light improvements as shown on the Plans and in accordance with these Specifications.

307-1.1 Specifications and Standards. All items to be furnished and all Work to be done shall conform to Section 86, "Signals and Lighting", of the State Standard Specifications and State Standard Plans (dated 2010); City of Long Beach Electrical Service Enclosure Specifications, included herein; City of Long Beach Addendum to State of California Traffic Signal Control Equipment Specifications, included herein; City of Long Beach Emergency Pre-emption Specifications, included herein; City of Long Beach Loop Detector Specifications; City of Long Beach LED Module Specifications, included herein; and as specified. If a conflict exists between City and State Standard Specifications, City Specifications shall govern.

The Contractor shall coordinate street light improvements with City Light & Power, Inc.

307-1.2 Scheduling of Work. The Contractor may perform sub-surface work consisting of the installation of conduit, foundations, and detectors prior to receipt of all electrical materials and equipment.

Above ground signal and street light work shall not commence until such time that the Contractor notifies the Engineer, in writing, of the date that Contractor has received all electrical materials and equipment. Contractor shall start said work within 7 days after notice to proceed from the City Engineer.

No materials or equipment shall be stored at the work site until receipt of said notification by the Engineer. The work sites shall be maintained in a neat and orderly condition at all times.

All striping, pavement markings, and signs shall be in place prior to signal turn on.

307-1.3 Equipment List and Drawings. The Contractor shall submit a list of equipment and materials that it intends to install in accordance with Subsection 307-1.3, "Equipment List and Drawings," of the Standard Specifications, as supplemented by the following:

Shop drawings, equipment, and materials submittals shall be submitted to the Engineer within 10 working days after the start date specified in the "Notice To Proceed", except where a shorter time is specified for submittals elsewhere in these Specifications, for the Engineer's review and approval.

The list of equipment and materials shall include spreadsheets for each intersection and for the project, listing the equipment and materials to be installed at each intersection and for the project. The equipment list shall include the manufacturer's name, size, and identifying number for each item to be installed by the Contractor. The Contractor shall update and re-submit the list of equipment and materials to incorporate any changes required by the Engineer.

The manufacturer's product data and catalog sheets shall be provided for each item. Detailed drawings and wiring diagrams shall be provided for the Type 332 controller cabinet assemblies.

307-1.4 Pre-installation Testing. The Contractor shall deliver all traffic signal control equipment to the City for final testing prior to installation. The equipment to be tested shall include but not limited to Type 332 controller cabinet assemblies complete with Type 2070 controllers and all auxiliary control equipment.

Controller units including cabinets and auxiliary equipment shall be delivered to the City Traffic Operations Center, 1601 San Francisco Street, Long Beach, a minimum of 15 working days prior to installation of the equipment for final functional testing. Wiring diagrams and manuals shall be included in each cabinet assembly upon delivery.

The Contractor shall provide for all delivery and pickup of equipment tested at the City facility. The Contractor shall pickup tested equipment from the City facility and deliver to individual project locations for installation.

307-1.5 Utility Potholing. The Work shall include "potholing" to locate all interfering utilities and repair of same by the Contractor.

The cost for "potholing" including the replacement of concrete or asphalt associated with "potholing" shall be included in the associated unit prices bid and no additional payment will be made therefor.

Prior to preparing the bid, utility drawings will be available in the City's Engineering Records for review by the Contractor.

307-1.6 Removing Traffic Signal and Lighting Standard Foundations. The Contractor shall remove and salvage traffic signal and street lighting, and completely remove its standard foundations as shown (RS) notes on the Plans.

Electrical equipment removed from the job site is deemed property of the City of Long Beach and shall be brought by the Contractor to the City yard at 1601 San Francisco Avenue, Long Beach, CA during operating hours for storage.

The Contractor shall notify City Light & Power, Inc. 48 hours in advance of removing a streetlight and its foundation.

The Contractor shall disconnect and pull the conductors routed through the foundation back into the nearest pull box(es), being careful to protect the conductors and to de-energize any conductors running through the foundation before starting work. The Contractor shall remove the foundation stub-ups running into the foundation from the nearest pull box(es), being careful to protect the pull box(es) as the stub-ups are removed.

The Contractor shall completely remove the existing foundation, and replace and reconnect street lighting conduit and conductors including furnishing and installing a new pull box, to reestablish the street lighting circuit.

The Contractor shall replace and restore the concrete sidewalk in the area where the foundation is removed. The concrete sidewalk shall be removed to neatly sawed edges in straight lines either parallel to the curb or at right angles to the alignment of the sidewalk where possible. No section to be replaced shall be smaller than 30 inches in either length or width.

307-8 Foundations, Foundation Caps and Slabs. The Contractor shall construct street light foundations per City of Long Beach Standard Plan No. 701 - "Light Standard Type A & B" and Standard Plan No. 707 – "Typical Foundation Details".

307-10 Standards, Pedestals, and Mast Arms. The Contractor shall install street light mast arms per Top Mounted Mast Arm – Type II per City of Long Beach Standard Plan No. 706-"Mast Arms and Mounting Heights" on concrete light pole per City of Long Beach Concrete "Light Standard Type A & B" on Standard Plan No. 701.

Street light pull boxes shall be installed per City of Long Beach Standard Plan No. 709 – "Pull Box and Street Light Conduit and Conductor Details".

Payment for REMOVE AND SALVAGE STREET LIGHT POLE INCLUDING FOUNDATION shall be at each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for REMOVE EXISTING PULLBOX shall be at the each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for ADJUST PULLBOX TO GRADE shall be at the each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for INSTALL NEW PULLBOX shall be at the each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

Payment for INSTALL LED TYPE STREET WITH 250W EQUIVALENT PHOTOCELL shall be at the each (Ea) unit price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

307-2 CONDUITS, WIRING AND ELECTRICAL.

307-2.1 Electrical Service. The Contractor shall furnish and install electrical service cabinets, including foundations, as shown on the Plans. Electrical service cabinets shall

be City Type IIIBF and shall conform to City of Long Beach Electrical Service Enclosure Specifications, Standard Plan 710, included herein. The cabinets shall be installed as shown in the Plans.

A photoelectric unit shall be mounted on the safety lighting luminaire nearest the electrical service cabinets. Conductors shall be #12 AWG THW, yellow with black tracer between electrical service cabinets and photoelectric unit, yellow with red tracer between photoelectric unit and relay, yellow with white tracer between photoelectric unit and neutral and also between relay and neutral.

The signal controller conductors shall be #6 AWG THW, red/white routed from the service cabinet through the 2-inch conduit, through the #6 pull box, through another 2-inch conduit, and into the controller cabinet.

Safety lighting conductors shall be #8 AWG THW, black/white from the electrical service cabinet through the #6 pull box and to the safety lighting. The white (neutral) conductors for the signal controller cabinet and safety lighting shall be connected to the neutral buss in the electrical service cabinet.

A #5 pull box with bolt-down lid shall be located between the electrical service cabinets and the utility feed point. The cover shall be labeled "EDISON". Where the conductors from the electrical service cabinets to the utility feed point are furnished by the Contractor, they shall meet the National Electrical Code for 100 amperes service/distance and shall not be less than #2 AWG THW. There shall be no wires, other than those required by the utility company, between the electrical service cabinet and the utility feed point.

Electrical service shall include copper-clad grounding rod.

Payment for electrical service will be included in the amount paid for the service cabinet.

PAYMENT - Payment for INSTALL 2" PVC STREET LIGHT CONDUIT shall be at the linear feet (LF) unit price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

307-2.2 Edison Facilities. The Contractor must be authorized by Southern California Edison (Edison) for work on Edison electrical service facilities or employ, at its own expense, an Edison-authorized contractor for such work. Qualified personnel from an Edison-authorized contractor shall be present at any time the Contractor's equipment is situated or operated within 10 feet of Edison overhead wires or when entry into an Edison vault is required, and shall execute any work done in Edison vaults.

A list of Edison-authorized contractors is attached hereto.

Payment for work done by Edison-approved contractors will be included in the amount paid for the service cabinet, and no separate payment will be made for this.

307-2.3 Traffic Signal Conduits. Conduits for traffic signal and detection systems shall be galvanized rigid steel with insulated bonded bushings in accordance with the State Standard Specifications. Conduits for communication system shall be PVC schedule 80.

The Contractor shall use boring or jacking technology as the principal method for installing conduit. Trenching may be used to install conduit where and when boring is not practical. No trenching is permitted without prior approval of the Engineer. With approval, the Contractor may install conduit in open trenches excavated with an earth saw, unless otherwise specified. The Contractor shall not excavate open trenches through Portland Cement Concrete bus pads, gutters, or local depressions. The maximum trench width for open trenches shall be 6 inches.

The Contractor shall remove Portland Cement Concrete and asphalt concrete to neatly cut lines with smooth edges. Conduit shall be installed a minimum of 30 inches below finished grade in all areas unless otherwise approved by the Engineer. Conduit sweeps into pull boxes shall be made at a maximum angle of 45 degrees for No. 6 or larger pull boxes and cable vaults, and shall be 90 degree sweeps for No. 5 pull boxes. The Contractor shall fit the conduit for drilling or jacking with suitable drill bits. The pavement shall be restored in accordance with the City of Long Beach Standard Plans No. 127 and 634.

Payment for conduits including the cost of pavement restoration will be made at the unit prices shown in the Bid.

307-2.4 Traffic Signal and Communication Pull Boxes.

The Contractor shall furnish and install pull boxes as shown on the Plans. Traffic signal pull boxes shall be No. 6e (24"Lx36"Wx24"D) unless otherwise noted on the plan. Communication pull boxes shall be No. 6 (24"Lx36"Wx12"D) and No. 6e (24"Lx36"Wx24"D) and be constructed in accordance with State Standard Specifications Subsection 86-2.06C, "Installation and Use" and State Standard Plan No. ES-8. All pull boxes shall have grouted bottoms. Pull boxes shall not be located in or within 1 foot of a curb ramp. Pull box covers shall be labeled with "TRAFFIC SIGNAL" for traffic signal and "COMMUNICATION" for traffic signal communication.

Within the pull box, the Contractor shall place the conduit so that the bottom part of the opening is at least 2 inches above the bottom of the pull box and so that the top part of the openings is at least 8 inches from the top of the pull box. The conduit shall be placed to allow the cable to be pulled in a straight line and clear the top of the pull box by 2 inches (angle of exit). Conduits shall terminate within 2 inches of their entry into the pull box.

Payment for traffic signal pull boxes will be made at the unit prices shown in the Bid.

307-2.4.1 Splice Vaults

Splice vaults shall be polymer box with concrete lid and lid ring and shall have a nominal inside dimensions of 42" L x 30" W x 24" D for splice vault. Hold down bolts or cap screws and nuts shall be of brass, stainless steel or other non-corroding material. Each cover portion shall have inset lifting pull slots. Cover marking shall be "LONG BEACH COMMUNICATIONS".

Splice vault shall be installed as detailed and at locations shown on the plans or otherwise directed by the engineer. Splice vaults shall be installed at one inch above grade in unpaved areas and at grade in paved areas. Concrete to be placed around splice vaults shall contain a minimum of 564 pounds of cement per cubic yard.

Metallic or non-metallic cable racks shall be installed on the interior of one side of the splice vaults. The rack shall be capable of supporting a load of 100 pounds, minimum, per rack arm. Racks shall be supplied in lengths appropriate to the box in which they will be placed. Rack arms shall not be less than 6 inches in length. All metallic cable racks shall be fabricated from ASTM Designation: A36 steel plate and shall be hot-dip galvanized after fabrication. Steel plate, hardware and galvanizing shall be in accordance with the requirements of Section 75, "Miscellaneous Metals," of the State Specifications.

307-2.5 Traffic Signal Conductors and Wiring. The Contractor shall furnish and install conductor cables (sizes 28, 5, and 3), detector cables, interconnect cables, and service/lighting conductors as specified on the Plans. All conductors #10 AWG or smaller shall be solid.

The Contractor shall connect all 28 traffic signal conductors irrespective of the number actually being terminated.

All conductors of all 28 conductor cables shall be spliced together in a pull box whether or not those phases are utilized at that pull box location. Where there is only one 28-conductor cable on a pull box, all unused conductors shall be individually capped with a wire nut, taped, and dipped in an approved liquid plastic electrical coating.

Interconnect cables shall be spliced only in controller cabinets, not in pull boxes or in conduit runs. Other conductors shall be spliced only in pull boxes. Such splices shall be twisted together with no less than five 360 degree turns, soldered, and secured with moisture resistant plastic wire covers, wrapped with 3 layers of 7 mil approved plastic electrical tape and dipped in an approved liquid plastic electrical coating.

Payment for traffic signal conductors and wiring will be made at the unit prices shown in the Bid.

307-2.6 Bonding and Grounding. The Contractor shall furnish and install a grounding jumper as shown on the Plans. Grounding jumpers shall be attached by a 3/16 inch or larger brass bolt in the signal standard and shall be run to the conduit, ground rod or bonding wire in an adjacent pull box. The grounding jumper shall be visible after the cap has been poured on the foundation.

Green wire #6 (cabinet ground) shall have a separate ground rod in the pull box nearest to the cabinet, with no other wire attached.

Payment to furnish and install grounding jumpers will be included in the payment for the various other items of Work, and no separate payment will be made for this.

307-3 TRAFFIC SIGNAL AND LIGHTING EQUIPMENT.

307-3.1 Traffic Signal and Lighting Standards. Contractor shall furnish and install traffic signal and lighting standards per State Standard Plans and per the "Pole Schedule" on the Plans.

Payment to furnish and install traffic signal standards and foundations will be made at the unit prices shown in the Bid.

Flashing beacon equipment shall be Eltec, or approved equal.

307-3.5 Type 332 Controller Cabinet Assemblies. The Contractor shall furnish and install Type 332 field controller cabinet assemblies as shown on the Plans. Controller assemblies shall consist of a Model 2070L controller unit, a fully-wired Type 332 cabinet, inductive loop sensor detectors, pedestrian push button isolators, and all auxiliary equipment required to control the system as shown on the Plans, and as specified in these Specifications.

Type 332 controller cabinet assemblies shall conform to the requirements in Subsection 86-3.03, "Model 170 and Model 2070 Controller Assemblies," of Caltrans Standard Specifications May 2010, "Transportation Electrical Equipment Specifications," (TEES) and "Traffic Signal Control Equipment Specifications" (TSCES), issued by the State of California, Department of Transportation, and to all addendums thereto current at the time that these Specifications were issued.

The Contractor shall arrange to have a signal technician, qualified to work on the controller unit and employed by the controller unit manufacturer, or the manufacturer's representative, present at the time the equipment is turned on.

Payment to furnish and install Type 332 controller cabinet assemblies will be made at the unit price shown in the Bid.

Solid State Traffic Actuated Controllers:

Solid State Traffic actuated controller shall be State type 2070L. Controller assemblies shall conform to the requirements in "Transportation Electrical Equipment Specifications" (TEES) and "Traffic Signal Control Equipment Specifications" (TSCES), issued by the State of California, Department of Transportation, and to latest addendums thereto current at the time of project advertising.

The 2070L controller shall be supplied in the following configurations:

- Model 2070L
- Provide chassis
- 2070-1B Single-Board CPU
- 2070-2A 170-style Field I/O Module
- 2070-3B LCD front Panel (8x40 display)
- 2070-4A Power Supply Module
- 2070-6a Modem
- Data Key 8 Meg. Memory

Include with each controller, manuals that document the programming, operation and maintenance of the unit. Include schematic drawings and pin assignment charts in the manuals for maintenance. Documentation shall include all components, including communications modules.

307-3.6 Controller Cabinet Foundations. The Contractor shall construct each controller cabinet foundation as shown on the Plans for Model 332 cabinets (including furnishing and installing anchor bolts), shall install the controller cabinet on the foundation, shall make field wiring connections to the terminal blocks, and shall install communications equipment in the controller cabinet. Foundations for Type 1 housing shall conform to the details on State Standard Plan ES-3C for Model 332 cabinets.

Portland cement concrete shall conform to Section 90-10, "Minor Concrete," of the State Standard Specifications and shall contain not less than 470 pounds of cement per cubic yard, except concrete for reinforced pile foundations, which shall contain not less than 564 pounds of cement per cubic yard.

Payment for construction of controller cabinet foundations will be included in the price paid for controller cabinets, and no separate payment will be made for this.

307-3.11 Loop Detectors. The Contractor shall furnish and install Canoga 9004, or approved equal, Vehicle and Bicycle Detector inductive loops for vehicle detection and system loops as shown on the Plans. Inductive loops shall be 6-foot diameter for vehicles and 3-foot diameter for bikes, and spaced as shown on the Plans and installed in accordance with Subsection 86-5.01A(4), "Construction Materials" and Subsection 86-5.01A(5), "Installation Details" of the State Standard Specifications, July 2002 except

that the loop shall be State Type E and shall be wired in series, alternating clockwise to counterclockwise. Installation procedure shall be in accordance with the details shown on the State Standard Plans Nos. ES-5A and ES-5B except loops shall have 4-inches of cover and advance loops shall have four turns.

Loop lead-in cable shall be State Type "B". Loop cable termination shall be in accordance with the Curb Termination Details, Type B of the State Standard Plan No. ES-5E.

Existing striping destroyed by the placement of traffic loops will be repainted after installation of traffic loops.

All the inductive loop detectors disturbed or damaged during construction shall be replaced completely with new inductive loop detector system and installed in the roadway to match with the existing signal system. After installation, the Contractor shall function test the signal system to the complete satisfaction of the City.

PAYMENT - Payment for BIKE DETECTOR MODIFICATION AT DAISY AVE AND 6TH STREET INTERSECATION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for installing traffic detection system and restoring markings and furnishing all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for BIKE DETECTOR MODIFICATION AT DAISY AVE AND 7TH STREET INTERSECATION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for installing traffic detection system and restoring markings and furnishing all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for BIKE DETECTOR MODIFICATION AT MAGNOLIA AVENUE AND ANAHEIM STREET INTERSECATION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for installing traffic detection system and restoring markings and furnishing all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for BIKE DETECTOR MODIFICATION AT LONG BEACH BOULEVARD AND BIXBY ROAD INTERSECATION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for installing traffic detection system and restoring markings and furnishing all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for BIKE DETECTOR MODIFICATION AT ATLANTIC AVENUE AND 52ND STREET INTERSECATION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for installing traffic detection system and restoring markings and furnishing all necessary labor, materials, equipment and incidentals.

307-17-.7.3 Traffic Signal Preemption. The Contractor shall furnish and install Opticom Detector 711, or approved equal, as shown on the Plans. The Contractor shall be responsible for furnishing, installing and testing the Opticom 711 detectors for vehicle emergency preemption. The Contractor shall furnish the Opticom Span Wire Clamp and Model 138 Detector, or approved equal, cable as part of the installation. The detector is mounted on the mast arm and shall be aimed to provide a direct, unobstructed line-of-sight to approaching of emergency vehicles.

Payment – Preemption detectors shall be full compensation for furnishing all labor, materials and equipment necessary for installing traffic detection system and shall be included in the price of the traffic signal system. Payment will be made at the unit prices shown in the Bid.

PAYMENT - Payment for TRAFFIC SIGNAL MODIFICATION AT MYRTLE AVENUE AND ARTESIA BOULEVARD INTERSECTION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for INSTALL TRAFFIC SIGNAL AT DAISY AVENUE AND WILLOW STREET INTERSECTION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

PAYMENT - Payment for INSTALL FLASHING BEACON SYSTEM AT LINDEN AVENUE AND SAN ANTONIO DRIVE INTERSECTION shall be at the lump sum (LS) price shown in the Bid and shall be full compensation for furnishing all necessary labor, materials, equipment and incidentals.

SECTION 308 - LANDSCAPE AND IRRIGATION INSTALLATION.

SECTION 308 – LANDSCAPE AND IRRIGATION INSTALLATION

308-2 EARTHWORK AND TOPSOIL PLACEMENT.

308-2.1 General. The landscape work shall not begin until all other trades have repaired all areas of settlement, erosion, rutting, etc., and the soils have been re-established, re-compacted and refinished to final grades. The City Engineer shall be notified of all areas where the landscape work is prevented from being executed.

308-2.3 Topsoil Preparation and Conditioning.

308-2.3.1 General. In the first sentence of the first paragraph substitute Class ‘A’ with Class ‘C’.

Within the median planting areas, the top 14 inches of the existing material from the top of curb shall be excavated and removed and 12 inches of Class 'A' topsoil shall be imported and installed. The finished grade shall be 2 inches below the top of curb.

308-2.3.2 Fertilizing and Conditioning Procedures. The Class 'A' topsoil shall meet the requirements of 212-1.1.2. The Contractor shall provide a certified topsoil report by an analytical laboratory showing analyses of the topsoil proposed for use. A written report shall be prepared by the laboratory that either indicates compliance with the requirements of 212-1.1.2 or recommendations for soil amendments needed to comply with the requirements of 212-1.1.2. Any soil amendments recommended per the report shall be added at the Contractor's expense. The topsoil and/or soil amendments shall not be delivered to the site until acceptance is received from the City Engineer. Topsoil shall be subject to rejection by the City Engineer on or after delivery if it is found not to meet the requirements of the specifications or does not conform to the laboratory test results.

The Contractor shall apply post-plant fertilizer at the rate of 20 pounds per 1,000 square feet, 30 days after planting and once again at the end of the Maintenance and Establishment period per 308-6.

308-3.2.1 Moisture Barrier Installation. Moisture barrier membrane shall be installed in all median islands, completely surrounding the areas to be irrigated and planted, as shown on the drawings. Membrane shall extend a minimum of 30-inches (760mm) below top of curb.

Attach membrane securely and continuously to the back of curb with a mastic adhesive.

Lengths of sheeting shall be joined by folded and cemented lap seams, completely waterproof. Furnish two samples of a completed seam to the Engineer for approval prior to start of this work. Seams shall be minimum 4-inches (100mm) wide by width of sheet.

308-4 PLANTING.

308-4.1 General. All plants of the same species and container size (i.e. the same specification) shall be uniform in size and shape and at the same stage of growth to the satisfaction of the City Engineer.

The Contractor shall be responsible for managing the site and performing planting, maintenance and corrective measures to the best advantage of the plant material to promote healthy growth, establishment, and success of the plantings. This shall include providing drainage, irrigation or watering, maintaining a proper soil moisture level, weeding, fertilization, protection, temporary measures to promote establishment, and other reasonable maintenance and construction efforts needed to provide for the successful establishment of the plant materials during the contract period.

Hair roots shall extend to the edge of the container. No plant shall be root-bound.

The Contractor shall not install planting as shown in the Plans when it is obvious in the field that conditions exist which are detrimental to plant survival and growth. Such conditions shall be brought to the attention of the City Engineer.

No plants shall be transported to planting areas that are not thoroughly wet throughout the ball of earth surrounding the roots. Plants should not be allowed to dry out, nor shall any roots be exposed to the air except during the act of placement. Any plant that, in the opinion of the City Engineer, is dry or in a wilted condition when delivered or thereafter, whether in place or not, shall not be accepted and shall be replaced at the Contractor's expense.

All inspections herein specified shall be made by the City Engineer. The Contractor shall request inspection at least 48 hours in advance of the time inspection is required. Inspection shall be required on the following stages of the work:

- a) During preliminary grading, soil preparation, and initial weed eradication.
- b) When plants are spotted for planting, but before planting holes have been excavated.
- c) When finish grading has been completed.
- d) When all specified Work has been completed (prior to the Maintenance and Plant Establishment Period).
- e) Final inspection at the completion of the Maintenance and Plant Establishment period.

The Contractor's failure to obtain inspection shall extend the start and/or finish of the Maintenance and Plant Establishment Period as applicable, unless otherwise agreed to in writing by the City Engineer.

308-4.5 Tree and Shrub Planting.

Planting holes shall have vertical sides to the depth of the rootball and shall be two times the width of the rootball.

All planting holes shall be backfilled with the approved Class 'A' topsoil.

The materials shall be thoroughly mixed prior to backfilling, so that they are evenly distributed and without clods or lumps.

Fertilizer planting tablets 21 gram size and shall be placed with each plant at the following rates:

- a) One tablet per one-gallon container;

Delete items #1, #2, and #3 in the fifth paragraph and replace with the following:

1) Set plant in the center of the hole with the fullest growth facing the prevailing wind.

2) Position the plant in the hole so that the top of the rootball is one inch above the finished grade and backfill no higher than halfway up the root ball. Place the recommended number of tablets evenly around the perimeter of and immediately adjacent to, the root ball at a depth that is between the middle and the bottom of the root ball.

3) Complete the backfilling, tamp (eliminating all air voids), sloping the soil away from the rootball to finished grade, and water.

4) Construct a berm 4" above finish grade, extending 4" to 6" beyond edge of root ball, forming a watering basin with a level bottom around each plant.

308-4.6 Plant Staking and Guying.

Use 308-4.6.1 Method "A" Tree Staking.

308-4.6.1 Method "A" Tree Staking. Delete and replace with the following:

All trees shall be double-staked with the tree stakes and tree ties per 212-1.5.3 and as indicated on the Plans.

308-4.10 Horizontal Root Barriers.

308-4.10.1 Installation. Install per manufacturer's recommendations and as shown in the Construction Drawings.

308-4.11 Landscape Boulder.

308-4.11.1 Installation. Protect the boulders during setting as follows:

1. Protect boulders from damage from construction machines and materials.
2. Clean stone surfaces that have become dirty and stained prior to setting. Remove soil, stains, and foreign materials. Clean stones by thoroughly scrubbing stones with fiber brushes followed by a thorough drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh filler or abrasives.

Setting:

1. Execute the boulder placement by workers experienced in boulder placement.
2. Set the boulders to comply with the requirements indicated on the Drawings.

3. All broken, chipped, stained, or otherwise damaged rock deemed unacceptable to the Engineer shall be replaced with similar size rock.

4. Clean the boulders not less than 2 days after completion of the work, using clean water and stiff-bristle fiber brushes. Do not use wire brushes, acid-type cleaning agents, cleaning compounds with caustic or harsh fillers, or other materials or methods that could damage the rock.

308-4.13 Payment. Payment for removing existing soil and providing prepared topsoil, furnishing and installing bark mulch, soil amendments, fertilizer, trees, shrubs, and root barriers will be made at the unit price shown in the Bid.

308-5 IRRIGATION SYSTEM INSTALLATION.

308-5.1 General

The Contractor shall check and verify the water pressure at the Point of Connection (P.O.C.) prior to beginning work. The Contractor shall notify the City Engineer of any discrepancy between pressure indicated on the Plans and the actual water pressure measured in the field. If the pressure provided at work site or any other conditions create problems that shall prevent proper operation of the irrigation system, the City Engineer shall be notified before commencement of any work.

The record drawings of the irrigation system shall show locations and depths of the following items:

- a) Points of connection.
- b) Routing of pressurized and non-pressurized lines (dimension at a maximum of 100 feet along routing).
- c) All valves.
- d) Quick coupling valves.
- e) Rerouting of control wires.
- f) Other related equipment (as directed by City Engineer).

Dimensions shall be from two permanent points of reference (monuments, sidewalks, curbs, and pavement). Information needed on the As-Built drawings shall be added on a day-to-day basis as the work is installed. All dimensions noted on the drawings shall be a ¼ inch in size.

Upon completion of each increment of work, the Contractor shall transfer all such information and dimensions to the prints. Changes and dimensions shall be in a legible and professional manner. When the drawings are approved, transfer all information to a set of reproducible drawings.

The Contractor shall submit As-Built drawings (mylars and bluelines) to the City Engineer for approval seven days prior to the start of the Maintenance and

Establishment Period.

308-5.3 Installation of Valves, Valve Boxes, and Special Equipment.

The backflow prevention unit shall be tested by a certified backflow technician and its operation certified in writing. The Contractor shall arrange and pay for all testing and certification fees. The original written certification of the backflow prevention unit is to be submitted to the City Engineer.

Install valve boxes in planting areas and according to the Construction Drawings. Only one valve per box shall be allowed. Align valve boxes at right angles to the adjacent hardscape whenever possible. Where several valve boxes are located in the same area, arrange them in a uniform and orderly fashion.

When grouped together, allow a minimum of 12" between valves. The valves shall be installed in valve boxes, which shall have enough room on all sides to allow repair personnel to completely re-construct the valves without removing the valve box.

Valve boxes shall have identification numbers hot branded onto the box covers. The letters shall be 2" high and shall be branded using irons specifically designed for this purpose. Heat branding shall not weaken or in any way puncture the valve box cover. Remote control valves shall be branded "RCV" followed by the irrigation controller and valve number (e.g. RCV A-12), ball valves shall be branded "BV", and quick coupler valves shall be branded "QCV".

Identification tags with numbers are required on all valves. Tags shall have black letter with yellow background unless otherwise directed by the City Engineer.

308-5.4 Sprinkler Head Installation and Adjustment.

308-5.4.2 Location, Elevation, and Spacing.

The Contractor shall coordinate the installation of all sprinkler equipment, including pipe, with the Plans to avoid interfering with trees or other planting, permanent pavement, utilities, or signage.

308-5.5 Automatic Control System Installation.

Loop 36" of excess wire into each single valve box and into one valve box in each group of valves.

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

Spare Wires: Two red and one white spare wires shall be run in each direction from furthest valve of furthest valve manifold on each mainline run to each controller.

Automatic Controllers: Controllers shall be installed approximately where shown on the Plans after having verified exact positioning with the City Engineer. Units shall be installed plumb and in a manner as recommended by the manufacturer in the enclosure.

Delete the first sentence in the fourth paragraph and replace with "All service wiring shall be installed at the minimum depth specified in 308-2.2 in Schedule 40 PVC conduit."

In the fourth paragraph, replace the word "concrete" with "plastic" in all cases.

308-5.6 Flushing Testing.

308-5.6.1 General.

If leaks develop, repair leaking portions and repeat test until entire system is proven to be water-tight.

Tests shall be observed and approved by the City Engineer prior to backfilling trenches.

308-5.6.2 Pipeline Pressure Test:

Swing joints, spray heads, etc are not included in the lateral line pressure test.

308-5.6.7 Controller Charts.

Upon completion of the Work, the control system shall be in operating condition with an operational chart mounted in the controller cabinet.

As-Built drawings shall be approved by the City Engineer before the controller charts are prepared. The Contractor shall provide two controller charts for each controller supplied that show the area covered by the automatic controller on the maximum size sheet which the controller or controller cabinet door shall allow. The chart shall be a reproduction of the As-Built system drawing. However, in the event the controller sequence is not legible when the drawing is reduced, it shall be enlarged or redrawn to a size that shall be readable.

The chart shall be a blackline print, and a different color shall be used to show area of coverage for each station.

When completed by the Contractor and approved by the City Engineer, one of the charts shall be hermetically sealed between two pieces of plastic, each piece being a minimum 20 mils. thick. This chart shall be mounted using Velcro or approved equal type of tape. The other chart shall be given to the City Engineer.

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

irrigation system.

308-5.7 Payment. Payment for the installation of the irrigation system will be made at the unit price shown in the Bid. There shall be no separate payment for furnishing and installing pipe, fittings, valves, controllers, enclosures, special equipment, trenching, and electrical work.

308-6 MAINTENANCE AND PLANT ESTABLISHMENT.

Any plant material found to be dead, missing, or in poor condition during the maintenance and establishment period shall be replaced immediately at the Contractor's expense. The City Engineer shall be the sole judge as to the condition of the material. Replacement shall be made to the same specifications required for the original plantings.

During the Maintenance and Plant Establishment period, should the Contractor fail to expeditiously replace dead plant material upon written notification by the City Engineer, the City shall cause the work to be corrected and bill the actual costs incurred to the Contractor.

The Contractor shall apply post-plant fertilizer at the rate of 20 pounds per 1,000 square feet 30 days after planting and once again at the end of the maintenance and establishment period. The above fertilization schedule may be revised by the City Engineer if optimal plant health and growth is not being obtained. The Contractor shall comply with all changes as directed.

308-7 GUARANTEE. All 15-gallon and larger trees installed under the Contract shall be guaranteed to live and grow for one year from the date of final acceptance of the Work unless decline of the tree is specifically attributable to causes unrelated to installation, plant material quality, and the Contractor's maintenance practices.

All other plant material shall be guaranteed to live and grow for a period of 90 calendar days from the date of final acceptance of the Work unless decline of the plant material is specifically attributable to causes unrelated to installation, plant material quality, and the Contractor's maintenance practices.

Any plant material found to be dead, missing, or in poor condition during the maintenance and establishment period shall be replaced immediately at the Contractor's expense. The City Engineer shall be the sole judge as to the condition of the material. Replacement shall be made to the same specifications required for the original plantings.

During the guarantee period, should the Contractor fail to expeditiously replace dead plant material upon written notification by the City Engineer, the City shall cause the work to be corrected and bill the actual costs incurred to the Contractor.

308-8 PAYMENT.

PAYMENT - Payment for LANDSCAPE PLANTING shall be made at the lump sum (LS) price shown in the Bid. This price shall include full compensation for all tools, materials, labor, equipment, water and incidentals to complete this work in accordance with the Plans and Special Provisions.

PAYMENT - Payment for IRRIGATION SYSTEM shall be made at the lump sum (LS) price shown in the Bid. This price shall include full compensation for all tools, materials, labor, equipment, water and incidentals to complete this work in accordance with the Plans and Special Provisions.

Payment for bioswale or detention basin work is not included in this Bid item.

SECTION 309 - MONUMENTS

309-2 MATERIALS.

The Contractor shall furnish all survey marker caps and other required accessories.

309-3 CONSTRUCTION.

The Contractor shall construct survey monuments and benchmarks per Long Beach Standard Plans.

309-4 PAYMENT.

The City shall make no payment for preserving or adjusting survey monuments and benchmarks and it shall be included incidental to other Bid items.

SECTION 314 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

314-1 GENERAL.

New striping and markings on asphalt concrete (AC) pavement shall be alkyd thermoplastic and new striping and markings on concrete pavement shall be paint with glass beads, 1.5 mm to 2.5 mm thick and shall be done in accordance with the Caltrans Traffic Manual. Paint material shall be in accordance with Section 210-1.6.2 of the Standard Specifications (Greenbook), "Paint for Traffic Striping, pavement marking and curb marking."

Curb paint shall be water-based with a 2-year guarantee against color fading. The Contractor shall submit to the City written proof of the manufacturer's 2-year guarantee before starting construction.

At locations where existing painted curb is to be reconstructed, the Contractor shall paint the new curb as shown on the Plans within 10 working days after completing curb reconstruction or as directed by the Engineer.

Within two days following curb painting, the Contractor shall contact the City's Traffic Paint & Signs Section at (562) 570-2740. The City will paint the City's logo on the newly painted curb.

The Contractor shall furnish samples of materials to the Engineer at least 3 weeks before the materials are to be applied.

The Contractor shall re-stripe existing striping and curb markings obliterated by new construction, whether or not shown on the Plans for replacement. Existing pavement markings shall be repainted after completion of constructing the asphaltic concrete pavement. The application of paint shall be delayed until the new asphalt concrete has cured. This delay shall be a minimum of 3 days, with the exception of school markings, which shall be repainted within 48 hours. No permanent paint shall be applied before the City Public Works Inspector has approved the painting to commence.

The pavement markings may include, but are not limited to, the following:

- Stop bar (white)
- Crosswalk (white or yellow)
- Continental crosswalk (white or yellow)
- Yield "shark teeth" (white)
- Street center line double (white or yellow)
- Solid line and dashed line (white or yellow)
- Street center dashed-line single (white)
- Chevron (white)
- Diagonal (white)
- Word "Stop" (white)
- Word "Yield" (white)
- Left turn arrow
- Right turn arrow
- Center line ties
- Delineators
- Bike symbol and/or arrow (white)
- Bike sharrow symbol (white)
- Bike lane solid line (white)
- Bike lane dashed line (white)
- Red curb

Yellow curb

Lane striping shall be installed according to Caltrans standard plans and with necessary reflectors. Ladder crosswalks shall be painted, unless otherwise noted, according to City standard and detail in the Plans.

Street centerlines, outside of school zones, shall be "cat tracked" immediately upon completion of A.C. placement. Payment for "cat tracking" shall be considered to be included in the unit price paid for Asphalt Concrete Pavement/Overlay.

PAYMENT - The lump sum price or unit price shown in the Bid will be paid for the repainting of pavement markings and new pavement markings and striping and shall be full compensation for furnishing all labor, materials and equipment necessary for repainting.

314-2 PREPARATION OF EXISTING SURFACES.

The Contractor shall remove markers, markings, and striping where necessary to adjust the configuration of existing striping to new striping. The Contractor shall remove markers flush with existing pavement. The Contractor shall remove markings and striping by dry sandblasting or light grinding, as approved by the Engineer.

All existing street traffic signal facilities (i.e. loop system) shall be protected in place during the course of this project. Any damage shall be repaired by the Contractor at the contractor's expense.

314-4 APPLICATION OF TRAFFIC STRIPING AND CURB AND PAVEMENT MARKINGS.

314-4.2 Control of Alignment and Layout.

314-4.2.1 General.

The Contractor shall notify the Engineer after completing layout and at least 3 working days before commencing installation of striping, markings and markers.

Within two days following curb painting, the Contractor shall contact the City's Traffic Operations Division at (562) 570-3264. The City will paint the City's logo on the newly painted curb.

The Contractor shall install a Type I pavement marker at the center of the street at all fire hydrant locations.

314-6 PAYMENT.

The City shall pay for STRIPING, MARKINGS, AND MARKERS work shown in Section 314 at the lump sum (LS) unit price shown in the Bid and shall include all equipment, materials, and incidentals..

The City will include payment for removal of interfering striping, markers and markings in the payment for the various other items of Work, and will make no separate payment for such removals.

The City will include payment for replacement of obliterated striping and markings in the payment for the various other items of Work, and will make no separate payment for such replacement.

SECTION 315 - TRAFFIC SIGNS

315-1 GENERAL. The Contractor shall furnish and install signs and signposts, re-post existing signs, and replace existing sidewalks where removed for signpost installation. The Contractor shall replace damaged posts within the Work area.

The signage may include, but are not limited to, the following:

- OM2-1H
- R1-1
- R1-2
- R1-5A
- R3-4
- R3-5R
- R3-7(Right)
- R4-7
- R4-7B (Right)
- R6-1 (Right)
- R6-2 (Right)
- R10-12
- R30(CA)
- R26 (CA)
- R44A (CA)
- R81
- Street Name Sign
- W2-6
- W3-2
- W4-2
- W9-2 (Left)
- W11-1
- W11-2
- W16-7P (Left)
- W16-7P (Right)

W16-9P
W16-12P
4' Class I Flexible Delineator

Signs shall conform to the provisions in Section 56, "Signs," of the State Standard Specifications, the State Specifications for Reflective Sheeting on Aluminum Signs, the State Specifications for Aluminum Single-Sheet and Laminated-Panel Signs.

All pedestrian and school area warning signs shall conform to the Specifications for 3M™ Diamond Grade™ Fluorescent VIP (Visual Impact Performance) yellow-green Reflective Sheeting or equal.

The Contractor shall install new signs and posts in accordance with Long Beach Standard Plan 317. When installing one new sign on a new post, the Contractor shall install the sign on a 10' high post. When installing two or more new signs on a new post, the Contractor shall install the signs on a 12' high post.

New signs to be posted on existing street light poles, traffic signal poles, or sign posts shall be installed according to the City of Long Beach Standard Plan 317.

Installation of object marking sign shall be installed per detail on the Plans. The bottom of the sign shall be 2 feet above the finished ground surface of installation location.

Street names signs shall be posted with the street name facing its respective street.

PAYMENT - The City shall pay for SIGNAGE work shown in Section 315 at the lump sum (LS) unit price shown in the Bid and shall include all equipment, materials, and incidentals.

315-2 WAYFINDING SIGNAGE.

A. Design Development Drawings

1. These Design Intent drawings are for the sole purpose of conveying design intent.
2. Construction drawings/shop drawings are the responsibility of the appropriate contractor.
3. The City shall review all shop drawings for conformance with the design intent of these drawings and will not be responsible or liable for any results of construction from working drawings, material selection, shop drawings, or any other agreements.

4. These drawings are not to be used as photo or computer artwork or patterns unless instructed to do so by the City.

B. Quality Assurance

1. Contractor Qualifications: The contractor shall be responsible for the quality and delivery of all materials and workmanship required for the execution of this contract. It is desirable that the fabricator for work herein have in-house a broad knowledge, diverse shop and field experience, flexibility, coordinating ability, skilled craftsmen, and physical plant necessary to produce quality products equivalent to or better than similar type products in use in the industry. These general requirements apply equally to the contractor and to his subcontractors.

2. Contractors shall be responsible for providing all subcontractors with complete and up-to-date drawings, specifications, message schedules and other information issued by the project manager.

3. Contractor to submit qualifying data to the City for approval.

4. The Contractor may make recommendations and/or changes to the details as shown on the drawings, if such recommendations are approved in writing by the City prior to shop drawings or fabrication of prototypes or samples.

5. The Contractor shall base his proposal on the performance of all services, including all labor, materials and equipment for the complete fabrication and installation of the product at the agreed upon schedule.

6. Where thicknesses and/or sizes are not specified, fabricator shall determine said measurements taking into account structural integrity as well as aesthetics. All fabricated surfaces are to be free of ripples, weld marks, "oil canning," etc. Seams, where visible, are to be straight and true.

7. All metal surfaces are to be prepared in a manner for permanent paint and film adhesion and prevention of corrosion. All metals are to be painted with automotive polyurethane paint, or with vinyl adhered. Paint and films must be able to withstand full-sun ocean front exterior weather conditions, and be sprayed to a smooth finish, not brushed on. Provide a protective clear coat finish with U.V. inhibitors on all exterior signs.

8. No sheet metal construction will be accepted, except as noted. All welds shall be ground smooth and blended into adjacent surfaces. All fabricated surfaces shall be free from visible warps and finish blemishes. No "oil canning" will be accepted. No visible seams or fasteners except noted. All surfaces shall be free of weld and cut marks. Where dis-similar metals are indicated, isolate and/or gasket as required.

C. Design Criteria

1. Structural Design

- a. Details on drawings indicate a design approach for sign structures but do not necessarily include all fabrication details required for the complete structural integrity of the signs, including consideration for static, dynamic and erection loads during handling, erecting and service at the installed locations, nor do they necessarily consider the preferred shop practices of the individual general sign contractors. Therefore it shall be the responsibility of the Contractor to perform the complete structural design of the signs and to incorporate all the reasonable safety factors necessary to protect the City and sign fabricator against public liability. Designs which survive rational engineering analyses and conform to all applicable national and local codes will be acceptable.
- b. Engineer to resist wind and seismic loads in accordance to all local, state and federal building codes.
- c. When hooks are required because of size or weight of the sign, provide as an integral part of the internal structural design. Hooks shall be as inconspicuous as possible in the finished work and removed if at all possible.
- d. On applicable signs, submit calculations signed and sealed by a licensed, registered professional engineer.
- e. Willmore City Historic District Street Name Signs shall be manufactured by Maneri Sign Co., Inc. at (310) 327-6261, www.manerisignco.com, per detail AH on Sheet 6 of Contract Drawings and City of Long Beach Standard Plan No. 320.

2. Dimensions

- a. Written dimensions on the drawings shall take precedence over scaled dimensions. Contractor shall verify and be responsible for all dimensions and conditions shown by these drawings and shall be responsible for confirming all field dimensions and conditions prior to beginning fabrication.
- b. Contractor will determine the copy, quantities and references in accordance with location plans. All messages are to be approved by the City.
- c. Locations of signs shown on the plans determine the quantity.

3. Execution

a. Contractor shall notify the City of any discrepancies in the drawings or graphics schedule, in field dimensions or conditions, and/or changes required in construction details. All discrepancies shall be brought to the attention of the City.

D. Contractor Responsibility

1. Review shop drawings, product data and samples prior to submittal.
2. Verify field measurements, field construction criteria, catalog numbers and similar data.
3. Contractor's responsibility for deviations in submittals from requirements of Contract Documents or these design development drawings is not relieved by the City's review of submittals unless the City gives written acceptance of specific deviations.
4. A deviation shall be construed to mean a minor change to the sequence indicated on the drawings or specifications. A deviation is not intended to allow substitutions or product options.
5. In addition to notifying the City in writing of deviations, such deviations shall be indicated on the shop drawings.
6. Work shall not begin until the corresponding submittals have been reviewed and approved by the City.

E. Artwork

1. Artwork for all signs contained within this document will be submitted to awarded sign contractor in digital format in Adobe Illustrator. The artwork provided will not be color-separated nor will it provide for trapping, overprinting or other requirements specific to the reproduction method. All enlarging and reducing is the responsibility of the Contractor. Do not use paper prints as originals for templates.
2. Contractor will be responsible for converting the provided artwork to whichever medium or format required.
3. All copy must be verified with the City prior to fabrication.

F. Labels

1. There shall be no visible labels on the completed signs unless required by law.

G. Inspection

1. The Contractor shall examine the substrates and conditions on which the signs are to be installed and notify the City and their designated representative(s) in writing of conditions that would impede the proper and timely completion of the work. Do not proceed with the work until all unsatisfactory conditions have been remedied.

H. Submittals

1. Shop Drawings

a. The Contractor shall submit electronic sets of prints the City prior to production. These drawings are to be submitted 2 weeks prior to the date they need to be returned to the Contractor.

b. The drawings are to show all materials, thicknesses, finishes, construction details, installation details, structure, artwork and illumination as well as the location of all seams, finished and unfinished. Drawings shall indicate locations of all transformers or other components which require access by service personnel, clearly describing methods of access to each point.

c. All dimensions are to be in United States feet and inches.

d. Review of shop drawings will be done in a timely manner by the City and other required agencies so as not to delay the work.

e. The Contractor shall make any changes indicated by the City and resubmit the shop drawings for final approval. Approved shop drawings must be received by the Contractor before fabrication can start.

f. Shop drawings will be reviewed for compliance with design intent only. The Contractor is responsible for all other aspects of fabrication including engineering, procedures, installation techniques and performance, as well as coordination with sub-contractors and related trades.

2. Product Data

a. The Contractor shall submit manufacturer's technical data and installation instructions for each type of sign or fixture required for the finished and installed unit.

b. The Contractor shall provide the City with complete care and maintenance instructions for the installed pieces, indicating all brand and model numbers for replaceable components that might fail such as transformers, light fixtures, motors, etc., as well as a list of all subcontractors and the replaceable materials they have provided such as flags and banners.

3. Samples

a. The Contractor shall submit to the Engineer two (2) samples of each material in the finish and texture specified and each paint color on the material and in the finish specified as indicated on the drawings. Minimum size shall be 6"x6" (150mm x 150mm). Samples should be submitted in ample time to allow adjustments and resubmission without causing delay to the project.

b. Contractor may suggest substitutions if they perform better than the designer's requirements. Manufacturer's product specification and performance data of the Contractor's suggested substitutions must be submitted with the samples. Data will be kept in the City's project files.

PAYMENT - Payment for WAYFINDING SIGNAGE shall be in the lump sum (LS) price as shown in the Bid. This payment shall be full compensation for furnishing material, labor and tools necessary for placement of wayfinding signage.

BIOSWALE

Bioswales consist of vegetated channels which contain conditioned planting soil beds and planting materials that are used to filter stormwater runoff. Construction of bioswales shall consist of furnishing necessary materials, preparing the runoff surfaces, excavating for and installing the filter media zone which consists of engineered soil, filter fabric, gravel filter, and amended subgrade as shown in the Plans. All bioswales shall be installed at the locations and to the grades and elevations shown in the Plans. Mass excavation for the swale channel is not included in this item.

MATERIALS Engineering filter fabric shall be US Fabrics, Inc. nonwoven geotextiles heavy weight (10-16 oz/sy), or approved equal. Gravel filter shall be porous 1-2" gravel rock. Pipe for subdrains shall be 6" PVC of the size and type shown in the Plans.

CONSTRUCTION Construction of bioswales shall be as shown in the contract documents. Depth of bioswales shall be to 7 feet below finished grade. Contractor shall make all efforts to limit soil compaction of the surface soils within the bioswale side slopes and bottom.

METHOD OF MEASUREMENT The length of bioswales will be measured by the Engineer to the square feet of the bioswale. The length of non-perforated subdrain pipe connections beneath the intercepting side roads will not be measured and will be incidental to this bid item. The non-perforated subdrain outlet pipe between the bioswales and the drainage ways will not be measured and will be incidental to this bid item. Curb inlets/outlets will not be measured and will be incidental to this bid item.

PAYMENT - Payment for CONSTRUCT BIOSWALE shall be in the ton (TON) unit price as shown in the Bid. This payment shall be full compensation for excavating, furnishing material, labor and tools necessary for placement of the bioswale, removal of excess excavated material from the project, furnishing and placing the engineered soils, furnishing and placing the filter fabric, and other necessary subdrain connections, and furnishing and placing the amended subgrade as shown in the Plans as directed by the Engineer. For bioswales built in accordance with the Plans, no extra compensation will be allowed for over-depth, rock excavation, tamping backfill, and removal of surplus material from the project.

DETENTION BASIN

Detention basins consist of vegetated channels which contain conditioned planting soil beds and planting materials that are used to hold and filter stormwater runoff. Construction of detention basins shall consist of furnishing necessary materials, preparing the runoff surfaces, excavating for and installing the filter media zone which consists of engineered soil, filter fabric, perforated and non-perforated subdrains, gravel filter, and amended subgrade as shown in the Plans. All detention basins shall be installed at the locations and to the grades and elevations shown in the Plans. Mass excavation for the detention basin is not included in this item.

MATERIALS Engineering filter fabric shall be US Fabrics, Inc. nonwoven geotextiles heavy weight (10-16 oz/sy), or approved equal. Gravel filter shall be porous 1-2" gravel rock. Pipe for subdrains shall be 6" PVC of the size and type shown in the Plans.

CONSTRUCTION Construction of detention basins shall be as shown in the Plans. Depth of detention basins shall be to 7 feet below finished grade. Depth of PVC perforated pipes shall be to 4 feet below finished grade. Contractor shall make all efforts to limit soil compaction of the surface soils within the detention basin side slopes and bottom.

METHOD OF MEASUREMENT The length of detention basins will be measured by the Engineer to the square feet of the detention basin. The length of non-perforated subdrain pipe connections beneath the intercepting side roads will not be measured and will be incidental to this bid item. The non-perforated subdrain outlet pipe between the detention basins and the drainage ways will not be measured and will be incidental to this bid item. Curb inlets/outlets will not be measured and will be incidental to this bid item.

PAYMENT - Payment for CONSTRUCT DETENTION BASIN shall be in the ton (TON) unit price as shown in the Bid. This payment shall be full compensation for excavating, furnishing material, labor and tools necessary for placement of the detention basin, removal of excess excavated material from the project, furnishing and placing the engineered soils, furnishing and placing the filter fabric, furnishing and placing perforated subdrain, non-perforated subdrain, subdrain end caps, elbows, tees, and other necessary subdrain connections, and furnishing and placing the amended

subgrade as shown in the Plans as directed by the Engineer. For detention basins built in accordance with the Plans, no extra compensation will be allowed for over-depth, rock excavation, tamping backfill, and removal of surplus material from the project.