CITY AND COUNTY OF DENVER

STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS WASTEWATER MANAGEMENT DIVISION

CONTRACT DOCUMENTS

Contract No. 201629825

2016 ON-CALL CONCRETE REPAIR

August 17, 2016

Denver Public Works

DENVER
THE MILE HIGH CITY

Engineering Division
Capital Projects Management - Dept. 506
Right-of-Way Services - Dept. 507
Traffic Engineering Services - Dept. 508

201 West Colfax Avenue Denver, CO 80202 www.Work4Denver.com

Policy and Planning - Dept. 509

NOTICE OF APPARENT LOW BIDDER

Keene Concrete, Inc. 30263 WCR8 Keenesburg, Colorado 80643

The EXECUTIVE DIRECTOR OF PUBLIC WORKS has considered the Bids submitted on **September 8, 2016**, for work to be done and materials to be furnished in and for:

CONTRACT NO. 201629825 On-Call Concrete Repair

as set forth in detail in the Contract Documents for the City and County of Denver, Colorado. It appears that your Bid is fair, equitable, and to the best interest of the City and County; therefore, said Bid is hereby accepted at the bid price contained herein, subject to the approval and execution of the Contract Documents by the City in accordance with the Charter of the City and County of Denver, and to your furnishing the items specified below. The award is based on the total bid items: (202-00019 through 630-00003 (Fifty-four (54) total bid items, the total estimated cost thereof being: Three Million Two Hundred Thirty One Thousand Three Hundred Fifty Eight Dollars and Ninety Nine Cents (\$3,231,358.99).

It will be necessary for you to appear forthwith at the office of the Department of Public Works, Contract Administration, 201 W. Colfax Ave., Dept 614, Denver, Colorado 80202, to receive the said Contract Documents, execute the same and return them to the Department of Public Works, Contract Administration within the time limit set forth in the Bid Package Documents.

In accordance with the requirements set forth in the Contract Documents, you are required to furnish the following documents:

- a. Insurance Certificates: General Liability and Automotive Liability, Workman's Compensation and Employer Liability;
- Payment and Performance Bond along with One original Power of Attorney relative to Performance and/or Payment Bond; and,

All construction Contracts made and entered into by the City and County of Denver are subject to Affirmative Action and Equal Opportunity Rules and Regulations, as adopted by the Manager of Public Works, and each contract requiring payment by the City of one-half million dollars (\$500,000.00) or more shall first be approved by the City Council acting by ordinance and in accordance with Section B1.12.2 of the Charter of the City and County of Denver.

Prior to issuance of Notice to Proceed, all Equal Opportunity requirements must be completed. Additional information may be obtained by contacting the Director of Contract Compliance at (720-913-1700).

NOTICE OF APPARENT LOW BIDDER

CONTRACT NO. <u>201629825</u> Page 2

cc:

The Bid Security submitted with your Bid, will be returned upon execution of the Contract and furnishing of the Performance Bond. In the event you should fail to execute the Contract and to furnish the performance Bond within the time limit specified, said Bid Security will be retained by the City and County of Denver as liquidated damages, and not as a penalty for the delay and extra work caused thereby.

CITY AND COUNTY OF DENVER

Ву

Jose M. Cornejo, P.E.

Executive Director of Public Works

Jeffrey Garcia (AUD), Doug Schellinger (Treasury/Tax Compliance), DSBO Inbox, Heidi Zarnow, Rob Merritt (PW-Aud), File.

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

WASTEWATER MANAGEMENT DIVISION

BID FORM SUBMITTAL PACKAGE

Contract No. 201629825

2016 ON-CALL CONCRETE REPAIR

August 17, 2016

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Wastewater Management Division

TABLE OF CONTENTS FOR BID FORM AND SUBMITTAL PACKAGE

Table of Contents	BF-1
Bidder's Checklist	BF-2 through BF-3
Bid Form and Submittal Package Acknowledgment Form	BF-4 through BF-5
Bid Form	BF-6 through BF-8
List of Proposed Minority/Woman Business Enterprise(s)	BF-9 through BF-12
Commitment to Minority/Woman Business Enterprise Participation	BF-13
Minority/Woman Business Enterprise Letter(s) of Intent & Checklist	BF-14 through BF-15
Joint Venture Affidavit	BF-16
Joint Venture Eligibility Form	BF-17 through BF-19
Bid Bond	BF-20
Diversity and Inclusiveness in City Solicitations Form	BF-21 through BF-24



This Checklist is provided solely for the assistance of the bidders, and need not be returned by Bidders with your BID FORM PACKAGE.

BIDDER'S CHECKLIST

These forms comprise the Bid Form and Submittal Package. Designated forms must be completed and turned in <u>at the time of Bid Opening</u>. Bidders should refer to the Contract Documents, particularly the Instructions to Bidders, accompanying this package, in completing these forms.

FORM/ PAGE NO.	COMMENTS	COMPLETE
BF-4 – BF-5	a.) Acknowledgment signature and attestation required.	
BF-6+	a.) Fill in individual bid item dollars and totals in Numerical figures only	
	b.) Complete all blanks	
BF-7	a.) Write out bid total or bid totals in words and figures in the blank form space(s) provided	
	b.) Calculate Textura® Construction Payment Management System Fee from chart on pg. BF-3 and write % and fee in the space provided	
BF-8	a.) List all subcontractors who are performing work on this project	
BF-9 – BF-10	 a.) Fully complete List of Proposed Minority /Woman Business Enterprise Bidders, Subcontractors, Suppliers, Manufacturers, or Brokers – check appropriate boxes. 	
BF-11	a.) Complete all blanksb.) If Addenda have been issued, complete bottom section.	
BF-12	a.) Complete appropriate sections - signature(s) required.b.) If corporation, then corporate seal required.	
BF-13	a.) Fully complete Commitment to Participation	
BF-16	a.) If applicable, fully complete Joint Venture Affidavit	
BF-17 – BF-19	 a.) If applicable, fully complete Joint Venture Eligibility Form (Submit 10 days prior to Bid Opening Date) 	
BF-20	a.) Fill in all Bid Bond blanks	
	b.) Signatures required	
	c.) Corporate Seal if required	
	d.) Dated	
	e.) Attach Surety Agents Power of Attorney	
	or Certified or cashier's check made out to the Manager of Revenue	
	referencing Bidder's Company and Contract Control Number.	
BF-21- BF-24	a.) Each bidder, as a condition of responsiveness to this solicitation, shall complete and return the "Diversity and Inclusiveness in City Solicitations Information Request Form" with their Bid.	

Textura ® Construction Payment Management System (CPM System)

Contractor recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (CPM System) for this Project. All fees associated with the CPM System are to be paid by the Contractor for billings for work performed. Bidders are required, when preparing a bid, to enter the price of the CPM service on the line provided for the service. The fee is all inclusive of all subcontractor, project and subscription fees associated with the CPM system. The bidder will calculate the fee based on a percentage of their total bid, and then should include it on the line item provided in the bid form labeled "Textura® Construction Payment Management System Fee". This expense becomes part of the contract and billable to the City. All costs including but not limited to costs associated with training, entering data or utilizing Textura other than the Textura Construction Payment Management System Fee are overhead and shall not be reimbursed by the City. Contractor is responsible for any tax on Textura fee. As with other taxes, the City will not reimburse Contractor for this cost and therefore this cost should be included in Contractor's bid. Textura will invoice the awarded contractor directly.

PROJECT SIZE	FEE (% OF BID)
< \$1,000,000	0.22% (.0022)
\$1,000,001 - \$5,000,000	0.17% (.0017)
\$5,000,001 - \$20,000,000	0.12% (.0012)
\$20,000,001 - \$50,000,000	0.10% (.0010)
\$50,000,001 - \$100,000,000	0.08% (.0008)
\$100,000,001 - \$500,000,000	0.05% (.0005)
> \$500,000,000	CONTACT TEXTURA FOR PROGRAM PRICING

For more information:

 $\frac{http://www.denvergov.org/constructioncontracts/ContractAdministration/BiddingProcess/TexturaPaymentSystem/tabid/44316}{5/Default.aspx}$

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Wastewater Management Division

BID FORM AND SUBMITTAL PACKAGE ACKNOWLEDGMENT

CONTRACT NO. 2016XXXXX

2016 On-Call Concrete Repair

BIDDER:	Keene Concrete Inc (Legal Name per Colorado Secretary of State)	
ADDRESS:	30263 UCR 8 Keenesburg CO 80643	

The undersigned bidder states that the undersigned bidder has received and had an opportunity to fully and thoroughly examine a complete set of the Contract Documents for Contract No. 2016XXXXX, made available to the undersigned bidder pursuant to Notice of Invitation for Bids dated August 17, 2016.

The undersigned bidder acknowledges that a complete and final set of the Contract Documents for the referenced Project, the components of which are identified below, are bound and maintained as the record set of Contract Documents by the Contract Administration Division of the Department of Public Works and that this Record Set is available for examination by the undersigned bidder.

The undersigned bidder, having thoroughly examined each of the components identified below and contained in Contract Documents, HEREBY SUBMITS THIS BID FORM AND SUBMITTAL PACKAGE, fully understanding that the Contract Documents, as defined in Paragraph 1 of the contract, including this executed Bid Form and Submittal Package, constitute all of the terms, conditions and requirements upon which this submission is based and further understanding that, by submission of this Bid Form and Submittal Package, the City shall rely on the representations and commitments of the undersigned bidder contained herein.

The following completed documents comprising this Bid Form and Submittal Package will be included with and, by this reference, are expressly incorporated into the Contract Documents specified at Paragraph 1 of the Contract:

Bid Form and Submittal Package Acknowledgment Form
Bid Form
List of Proposed Minority/Woman Owned Business Enterprise(s)
Commitment to Minority/Woman Business Enterprise Participation
M/WBE Letter(s) of Intent
Joint Venture Affidavit (if applicable)
Joint Venture Eligibility Form (if applicable)
Bid Bond
Certificate of Insurance

The following designated documents constitute that portion of the Contract Documents made available by the Notice of Invitation for Bids, but not included in the Bid Form and Submittal Package:

Notice of Invitation for Bids

Instructions to Bidders

Addenda (as applicable)

Equal Employment Opportunity Provisions (Appendix A and Appendix F)

Contract Form

General Contract Conditions

Special Contract Conditions

Performance and Payment Bond

Notice to Apparent Low Bidder

Notice to Proceed

Contractor's Certification of Payment Form

Final/Partial Lien Release Form

Final Receipt

Change Orders (as applicable)

Federal Requirements (as applicable)

Prevailing Wage Rate Schedule(s)

Technical Specifications

Contract Drawings

Accepted Shop Drawings

The undersigned bidder expressly assumes responsibility for the complete contents of these designated documents as bound together with the Bid Form and Submittal Package submitted herewith and designated the Contract Documents.

IN WITNESS WHEREOF, the undersigned bidder has signed personally or by duly authorized officer or agent and duly attested.

BIDDER: Keene Concrete, Inc.

Name: Chris C. Bailen

THE Page do 1

ATTEST:

Goil Parnell

[SEAL]

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS Wastewater Management Division

BID FORM

CONTRACT NO. 2016XXXXX 2016 On-Call Concrete Repair

(Legal Name per Colorado Secretary of State)

TO: The Manager of Public Works

City and County of Denver c/o Contract Administration 201 West Colfax, Dept. 614 Denver, Colorado 80202

The Undersigned Bidder, having examined the plans, technical specifications, and remainder of the proposed Contract Documents as designated and enumerated in the General and Special Contract Conditions and any and all addenda thereto; having investigated the location of and conditions affecting the proposed Work; and being acquainted with and fully understanding the extent and character of the Work covered by this bid, and all factors and conditions affecting or which may be affected by Work, HEREBY SUBMITS THIS BID, pursuant to an advertisement of a Notice of Invitation for Bids as published on August 17, 2016, to furnish all required materials, tools, appliances, equipment and plant; to perform all necessary labor and to undertake and complete: **CONTRACT NO. 2016XXXXX**, in Denver, Colorado, in full accordance with and conformity to the Plans, Technical Specifications, and Contract Documents hereto attached or by reference made a part hereof, at and for the following price(s) set forth on this Bid Form.

The following documents, which taken as a whole constitute the Contract Documents for this Project, and which are incorporated herein, by reference, were made available to the Bidder as provided in the Advertisement of Notice of Invitation for Bids, were received by the bidder, and form the basis for this bid:

Advertisement of Notice of Invitation for Bids

Instructions to Bidders

Commitment to M/WBE Participation

Article III, Division 1 and 3 of Chapter 28, D.R.M.C.

Bid Bond

Addenda (as applicable)

Equal Employment Opportunity Provisions (Appendix A and Appendix F)

Bid Form

Contract Form

General Contract Conditions

Special Contract Conditions

Performance and Payment Bond

Notice to Apparent Low Bidder

Notice to Proceed

Contractor's Certification of Payment Form

Final/Partial Lien Release Form

Final Receipt

Change Orders (as applicable)

Federal Requirements (as applicable)

Prevailing Wage Rate Schedule(s)

Technical Specifications

Contract Drawing

Accepted Shop Drawings

Item No.	Description and Price	Estimated Quantity	Estimated Cost
202-00019	REMOVAL OF INLET at the unit price of \$ 1,000.00 per EACH.	10 EA	\$ 10,000.00
202-00200	REMOVAL OF SIDEWALK at the unit price of \$io.ooper SQUARE YARD.	5,400 SY	\$ 54,000.00
202-00201	at the unit price of \$ /2.00 per LINEAR FOOT.	180 LF	\$_2,160.00
202-00203	at the unit price of \$ 12.00 per LINEAR FOOT.	810 LF	\$_9,720.00
202-00204	REMOVAL OF COMBINATION CURB, GUTTER AND WALK at the unit price of \$	7,000 LF	\$ 56,000.00
202-00208	REMOVAL AND RESET FLAGSTONE (INCLUDES SALVAGE AND STORAGE) at the unit price of \$ 25.00 per SQUARE YARD.	500 SY	\$_12,500.00
202-00210	REMOVAL OF CONCRETE PAVEMENT at the unit price of \$ /2.00 per SQUARE YARD.	6,150 SY	\$ 73,800.00
202-00220	REMOVAL OF ASPHALT MAT at the unit price of \$	9,500 SY	\$_38,000.00
202-01000	REMOVAL OF FENCE at the unit price of \$ 10.00 per LINEAR FOOT.	150 LF	\$1500.00
202-05021	TRIP HAZARD SAWING (>5 LOCATIONS 1 MONTH COMPLETION) at the unit price of \$ 30.00 per INCH FEET.	1,000 IN-FT	\$_30,000.00
202-05020	TRIP HAZARD SAWING (<= 5 LOCATIONS 1 WEEK COMPLETION) at the unit price of \$	500 IN-FT	\$_20,000.00

Item No.	Description and Price	Estimated Quantity	Estimated Cost
203-00200	unclassified excavation at the unit price of \$	3,150 CY	\$ 56,700.00
203-02330	at the unit price of \$_\(\ell 80.00\) per HOUR.	90 HR	\$ 16,200.00
206-00065	STRUCTURE BACK FILL (FLOW FILL) at the unit price of \$	450 CY	\$ 54,000.00
208-00050	STORM DRAINAGE INLET PROTECTION at the unit price of \$ 95.00 per EACH.	180 EA	\$_17,100.00
210-00810	RESET GROUND SIGN at the unit price of \$_150.00 per EACH.	85 EA	\$ 12,750.00
210-04010	ADJUST MANHOLE/METER /VALVE/PULLBOX at the unit price of \$_380.00 per EACH.	65 EA	\$_24,700.00
210-04011	ADJUST INLET FRAME AND ADJUSTABLE CURBHEAD at the unit price of \$_350.00 per EACH.	60 EA	\$
210-04020	RESET INLET GRATE, FRAME, AND ADJUSTABLE CURB BOX (NEW CASTING) at the unit price of \$_\limits_1\limits_0\to_0\to_per EACH.	225 EA	\$_247,500.00
212-00050	sodding at the unit price of \$ 2.00 per SQUARE FOOT.	5,000 SF	\$ 10,000.00
212-01200	at the unit price of \$	27,000 SF	\$_108,000.00
212-01201	AMENDED TOP SOIL OR LANDSCAPE PLANTER'S SOIL MIX at the unit price of \$ 45.00 per CUBIC YARD.	220 CY	\$ 9,950.00

Item No.	Description and Price	Estimated Quantity	Estimated Cost
304-06000	at the unit price of \$	2,600 TON	\$ 65,000.00
403-00720	at the unit price of \$	3,300 TON	\$ 363,000.00
412-00000	24-HOUR HIGH EARLY STRENGTH CONCRETE at the unit price of \$ 5.00 per CUBIC YARD.	315 CY	\$_26,775.00
412-00001	at the unit price of \$ (00.00 per CUBIC YARD.	50 CY	\$ 5,000.00
412-00100	GEO TECH MATERIAL TESTING CONCRETE at the unit price of \$_500.00 per EACH.	35 EA	\$_17,500.00
412-00600	6" CONCRETE PAVEMENT at the unit price of \$	1,500 SY	\$ 69,000.00
412-00800	8" CONCRETE PAVEMENT at the unit price of \$_56.00 per SQUARE YARD.	2,900 SY	\$_162,400.00
412-01000	10" CONCRETE PAVEMENT at the unit price of \$	300 SY	\$ 20,400.00
412-01200	12" CONCRETE PAVEMENT at the unit price of \$ 78.00 per SQUARE YARD.	300 SY	\$_23,400.00
413-00100	CONCRETE PATCHING (STRUCTURAL SURFACE REPAIR <2" DEPTH) at the unit price of \$ 48.00 per SQUARE FOOT/INCHES.	360 SF-IN	s17,280.00
601-00100	PAVESTONE STACKED PRE-CAST WALL BLOCK at the unit price of \$ 59.00 per SQUARE FOOT.	610 SF	\$_35,990.00

Item No.	Description and Price	Estimated Quantity	Estimated Cost
601-00400	REINFORCED VARIABLE HEIGHT CONCRETE RETAINING WALL at the unit price of \$_55.00 per SQUARE FOOT.	300 SF	\$_16,500.00
601-06150	CONCRETE PATCHING (STRUCTURAL CURB REPAIR) at the unit price of \$ 12.00 per LINEAR FOOT.	500 LF	\$_6,000.00
604-14050	# 14 INLET (L=6') at the unit price of \$ 4,500.00 per EACH.	5 EA	\$_22,500.00
604-16050	at the unit price of \$_3,800.00 per EACH.	5 EA	\$19,000.00
608-00000	at the unit price of \$ 39.00 per SQUARE YARD.	2,000 SY	\$_78,000.50
608-00010	at the unit price of \$per SQUARE YARD.	9,000 SY	\$_720,000.00
608-00018	TRUNCATED DOMES (SPECIAL CAST IRON) MATERIAL ONLY at the unit price of \$_55.00 per SQUARE FOOT.	200 SF	\$
609-20000	at the unit price of \$ 7.00 per LINEAR FOOT.	9,800 LF	\$_68,600.00
609-21020	CURB & GUTTER TYPE II, SECTION 2B at the unit price of \$ 19.00 per LINEAR FOOT.	9,000 LF	\$
609-21023	CURB & GUTTER TYPE IIB (9") CURBHEAD at the unit price of \$ 20.00 per LINEAR FOOT.	360 LF	\$_7,200.00
609-22021	combination curb, gutter & sidewalk (2-'8") at the unit price of \$ 20.00 per LINEAR FOOT.	450 LF	\$13,500.00

Item No.	Description and Price	Estimated Quantity	Estimated Cost
609-22025	COMBINATION CURB, GUTTER & SIDEWALK (3'-11") at the unit price of \$ 38.00 per LINEAR FOOT.	3,600 LF	\$ 136,800.00
610-00026	MEDIAN COVER MATERIAL (6" PATTERNED COLORED CONCRETE) at the unit price of \$	500 SY	\$_62,500.00
613-07000	at the unit price of \$_380.50 per EACH.	45 EA	\$17,100.00
614-72875	at the unit price of \$ 9.00 per LINEAR FOOT.	225 LF	\$ 2,025.00
623-00204	SPRINKLER SYSTEM/ADJUST SPRINKLER HEAD at the unit price of \$	450 EA	\$_18,000.00
623-00205	SPRINKLER SYSTEM/NEW SPRINKLER HEAD at the unit price of \$ per EACH.	400 EA	\$_28,000.00
623-00505	SPRINKLER SYSTEM/IRRIGATION RECONSTRUCTION at the unit price of \$	4,250 LF	\$_21,250.00
630-00000	TRAFFIC CONTROL - ARTERIAL/COLLECTOR at the unit price of \$ 975.00 per DAY.	55 DAY	\$_48,125.00
630-00002	at the unit price of \$	150 DAY	\$ 60,000.00
630-00003	TRAFFIC CONTROL - UNIFORMED TRAFFIC CONTROL at the unit price of \$ 100.00 per HOUR.	75 HR	\$ 7,500.00

Four[54]) Total Bid l Textura ® Fee from Total Amount	Items) table on Page BF-3 <u>O・パー</u> % of Bid Items	s_5,483.99
Bid Items Total Amo Amount	ount plus Textura® Fee equals Total Bid	s <u>3,231,358.</u> 99
Total Bid Amount There Million FIFTY EIGHT D	Two Hindred Thiefy One Thousand Dollars (\$	3,231,358,99
Form, the Undersigned Bidd after the date of the Notice: of insurance; and (iii) furnish acceptable to the Manager. The Ohio Cosualty If such surety is not approve Enclosed with this bid is 5% of total bid and become the property of City; (ii) the City notifies the execute the Contract in the fedate of such notification.	ten Notice of Apparent Low Bidder, addressed to the Bidder shall, in accordance with the Contract Documents, b (i) execute the attached form of Contract in conformity who the required bond or bonds in the sum of the full amount and by the Manager, another and satisfactory surety compans a bid guarantee, as defined in the attached Instruction. The Undersigned Bidder agrees that the entire amount the City as liquidated damages, and not as a penalty, if: (i) the Undersigned Bidder that it is the Apparent Low Bidder form prescribed or to furnish the required bond and proofs as or corporations are interested with the Undersigned Bidder Bidder agrees that the Undersigned Bidder that it is the Apparent Low Bidder form prescribed or to furnish the required bond and proofs as or corporations are interested with the Undersigned Bidder Bidde	e ready to, and shall, within five (5) days ith this bid; (ii) furnish the required proofs tof this bid, executed by a surety company , is hereby offered as Surety on said bond. In shall be furnished. In the amount of ount of this bid guarantee is to be paid to the bid is considered to be the best by the r; and (iii) the Undersigned Bidder fails to of insurance, within five (5) days after the
Name:	Name:	
Address:	Address:	
If there are no such persons,	firms, or corporations, please so state in the following spa	ace: None

Bid Items Total Amount (202-00019 through 630-00003 (Fifty-Four[54]) Total Bid Items)

Four[54]) Total Bid Items)

The Undersigned Bidder proposes to subcontract the following Work in accordance with General Contract Conditions, Title 5, SUBCONTRACTS, and represents that, to the greatest degree practical, all subcontractors known at the time of bid submittal have been identified.

Item of Work	Percent (%) of Total;	Proposed Subcontractor and Address
HBP Patch	Work 10.05	LoyA Construction, INC. P.O.BOX 211555 - Denur, CO 9022
	-	
		CONTROL OF THE PROPERTY OF THE

(Copy this page if additional room is required.)



List of Proposed MWBE Bidders, Subcontractors, Suppliers (Manufacturers) or Brokers

Office of Economic Development
Division of Small Business Opportunity
Compliance Unit
201 West Colfax Avenue, Dept. 907
Denver, CO 80202
Phone: 720-913-1999
Fax: 720-913-1803
DSBO@denvergov.org

City and County of Denver Co	City and County of Denver Contract No.: 2016XXXXX				
The undersigned Bidder proposes to utilize the following MWBE for the project. All listed firms are CURRENTLY certified by the City and County of Denver. Only the level of MWBE participation listed at the bid opening will count toward satisfaction of the project goal. Only bona fide commisions may be counted for Brokers. MWBE prime bidders must detail their bid information below. Please copy and attaach this page to list additional MWBE.					
	Prime Bidder				
Business Name: Keene Cor		T	0		
Address: 30263 WCR 8 Keen	csburg CO 80643	Contact Person: Rob	Brock		
Type of Service: Concrete	Construction	Dollar Amount: \$: 2,906,858.99	Percent of Project: 90		
	MWBE Prime Bidd	ler			
Business Name:					
Address:		Contact Person:			
Type of Service:		Dollar Amount: \$: Percent of Project:			
Subcontractors	, Suppliers Manufacturers	or Brokers (check one be	ox)		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name: Loy4 Cons	fruction, Inc.				
Address: 641/15 P.O. Box 211	1555 - Denuer, CO 80221	Type of Service: HB	P Patch		
Contact Person: Jessie		Dollar Amount: \$: 324,500,00	Percent of Project: 10.05		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:	- 127				
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:					
Address:	Type of Service:				
Contact Person:		Dollar Amount: \$:	Percent of Project:		

Subcon	tractors, Suppliers Ma	nufacturers or Brokers (d	check one box)		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:					
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:		4			
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:					
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:			i i i i i i i i i i i i i i i i i i i		
Address:		Type of Service:	Type of Service:		
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:			1-9-16		
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:			MINI		
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:					
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:					
Address:		Type of Service:	100.00		
Contact Person:		Dollar Amount: \$:	Percent of Project:		

The undersigned Bidder hereby certifies that the aforementioned subcontractors and suppliers have full knowledge that their names have been offered as subcontractors and suppliers for the work, and the Bidder further certifies that the dollar amount of work to be performed by the aforementioned M/WBE(s) was furnished to the Bidder prior to the bid opening. The undersigned Bidder agrees that after the bid opening, it shall submit to the City an executed and completed W/MBE "Letter of Intent" in three working days (3) on each of its M/WBE subcontractors. The "Letter of Intent" form is contained in the Contract Documents.

The undersigned Bidder acknowledges the right of the City to reject any or all bids submitted, to waive informalities in bids and to re-advertise this Project for bids.

The undersigned certifies that it has carefully checked all works and figures and all statements made in these Bid Forms.

21712 1. VD Q

This bid is submitted upon the declaration that neither, I (we), nor, to the best of my (our) knowledge, none of the members of my (our) firm or company have either directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this bid.

Business Address of Bidder:	JUNES WILL	\ 0		
City, State, Zip Code:	Keenesburg	CO 8064	3	_
Telephone Number of Bidder:	303-227-190	Fax No. 30	3-227-1904	_
Social Security or Federal Employe			H9Kelde	
Name and location of the last work ADLLECTION For information relative thereto, ple	of this kind herein contemplatemps + Concrete Reports	ted upon which the Bid	der was engaged: arious location he city 4 count	5-throughout y of Denver
	1			
Title: Project	Manager			
Address: 2000	U. 3rd Que	Denver (6 80233	
The undersigned acknowledges reco	eipt, understanding, and full co	onsideration of the follo	owing addenda to the Contrac	et Documents:
Adden	da Number NA	Date		
Adden	da Number	Date		
Adden	da Number	Date		
Dated this day o	September :	20 <u>1le</u>		

Signatu	ure of Bidder:			
	If an Individual:			doing business
		as		· · · · · · · · · · · · · · · · · · ·
	If a Partnership:			
		by:		_,General Partner.
	If a Corporation:	Keene Conc	rete Inc	
		a Coloro	udo	, Corporation,
		by: Chrisc Ba	Sech	, its President.
	Attest:	00		
	Secretary Gail Darnell	(Corporate Seal)	_	
If a Join	at Venture, signature of all Joint Vent	ure participants.		
	Firm:			
	Corporation (), Partnership () or	() Limited Liability Comp	oany	
	By:		(If a Corporation)	
	Title:		Attest:	
			Secretary	(Corporate Seal)
	Firm:			
	Corporation (), Partnership () or	() Limited Liability Comp	any	
	By:		(If a Corporation) Attest:	
	Title:			(Corporate Seal)
	Firm:			
	Corporation (), Partnership () or	() Limited Liability Comp	any	
	By:		(If a Corporation)	
	Title:		Attest:	
			Secretary	(Corporate Seal)



COMMITMENT TO MWBE PARTICIPATION

Office of Economic Development
Division of Small Business Opportunity
Compliance Unit
201 West Colfax Avenue, Dept. 907

Denver, CO 80202 Phone: 720-913-1999 Fax: 720-913-1803 DSBO@denvergov.org

The undersigned has satisfied the MWBE participant requirements in the following manner (Please check the appropriate box): The Bidder/Proposer is committed to the minimum advertised project goal for MWBE utilization on the project, and will submit Letters of Intent (LOI) for each subcontractor/subconsultant listed in the Bid Forms as Hard Bids: Three (3) business days after the bid opening Request for Proposals: With the proposal when due ☐ The Bidder/Proposer is unable to meet the project goal of ______% MWBE, but is committed to a minimum of ______% MWBE utilization on the project. The Bidder/Proposer understands that they must submit a detailed statement of their good faith effort in accordance with DRMC Section 28-62 and 28-67 of Ordinance 85 and must submit Letters of Intent for each MWBE listed in the Bid Forms, within three (3) business days after the bid opening or at time proposal is submitted. ☐ The Bidder/Proposer is a certified **MWBE** in good standing with the City and is committed to self-perform a minimum of % of the work on the contract. Bidder/Proposer (Name of Firm): Firm's Representative (Please print): Signature (Firm's Representative): Title:/ Address State: Fax Phone com



Office of Economic Development

Division of Small Business Opportunity Compliance Unit 201 West Colfax Ave., Dept. 907

Denver, CO 80202 Phone: 720-913-1999 Fax: 720-913-1803

LETTER OF INTENT (LOI) INSTRUCTIONS FOR COMPLETION & SUBMISSION:

- All lines must be completed or marked N/A for Not Applicable
- Submit the attached completed checklist with this letter
 - Email to <u>dsbo@denvergov.org</u> , <u>OR</u>
 Fax: 720-913-1803,
- FOR RFPs and RFQs: LOIs should be included with Submittal

	Project Na	ame:				
A. The Follo This Letter of Intent Mu		Is To Be Comp				BE or DBE
Name of Bidder/Consultant:			Self-Performing ☐ Yes ☐ No		Phone:	
Contact Person:		Email:	Email:		Fax:	
Address:		City:			State:	Zip:
B. The Following Sect This Letter of Intent M						
Name of Certified Firm:					Phone:	
Contact Person:		Email:			Fax:	
Address:		City:			State:	Zip:
Please check the designation which applies to the certified firm.	M/WBE (√)	SBE	EBE		DBE (√)	Self- Performing (√)
				4.		· · · · · · · ·
Identify the scope of the work to be price bids only, identify which bid	performed or s		will be provided	by the M	1/WBE/SBI	E/DBE. <u>On unit</u>
Identify the scope of the work to be p	performed or s line items the	upply item that very more than the miles of	will be provided EBE/DBEs sco	by the M	1/WBE/SB	E/DBE. <u>On unit</u>
Identify the scope of the work to be price bids only, identify which bid Subcontractor/Subconsultar Bidder intends to utilize the aforeme	entioned M/WB	Supplier SE, SBE, EBE of	will be provided EBE/DBEs sco	by the M	N/WBE/SBI	E/DBE. On unit ply corresponds to.
Identify the scope of the work to be price bids only, identify which bid Subcontractor/Subconsultar	entioned M/WB	Supplier SE, SBE, EBE of	will be provided EBE/DBEs sco	by the M	N/WBE/SBI	E/DBE. On unit ply corresponds to.
Subcontractor/Subconsultar Bidder intends to utilize the aforeme of the work and percentage of the total the Work/Supply described above. Toonsultant M/WBE, SBE, EBE or DB	entioned M/WE tal subcontract	Supplier SE, SBE, EBE of tor M/WBE, SBE, SBE, EBE of the work of is:	will be provided EBE/DBEs sco (√) T DBE for the W E, EBE or DBE I BE or DBE for the total sub	by the M	N/WBE/SBI	E/DBE. On unit ply corresponds to. oker (\(\strict{\dagger})\) ed above. The cost
Subcontractor/Subconsultar Bidder intends to utilize the aforeme of the work and percentage of the total Consultant intends to utilize the aforeme of the work and percentage of the total the work and percentage of the total the work/Supply described above.	entioned M/WE tal subcontract	Supplier SE, SBE, EBE of tor M/WBE, SBE, SBE, EBE of the work of is:	will be provided EBE/DBEs sco (√) T DBE for the W E, EBE or DBE I BE or DBE for the total sub	by the M	N/WBE/SBI	E/DBE. On unit ply corresponds to. oker (\(\strict{\dagger}{\dagger} \) ed above. The cost
Identify the scope of the work to be price bids only, identify which bid Subcontractor/Subconsultar Bidder intends to utilize the aforeme of the work and percentage of the total Consultant intends to utilize the aforeme of the Work/Supply described above. To consultant M/WBE, SBE, EBE or DB	entioned M/WE tal subcontract	Supplier SE, SBE, EBE of tor M/WBE, SBE, SBE, EBE of the work of is:	will be provided EBE/DBEs sco (√) T DBE for the W E, EBE or DBE I BE or DBE for the total sub	by the Mpe of wo	N/WBE/SBI	E/DBE. On unit ply corresponds to. oker (\(\strict{\dagger}{\dagger} \) ed above. The cost
Identify the scope of the work to be price bids only, identify which bid Subcontractor/Subconsultar Bidder intends to utilize the aforeme of the work and percentage of the total \$ Consultant intends to utilize the aforeme of the Work/Supply described above. To consultant M/WBE, SBE, EBE or DB If the fee amount of the work to be presented.	entioned M/WE tal subcontract	Supplier SE, SBE, EBE of tor M/WBE, SBE, SBE, EBE of the work of is:	will be provided EBE/DBEs sco (√) T DBE for the W E, EBE or DBE I BE or DBE for the total sub	by the Mpe of wo	Br bly describ	E/DBE. On unit ply corresponds to. oker (\(\strict{\dagger})\) ed above. The cost
Subcontractor/Subconsultar Bidder intends to utilize the aforeme of the work and percentage of the tot Consultant intends to utilize the aforeme the Work/Supply described above. To consultant M/WBE, SBE, EBE or DB If the fee amount of the work to be published expensions.	ent (√) entioned M/WE tal subcontract rementioned M The percentage E will perform erformed is red	Supplier SE, SBE, EBE of tor M/WBE, SBE, SBE, EBE of the work of is:	will be provided EBE/DBEs sco (√) T DBE for the W E, EBE or DBE I BE or DBE for the total sub	ork/Suppoid amou	Br bly describ	E/DBE. On unit ply corresponds to. oker (√) ed above. The cost

Letter of Intent (LOI) Checklist

All lines must be completed or marked N/A for Not Applicable Submit the attached completed checklist with this letter.

Completed ✓	
Completed	
	Project Number & Project Name
	Section A: Name of Bidder/Consultant, Contact Person, Address, City, State, Zip, Phone, Email
	Section B: Name of Certified Firm, Contact Person, Address, City, State, Zip, Phone, Email
	Designation checked for MBE/WBE, SBE, EBE or DBE
	Indirect Utilization: Name of subcontractor/subconsultant, supplier or broker is indicated if using the participation of a 2 nd tier subcontractor/subconsultant, supplier or broker.
	Scope of work performed or item supplied by M/WBE, SBE, EBE or DBE
	Line items performed, if line-item bid.
	Copy of M/WBE, SBE, EBE or DBE Letter of Certification Attached
	Designation checked for Subcontractor/Subconsultant, Supplier or Broker
	If project is a hard bid
	Bidder has indicated dollar amount for value of work going to Subcontractor/ Subconsultant, Supplier or Broker
	Bidder has indicated percentage for value of work going to Subcontractor/ Subconsultant, Supplier or Broker
	If project is an RFP/RFQ
	Consultant has indicated percentage for value of work going to Subcontractor/ Subconsultant, Supplier or Broker Name & contact name for MWBE.
	Fee amount if fee amount of work to be performed is requested.
	Bidder/Consultant's Signature, Title & Date
	M/WBE, SBE, EBE or DBE Firm's Signature, Title and Date
Select One ✓	SUBMITTED VIA For Construction Hard Bids, Bidders are strongly urged to deliver the LOI via one of the methods below. (The preferred method is to scan/email completed forms to email address below. Delivery to any other point cannot be guaranteed timely delivery.)
	Email to DSBO@denvergov.org
П	Fax to 720-913-1803

The complete and accurate information that is required for the Letter of Intent is based on the following sections of the Ordinance 85: Section 28-63 and Section 28-68. Failure to complete this information on the Letter of Intent (LOI) may automatically deem a bid or proposal non-responsive.

COMP-FRM-012 Revised 9-8-14



JOINT VENTURE AFFIDAVIT

Office of Economic Development
Division of Small Business Opportunity
Compliance Unit
201 West Colfax Avenue, Dept. 907
Denver, CO 80202
Phone: 720-913-1999
Fax: 720-913-1803
DSBO@denvergov.org

The <u>Undersigned</u> swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the <u>Undersigned</u> covenant and agree to provide the City current, complete, and accurate information regarding actual joint venture work and the payment thereof and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records, and files of the joint venture, by authorized representatives of the City or Federal funding agency, if applicable. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initialing action under Federal or State laws concerning false statements.

Name of Firm:			100 - 101 - 100 - 1		
Print Name: Title		Title			
Signature:		D	ate:		
Notary Public					
County of	State of	My Commission	Expires:		
Subscribed and sworn before me this					
day of	, 20				
Notary Signature:		_	Notary Seal		
Address:					
Name of Firm:					
Print Name:	- 45 A 31 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Title			
Signature:			ate:		
Signature.	Notary Pub				
County of	State of	My Commission	Evoiree		
County of Subscribed and sworn before me this	State of	Wy Commission	Ехрисэ.		
day of	, 20				
N-k Cik			Notary Seal		
Notary Signature:					
Address:					
Name of Firm:					
Print Name:	410	Title			
Signature:		Da	ate:		
	Notary Pub	lc			
County of	State of	My Commission	Expires:		
Subscribed and sworn before me this					
day of	, 20				
Notary Signature:			Notary Seal		
Address:					

Rev 122910 JG



JOINT VENTURE ELIGIBILITY FORM

Office of Economic Development Division of Small Business Opportunity Compliance Unit 201 West Colfax Avenue, Dept. 907 Denver, CO 80202 Phone: 720-913-1999 Fax: 720-913-1803 DSBO@denvergov.org

Joint Venture means an association of two (2) or more business enterprises to constitute a single business enterprise to perform a City construction or professional design and construction services contract for which purpose they combine their property, capital, efforts, skills and knowledge, and in which each joint venturer is responsible for a distinct, clearly defined portion of the work of the contract, performs a commercially useful function, and whose share in the capital contribution, control, management responsibilities, risks and profits of the joint venture are equal to its ownership interest. Joint ventures must have an agreement in writing specifying the terms and conditions of the relationships between the joint venturers and their relationship and responsibility to the contract.

The Division of Small Business Opportunity (DSBO) requires the following information be provided from participants of a prospective joint venture, to assist DSBO in evaluating the proposed joint venture. This Joint Venture Eligibility form and the Joint Venture Affidavit apply if SBEs, MBEs, WBEs or DBEs participate in this joint venture.

Please return this form, the Joint Venture Affidavit, and a copy of your Joint Venture Agreement to: Division of Small Business Opportunity, 201 West Colfax Avenue, Denver, CO 80202, at least ten (10) working days prior to bid opening or proposal.

If you have questions regarding this process, please contact DSBO at 720-913-1999.

		Joint Venture I	nformation	1	
Name:				Contact P	Person:
Address:					
City:		State:	Zip:		Phone:
		Joint Venture P	articipant	S	
Name:				Contact P	Person:
Address:					
City:		State:	Zip:		Phone:
% Ownership:	Certifying Entity:	Type Certification & Date: (S/M/W or DBE)			
Type of Work for which Cer	tification was grante	ed:	-43000000000000000000000000000000000000		
Name:				Contact P	'erson:
Address:					
City:		State:	Zip:		Phone:
% Ownership:	Certifying Entity:				Type Certification & Date: S/M/W or DBE)
Type of Work for which Cer	tification was grante				
		General Info	rmation		
SBE/MBE/WBE/DBE Initial	Capital Contribution	s: \$			%
Future capital contributions	(explain requirement	nts) (attach addition	al sheets if	necessary):	
Source of Funds for the SB	E/MBE/WBE/DBE C	apital Contribution	S:		
Describe the portion of the sheets if necessary)	work or elements of	the business contr	olled by the	SBE/MBE/	WBE or DBE: (attach additional
Describe the portion of the sheets if necessary)	work or elements of	the business contr	olled by non	-SBE/MBE/	/WBE or DBE: (attach additional

	JOINT VENTUR	E ELIGIBILITY FORM			
	General in	formation			
Describe the SBE/MBE/WBE or DBE's involvement in the overall management of the joint venture (e.g., participation on a management committee or managing board voting rights, etc.) (attach additional sheets if necessary)					
Describe the SBE/MBE/V	VBE or DBE's share in the profits of the	e joint venture:			
Describe the SBE/MBE/V	VBE or DBE's share in the risks of the	joint venture:			
Describe there roles and additional sheets if neces		articipant with respect to managing the	joint venture (use		
a. SBE/MBE/WBE or DB	E joint venture participant:				
b. Non-SBE/MBE/WBE	or DBE joint venture participant:				
additional sheets if neces	sary):	icipant with respect to operation of the	joint venture (use		
a. SBE/MBE/WBE OF DB	E joint venture participant:	***************************************			
		A SUPERIOR AND A SUPE			
b. Non- SBE/MBE/WBE or DBE joint venture participant:					
Which firm will be respon-	sible for accounting functions relative to	o the joint venture's business?			
Explain what authority each party will have to commit or obligate the other to insurance and bonding companies, financing institutions, suppliers, subcontractors, and/or other parties?					
Please provide information relating to the approximate <u>number</u> of management, administrative, support and non-management employees that will be required to operate the business and indicate whether they will be employees of the SMWBE, non-SMWBE or joint venture:					
	Non- SBE/MBE/WBE/DBE	SBE/MBE/WBE/DBE	Joint Venture		
Management					
Administrative					
Support					
Hourly Employees					

		JOINT VENTURE	ELIGIBILITY FORM		
		General I	nformation		
Please provide the	e name of the	person who will be responsible for	hiring employees for the joint venture	re.	
Who will they be e	mployed by?				
Are any of the prop partners?	posed joint ver	nture employees currently employe	ees of any of the joint venture	Yes No (√)	
If yes, please list the necessary)	he number and	d positions and indicate which firm	currently employs the individual(s),	(use additional sheets if	
Number of employees		Position	Employed By		
Attach a copy of the agreements between			note or loan agreement (if applicab	le), and any and all written	
List all other busine parties are jointly in		ips between the joint venture partic	cipants, including other joint venture	agreements in which the	
If there are any sign Small Business Op	_	jes in or pertaining to this submittal	I, the joint venture members must in	nmediately notify the Division o	of

COMP-FRM-015

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Wastewater Management Division

BID BOND

THAT Keene Concrete, Inc., 30263 WCR 8, Ke	enesburg, CO 80643 as Pri	ncipal,
and The Ohio Casualty Insurance Company, 62 Map	le Ave., Keene, NH 03431, a corporation organized and existing	
	pshire, and authorized to do business within the State of Colora	
Surety, are held and firmly bound unto the City and	County of Denver, Colorado, as Obligee, in full and just sum of five	<u>:</u>
percent of the bid amount***********	**************************************	of the
	and truly to be made, we bind ourselves, our heirs, executors, administ	rators,
successors and assigns, jointly and severally, firmly		
WHEREAS, the said Principal is herewith submitting	ng its bid, dated September 8th , 2016 , for	
construction of: Contract No. 2016XXXXX, 2016	On-Call Concrete Repair, as set forth in detail in the Contract Docu	iments
for the City and County of Denver, Colorado, and sa	id Obligee has required as a condition for receiving said bid that the Pri	ncipal
deposit specified bid security in the amount of not l	less than five percent (5%) of the amount of said bid, as it relates to w	ork to
be performed for the City, conditioned that in event	of failure of the Principal to execute the Contract, for such construction the contract is offered him that said sum be paid immediately to the O	bligge
as liquidated damages, and not as a penalty, for the		ongec
	t if the aforesaid Principal shall, within the period specified therefore,	on the
prescribed form presented to him for signature, en	ter into a written contract with the Obligee in accordance with his	bid as
accepted and give Performance and Payment Bond	with good and sufficient surety or sureties, upon the form prescribed	by the
Obligee, for the faithful performance and the proper	fulfillment of said Contract, or in the event of withdrawal of said bid	within
the time specified, or upon the payment to the Obli	igee of the sum determined upon herein, as liquidated damages and	not as
penalty, in the event the Principal fails to enter into	said contract and give such Performance and Payment Bond within th	e time
specified, then this Obligation shall be null and void	I, otherwise to remain in full force and effect.	
Signed, sealed and delivered this 8th	day of <u>September</u> , 20016.	
ATTEST	Keene Concrete, Inc., 30263 WCR 8, Keenesburg, CO 80643	
6 00	Principal On O	
drill hara all	By Much Coll	
Salle Laurelle	Chris C. Bailey	
Secretary Gail Darnell	Tital Drasidant	
	Title President	
	The Ohio Casualty Insurance Company, 62 Maple Ave., Keene, Ni 1034	131
	1. 20	
	Surety	
	By Make	
Seal if Bidder is Corporation	Thomas W. Patton, Attorney-in-fact	
Attach Power-of-Attorney)	[SEAL]	
/ time is 1 offer of / titoline j		

KNOW ALL MEN BY THESE PRESENTS:

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7238400

American Fire and Casualty Company The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Annette M. Campbell; Carolyn Evans; Janine Darling; Judith Miller; Mary E. Ficken; Thomas W. Patton; Tristin Rosen; Virginia Shaw

all of the city of GREENWOOD VILLAGE, state of CO each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 13th _day of _January



STATE OF PENNSYLVANIA COUNTY OF MONTGOMERY

On this 13th day of January , 2016, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written COMMONWEALTH OF PENNSYLVANIA



Notarial Seal Teresa Pastella, Notary Public Plymouth Twp., Montgomery County My Commission Expires March 28, 2017

Member, Pennsylvania Association of Notaries

Teresa Pastella, Notary Public

American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, validity acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said









49 of 200

1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

Power of Attorney

of this



Office of Economic Development
Division of Small Business Opportunity
201 W. Colfax Ave, Dept. 907
Denver, CO 80202
p: 720.913.1999
f: 720.913.1809
www.denvergov.org/dsbo

Diversity and Inclusiveness * in City Solicitations Information Request Form

Type in your response, print out, sign and date; or print out and complete manually. Please print legibly.

Denver Executive Order No. 101 establishes strategies between the City and private industry to use diversity and inclusiveness to promote economic development in the City and County of Denver and to encourage more businesses to compete for City contracts and procurements. The Executive Order requires, among other things, the collection of certain information regarding the practices of the City's contractors and consultants toward diversity and inclusiveness and encourages/requires City agencies to include diversity and inclusiveness policies in selection criteria where legally permitted in solicitations for City services or goods.

Answer each question below. Missing or incomplete responses will be recorded as "no", "not applicable", or "none". A proposal or response to a solicitation by a contractor/consultant that does not include this <u>completed</u> form shall be deemed non-responsive and rejected.

Business Email Address: robb@Keeneconcrete.com
Please include the Email address of the contact person facilitating this solicitation for the City and County of Denver: brenda, hageman a denvergov.org
Agency Name:Arts and Venue
Project Name: 2016 On-Call Concrete Repairs BID / RFP No.: 2016XXXXX Name of Contractor/Consultant: Keene Concrete Inc What industry is your business? Concrete Construction Address: 30063 WCR 8 Keeneshung CO 80643
Business Phone No.: 363-227-1901 Business Facsimile No.: 363-227-1904

OED - Executive Order No. 101
Diversity and Inclusiveness in City Solicitations Information Request Form
Rev. 12/29/2015

How many employees does your company employ?
1-10 51-100 11-50 over 100
1.1. How many of your company's employees are:
Full-time Part-Time
2. Do you have a Diversity and Inclusiveness Program? Yes No
If No , and your company size is less than 10 employees continue to question 11. Complete and sign the form.
If Yes, does it address: 2.1 Employment and retention? 2.2 Procurement and supply chain activities? 2.3 Customer service? Yes No No No
3. Provide a detailed narrative of your company's diversity and inclusiveness principles and programs. This may include, for example, (i) diversity and inclusiveness employee training programs, equal opportunity policies, and the budget amount spent on an annual basis for workplace diversity; or (ii) diversity and inclusiveness training and information to improve customer service.
4. Does your company regularly communicate its diversity and inclusiveness policies to employees? If Yes, how does your company regularly communicate its diversity and Inclusiveness policies to employees? (select all that apply)
Employee Training Pamphlets Public EEO postings Other Not Applicable

		you do not have a diversity and inclusiveness program, describe any may have to adopt such a program.
	N	one at this time
6. H	ow often do you pro	vide training in diversity and inclusiveness principles?
	Monthly Quarterly	☐ Annually Not Applicable ☐ Other
6.1 \	What percentage of	the total number of employees generally participate?
	0 - 25% 26 - 50%	☐ 51 - 75% ☐ 76 - 100%
di ^s th	versity or inclusiven	example, narratives of training programs, equal opportunity policies, ess partnership programs, mentoring and outreach programs, and ription of budget spent on an annual basis for procurement and inclusiveness.
L		
8. Do	you have a diversi	ty and inclusiveness committee? Yes No
8.1	f Yes, how often do	es it meet?
	Monthly Quarterly	Annually No Committee Other
		it you do not have a diversity and inclusiveness committee, describe iny may have to establish such a committee.
	None a	t this time.

9. Do you have a	a budget for diversity	and inclusiveness	efforts?	Yes	No No			
•	ompany integrate dive e/manager performa	The state of the s	The state of the s	ncies Yes	⋈ No			
11. Would you lii program?	ke information detaili	ng how to impleme	ent a Diver	sity and Inclu	siveness			
If yes, please email X0101@denvergov.org.								
I attest that the information represented herein is true, correct and complete, to the best of my knowledge.								
Signature of Pers	Son Completing Form	2	q Date	18/11e				
Cail Printed Name of	Darnel\ Person Completing F	form						

NOTE: Attach additional sheets or documentation as necessary for a complete response.

^{*&}quot;Diversity and inclusiveness program" means a program that invites values, perspectives and contributions of people from diverse backgrounds, and integrates diversity into its hiring and retention policies, training opportunities, and business development methods to provide an equal opportunity for each person to participate, contribute, and succeed within the organization's workplace. "Diversity" encompasses a wide variety of human differences, including differences such as race, age, gender, gender identity, sexual orientation, ethnicity, physical disabilities, appearance, historically underutilized and disadvantaged persons, as well as social identities such as religion, marital status, socio-economic status, lifestyle, education, parental status, geographic background, language ability, and veteran status."

CITY AND COUNTY OF DENVER

STATE OF COLORADO



DEPARTMENT OF PUBLICWORKS

WASTEWATER MANAGEMENT DIVISION

BID DOCUMENTS PACKAGE

Contract No. 201629825

2016 ON-CALL CONCRETE REPAIR

August 17, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

TABLE OF CONTENTS FOR CONTRACT DOCUMENTS

BID FORM AND SUBMITTAL PACKAGE	PAGE	
Bid Form and Submittal Package (bound separately and attached as part of these Bid I Table of Contents Bidder's Checklist Bid Form and Submittal Package Acknowledgment Form Bid Form List of Proposed Minority and Woman Business Enterprise(s) Commitment to Minority and Woman Business Enterprise Participation Minority and Woman Business Enterprise Letter(s) of Intent Joint Venture Affidavit Joint Venture Eligibility Form Bid Bond Diversity and Inclusiveness in City Solicitations Form	BF-1 BF-2 through BF-3 BF-4 through BF-5 BF-6 through BF-8 BF-9 through BF-12 BF-13 BF-14 through BF-15 BF-16 BF-17 through BF-19 BF-20 BF-21 through BF-24	
BID DOCUMENTS Table of Contents Statement of Quantities Notice of Invitation for Bids Instructions to Bidders Equal Employment Opportunity Provisions Appendix A	BDP-1 SQ-1 through SQ-4 BDP-2 through BDP-3 BDP-4 through BDP-14 BDP-15 through BDP-25	
Appendix F Contract Form Index of the General Contract Conditions Special Contract Conditions Final/Partial Release and Certificate of Payment Forms (Samples) Performance and Payment Bond Form Performance and Payment Bond Surety Authorization letter (Sample) Notice to Apparent Low Bidder (Sample) Notice To Proceed (Sample) Final Receipt (Sample)	BDP-26 through BDP-32 BDP-33 through BDP-37 BDP-38 through BDP-52 BDP-41 through BDP-42 BDP-53 through BDP-54 BDP - 55 BDP-56 through BDP-57 BDP-58 BDP-59	
On-Call Specific Contract Forms 1. Change Rider 2. Proposal Request 3. Proposal Request Pricing Worksheet 4. Unit Price Sheets for Proposal Request 5. Contractor Worksheet for Proposal Requests 6. Work Order 7. Work Order Change Prevailing Wage Rate Schedule Index to Technical Specifications	BDP-60 BDP-61 BDP-62 BDP-63 BDP-64 BDP-65 BDP-66 BDP-67 16 pages	
Technical Specifications	75 pages	

Contract No. 201629825 BDP - 1 August 17, 2016

2016 OCCR



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 201629825

STATEMENT OF QUANTITIES

Item No.	Description	Estimated Qua	ntity
202-00019	REMOVAL OF INLET	10	EA
202-00200	REMOVAL OF SIDEWALK	5,400	SY
202-00201	REMOVAL OF CURBHEAD	180	LF
202-00203	REMOVAL OF CURB AND GUTTER	810	LF
202-00204	REMOVAL OF COMBINATION CURB, GUTTER AND WALK	7,000	LF
202-00208	REMOVAL AND RESET FLAGSTONE (INCLUDES SALVAGE AND STORAGE)	500	SY
202-00210	REMOVAL OF CONCRETE PAVEMENT	6,150	SY
202-00220	REMOVAL OF ASPHALT MAT	9,500	SY
202-01000	REMOVAL OF FENCE	150	LF
202-05021	TRIP HAZARD SAWING (>5 LOCATIONS 1 MONTH COMPLETION)	1,000	IN-FT
202-05020	TRIP HAZARD SAWING (<= 5 LOCATIONS 1 WEEK COMPLETION)	500	IN-FT
203-00200	UNCLASSIFIED EXCAVATION	3,150	CY
203-02330	3-MAN LABOR CREW	90	HR
206-00065	STRUCTURE BACK FILL (FLOW FILL)	450	CY
208-00050	STORM DRAINAGE INLET PROTECTION	180	EA
210-00810	RESET GROUND SIGN	85	EA
210-04010	ADJUST MANHOLE/METER/VALVE/PULLBOX	65	EA
Contract No. 201629825 2016 OCCR			August 17, 2016



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 201629825

STATEMENT OF QUANTITIES

Item No.	Description	Estimated Quantity	
210-04011	ADJUST INLET FRAME AND ADJUSTABLE CURBHEAD	60	EA
210-04020	RESET INLET GRATE, FRAME, AND ADJUSTABLE CURB BOX (NEW CASTING)	225	EA
212-00050	SODDING	5,000	SF
212-01200	RESTORE LANDSCAPING	27,000	SF
212-01201	AMENDED TOP SOIL OR LANDSCAPE PLANTER'S SOIL MIX	220	CY
304-06000	AGGREGATE BASE COURSE	2,600	TON
403-00720	HBP PATCH/OVERLAY	3,300	TON
412-00000	24-HOUR HIGH EARLY STRENGTH CONCRETE	315	CY
412-00001	ADD PIGMENT TO CONCRETE	50	CY
412-00100	GEO TECH MATERIAL TESTING CONCRETE	35	EA
412-00600	6" CONCRETE PAVEMENT	1,500	SY
412-00800	8" CONCRETE PAVEMENT	2,900	SY
412-01000	10" CONCRETE PAVEMENT	300	SY
412-01200	12" CONCRETE PAVEMENT	300	SY
413-00100	CONCRETE PATCHING (STRUCTURAL SURFACE REPAIR <2" DEPTH)	360	SF-IN
601-00100	PAVESTONE STACKED PRE-CAST WALL BLOCK	610	SF

Contract No. 201629825



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 201629825

STATEMENT OF QUANTITIES

Item No.	Description	Estimated Quar	ntity
601-00400	REINFORCED VARIABLE HEIGHT CONCRETE RETAINING WALL	300	SF
601-06150	CONCRETE PATCHING (STRUCTURAL CURB REPAIR)	500	LF
604-14050	# 14 INLET (L=6')	5	EA
604-16050	SINGLE #16 INLET	5	EA
608-00000	CONCRETE SIDEWALK	2,000	SY
608-00010	CONCRETE CURB RAMP	9,000	SY
608-00018	TRUNCATED DOMES (SPECIAL CAST IRON) MATERIAL ONLY	200	SF
609-20000	CONCRETE GUTTER OVERLAY	9,800	LF
609-21020	CURB & GUTTER TYPE II, SECTION 2B	9,000	LF
609-21023	CURB & GUTTER TYPE IIB (9") CURBHEAD	360	LF
609-22021	COMBINATION CURB, GUTTER & SIDEWALK (2-'8")	450	LF
609-22025	COMBINATION CURB, GUTTER & SIDEWALK (3'-11")	3,600	LF
610-00026	MEDIAN COVER MATERIAL (6" PATTERNED COLORED CONCRETE)	500	SY
613-07000	RESET PULL BOX	45	EA
614-72875	LOOP DETECTOR WIRE	225	LF
623-00204	SPRINKLER SYSTEM/ADJUST SPRINKLER HEAD	450	EA
Contract No. 201629825			August 17, 2016

Contract No. 201629825

2016 OCCR

August 17, 2016



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 201629825

STATEMENT OF QUANTITIES

Item No.	Description	Estimated Quantity	
623-00205	SPRINKLER SYSTEM/NEW SPRINKLER HEAD	400	EA
623-00505	SPRINKLER SYSTEM/IRRIGATION RECONSTRUCTION	4,250	LF
630-00000	TRAFFIC CONTROL - ARTERIAL/COLLECTOR	55	DAY
630-00002	TRAFFIC CONTROL - LOCAL	150	DAY
630-00003	TRAFFIC CONTROL - UNIFORMED TRAFFIC CONTROL	75	HR

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

NOTICE FOR INVITATION FOR BIDS FOR CONTRACT NO. 201629825

2016 ON-CALL CONCRETE REPAIR

BID SCHEDULE: 11:00 a.m., Local Time September 08, 2016

Sealed bids will be received in Room 6.G.7, 201 West Colfax Ave., Denver, CO 80202, beginning at 10:30 a.m., no later than 11:00 a.m., on bid day. All properly delivered bids will then be publicly opened and read aloud.

Bids submitted prior to 10:30 a.m. on the specified bid opening date/time shall be presented at the Office of Contract Administration, Attention: Public Works Contract Administration, 201 West Colfax Avenue, Department 614, Denver, Colorado 80202.

Prior to submitting a bid, the bidder shall consult the Contractor's Bulletin Board located at 201 W. Colfax, 2nd Floor, Denver, Colorado, 80202 and/or www.work4denver.com.

GENERAL STATEMENT OF WORK:

The Work contemplated hereunder shall generally consist of all work, including labor, materials, supplies and equipment which is necessary to satisfactorily complete Construction Services related to the Concrete Repair Program as yet to be identified (i.e., the "Projects"). The City anticipates that typical Project Work may include repair and/or replacement of flatwork and other incidental and related infrastructure items including, but not limited to: ADA compliant handicap curb ramps, curbs, gutters, sidewalks, pavements, asphalt, driveways, alleys, crosspans, walkways, rip-rap, water proof membranes, bridge decks, and retaining walls. Incidental repairs to associated storm inlets, pipe, and or landscaping may be required. Each of these Projects will be separately scoped, designed (if deemed necessary by the City) and quantified. The selected contractor shall have all necessary resources available, on an as needed basis, to complete each such Project when directed by the Division. The City may award more than one contract to more than one General Contractor for this procurement. This is a master on-call contract which will be composed of multiple work orders. Work orders cannot exceed \$450,000. The master on-call contract will be administered by CCD Wastewater Capital Projects Management however, the individual work orders may be managed by other assigned departments/agencies. The City may award more than one contract to more than one General Contractor for this procurement.

ESTIMATED CONSTRUCTION COST:

The estimated cost of construction for this project is between \$3,200,000.00 and \$3,900,000.00.

MAXIMUM CONTRACT AMOUNT:

The total cost of all Works performed under this contract shall not exceed <u>Four Million Dollars and No Cents</u> (\$4,000,000.00) during the three (3) year term of the contract. Each project will be assigned and authorized separately and no authorized Project cost will exceed <u>Four Hundred Fifty Thousand Dollars and No Cents</u> (\$450,000.00).

TEXTURA CONSTRUCTION PAYMENT MANAGEMENT:

Bidders are required, when preparing a bid, to agree that it shall use the Textura® Construction Payment Management System (CPM System) for this Project and recognizes that all fees associated with the CPM System are to be paid by the awarded Contractor for billings for work performed. Use the pricing scale provided in Instructions to Bidders to price the Textura service appropriately. For details on the company and service contact the Textura® Corporation 866-TEXTURA or www.texturacorp.com.

DOCUMENTS AND BID INFORMATION AVAILABLE:

Contract Documents complete with Technical Specifications and construction drawings, if applicable will be available on the first day of publication at: www.work4denver.com to download digital Contract Documents at a cost of \$10.00 per download (eBid Document Number #4625329). Contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance.

Contract No. 201629825 BDP - 2 August 17, 2016

PRE-BID CONFERENCE:

A pre-bid conference will be held for this Project at 9:00 a.m., local time, on August 25, 2016. This meeting will take place Webb Building, 201 W. Colfax Avenue, 4.I.4, Denver, CO 80202.

DEADLINE TO SUBMIT QUESTIONS: August 30, 2016 by 2:00 p.m. local time.

PREQUALIFICATION REQUIREMENTS:

Each bidder must be prequalified as a Wastewater Management Division in the 1F(2) Concrete \$1,500,000.00 monetary level in accordance with the City's Rules and Regulations Governing Prequalification of Contractors. Each bidder must have submitted a prequalification application a minimum of ten (10) calendar days prior to the bid opening date. Applications must be submitted to the Department of Public Works, Prequalification Section, 201 West Colfax Avenue, Department 506, Denver, Colorado 80202. To view the Rules and Regulations and to obtain a prequalification application, please visit our website at https://www.denvergov.org/content/denvergov/en/denver-department-of-public-works/rules-and-regulations/prequalification-of-contractors-rules-regs-18.html or call 720-865-2539 for prequalification information ONLY.

MINORITY AND WOMAN BUSINESS ENTERPRISE PARTICIPATION:

Construction, reconstruction and remodeling contracts made and entered into by the City and County of Denver are subject to Article III, Divisions 1 and 3 of Chapter 28 of the Denver Revised Municipal Code, (Sections 28-31 to 28-36 and 28-52 to 28-90 D.R.M.C) and all Minority and Woman Business Enterprise and Equal Employment Opportunity Rules and Regulations adopted by the Director of the Division of Small Business Opportunity.

Article III, Division 3 of Chapter 28 of the D.R.M.C. directs the Director of the Division of Small Business Opportunity to establish a project goal for expenditures on construction, reconstruction, and remodeling work contracted by the City and County of Denver. The specific goal for this project is:

10% Minority and Woman Business Enterprise (M/WBE) Participation

Project goals must be met with certified participants as set forth in Section 28-60, D.R.M.C. or through the demonstration of a sufficient good faith effort under Section 28-62 D.R.M.C. For compliance with good faith requirements under Section 28-62(b), the M/WBE percentage solicitation level required for this project is 100%.

The Director of the Division of Small Business Opportunity urges all participants in City construction, reconstruction and remodeling projects to assist in achieving these goals.

MISCELLANEOUS:

Contracts for construction, reconstruction, and remodeling are subject to the City prevailing wage rate requirements established pursuant to Section 20-76, D.R.M.C.

As its best interest may appear, the Manager of Public Works reserves the right to reject any or all bids and to waive informalities in bids.

Publication Dates: August 17, 18, 19, 2016
Published In: The Daily Journal

A modified version of this Notice of Invitation for Bids and the project's Statement of Quantities is available on the City and County of Denver's website at: www.work4denver.com.

Contract No. 201629825 BDP - 3 August 17, 2016

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

INSTRUCTIONS TO BIDDERS

IB-1 INSTRUCTION TO BIDDERS

These Instructions to Bidders are a part of the Contract Documents and are intended to serve as a guide to bidders. They are general in nature and may be amended or supplemented as needed to support any one specific invitation to bid. Each bidder shall prepare its bid in strict compliance with all requirements of the Contract Documents and by careful application of these instructions.

IB-2 BIDDING

The copy of the Contract Documents contains the Bid Form and Submittal Package for this Project which must be used to submit a bid hereunder. The bidder must fully complete, execute and submit this Bid Form and Submittal Package, along with any other specified components of the Contract Documents, as its bid for the referenced Project.

A bidder is not required to submit as part of its bid the entire set of Contract Documents distributed by the City pursuant to the Notice of Invitation for Bids, if the bidder executes and submits the Bidder Acknowledgment Form included with the Bid Form and Submittal Package as part of its bid. However, each bidder, by submitting its bid, shall be conclusively presumed to have received and reviewed all of the information contained in the Contract Documents as this term is further defined herein.

Each bid must be enclosed in a sealed envelope, must be addressed to the Manager and must show on the face of the envelope the full name of the bidder, the City Project Number, and descriptive title of the Project for which the bid is made.

The advertisement for Notice of Invitation for Bids will identify where and when the bid must be delivered.

IB-3 CONTRACT DOCUMENTS AS PUBLISHED BY CITY

Each bidder shall be responsible for, and shall be deemed to have received, all the information contained in the Contract Documents as distributed by the City pursuant to the Notice of Invitation for Bids, including addenda, whether or not such bidder has reviewed all or part of the Contract Documents in either its hard copy form or in any other format. If organizations or companies other than the City or its design professional distribute the City's Contract Documents for review by prospective bidders, whether in hard copy or via electronic or other media, neither the City nor its design professional shall be responsible for the content, completeness or accuracy of any information distributed or transmitted by any such organization or company.

IB-4 COMPLETING AND SIGNING THE BID FORMS

The bidder must complete the Bid Form by legibly writing or printing in ink, in words and figures as required, all the bidder's prices offered for the Work to be performed. All blank spaces, which require a response of the bidder, must be properly completed in full. If in the process of evaluating a bid, words and figures, as written on the Bid Form by the bidder, do not agree, the written words will govern.

This Bid Form requires unit price bids for representative work items listed. The bidder shall write in the Bid Form spaces provided a unit price for each work item for which a quantity is given and shall also write the product of each unit price and the quantity specified in the "Amount" or "Total" space provided. Upon completion of all spaces provided for the listed work items, the bidder shall total all of the work item "Amounts" provided by the bidder and write that total, in words and figures, in each space provided on the Bid Form.

Each bidder must sign the Bid Form and give the bidder's current business address. If an individual, the signature must be of the individual offering the bid; if a partnership, the signature must be that of a general partner; and if a corporation, both the president and the secretary must sign and the seal of the corporation must be affixed. Signatures of other persons may be acceptable if the bid contains sufficient evidence, satisfactory to the City in its sole discretion, to indicate that the other persons are authorized to bind the bidder.

Contract No. 201629825 BDP - 4 August 17, 2016

IB-5 UNACCEPTABLE BIDS

The City will not accept bids from Bidders not prequalified with the Department of Public Works (if prequalification is required for this project), in arrears to the City upon debt or contract, or which are defaulters (as surety or otherwise) upon any obligation to the City.

IB-6 INFORMAL AND UNBALANCED BIDS

Any alteration, interlineation, erasure, omission, deletion or addition by the bidder to the Bid Form and Submittal Package or other parts of the Contract Documents submitted with the Bid Form and Submittal Package, as originally issued to the bidder, shall render the accompanying bid informal and may constitute cause for rejection.

Any unauthorized addition, conditional or alternate bids, failure to provide a unit price, lump sum amount or authorized alternate item specified or other irregularities of any kind which tend to render the bid incomplete, indefinite or ambiguous shall render the bid informal and may constitute cause for rejection.

Bids for any work item that are deemed unbalanced or unreasonable so as to disproportionate to reasonable approximations or estimates of the work item or items that do not reasonably carry its own proportion of cost or that contain inadequate or unreasonable prices for any item may be rejected. Bids which have not acknowledged all addenda to the Contract Documents issued for this bid may also be rejected.

The right is reserved by the City to reject any or all bids and to waive any informalities where it is deemed by the City to be in the best interests of the City to do so.

IB-7 ONLY ONE BID ACCEPTED

The City will accept only one bid for the same work from any one bidder. This includes bids that may be submitted under different names by one business enterprise.

IB-8 BID GUARANTEE

As a guarantee of good faith on the part of the bidder, each bid must be accompanied by a bid guarantee, consisting of either a certified or cashier's check made payable without condition to the order of the City and County of Denver or a bid bond written by an approved corporate surety in favor of the City and County of Denver. If the bid of a bidder is acceptable and the bidder is notified by the Manager that it is considered to be the Apparent Low Bidder and said bidder fails to execute a contract in the form prescribed or to furnish a performance and payment bond with a legally responsible and approved surety or to furnish the required evidence of insurance or satisfy all conditions precedent to contract execution within five (5) days after such notice is made by the City, said bid guarantee shall be forfeited to the City as liquidated damages and not as a penalty.

The bid guarantee shall be in the amount of five percent (5%) of the total bid unless otherwise specified in the Notice of Invitation for Bids and on the form appearing in the Contract Documents in the Bid Form and Submittal Package. Failure to submit a proper bid guarantee, satisfying all of the requirements specified herein and on the form provided herein shall render the bid nonresponsive and may constitute cause for rejection.

Following award and execution of the Contract by the Apparent Low Bidder, or earlier in the sole discretion of the City, bid guarantees of all but the Apparent Low Bidder will be returned. When the Apparent Low Bidder executes the Contract and delivers to the City satisfactory performance and payment bonds, required insurance documentation, and has satisfied all conditions precedent to contract execution by the City, and after approval, if any, by the Council of the City of the proposed Contract with the Apparent Low Bidder, the bid guarantee of the Apparent Low Bidder shall be returned. Such return shall be made within one hundred twenty (120) days from date bids are opened unless otherwise specified in the Special Contract Conditions.

IB-9 NOT USED

IB-10 INCONSISTENCIES

Any seeming inconsistencies or ambiguities between different provisions of the Contract Documents or any point which the bidder believes requires a decision or interpretation by the City must be inquired into by the bidder by addressing a formal written communication to the Manager of Public Works and sending or delivering it to the offices of the Division of Public Works advertising this Project for bid at least forty-eight (48) hours, excluding Saturdays, Sundays, and holidays, before the time set for the opening of bids

Contract No. 201629825 BDP - 5 August 17, 2016

Information about the decision or interpretation made in response to any inquiry will be posted on the Contractor's Bulletin Board (refer to IB-12 CONTRACTOR'S BULLETIN BOARD, for the location of the Contractor's Bulletin Board). If the matter raised requires, in the sole discretion of the Manager, that an addendum to the bid documents be issued, such addendum will be published and each bidder shall be required to acknowledge the addendum by signing and identifying it in the Bid Form when submitting the bid.

After bids are opened, all bidders must abide by the formal response of the Manager, as to any interpretation. The City shall not be bound and the bidder shall not rely on any oral communication, interpretation clarification or determination of the Contract Documents prior to bid opening.

IB-11 WITHDRAWAL OF BID

A bidder may withdraw its bid at any time prior to the time for receipt of bids set forth in the Notice of Invitation for Bids by making written request upon the Manager of Public Works. After such time, no bid may be withdrawn or modified.

Such request must be signed by the persons authorized to bind the bidder as defined in IB-3, COMPLETING AND SIGNING BID FORMS.

IB-12 CONTRACTOR'S BULLETIN BOARD

It shall be conclusively presumed that the bidder has, before submitting any bid, read and shall take full responsibility for all addenda, posted decisions, and other information relevant to the bid posted by the City on the Contractor's Bulletin Board. The Contractor's Bulletin Board is located on the 2nd floor at 201 W. Colfax Avenue, Denver, CO 80202.

IB-13 PRE-BID MEETING

Bidders are urged to attend the pre-bid meeting(s) scheduled for this Project. Attendance is not mandatory; however, bidders will be held responsible for all information presented at such meeting(s).

IB-14 ADDENDA

As its best interests may require, the City may issue addenda to the Contract Documents. Such addenda shall be posted on the Contractor's Bulletin Board and made available to all persons having purchased a set of Contract Documents as set forth in the Notice of Invitation for Bids contained herein. All bidders must acknowledge receipt of all addenda on the Bid Form at the time of submission of the bid.

IB-15 BID OPENING

Bidders are invited to be present at the bid opening. Unless otherwise suspended, delayed or canceled by posted notice from the Manager, bid opening will occur at the time and place designated in the Notice of Invitation for Bid.

IB-16 EVALUATION OF BIDS AND BASIS OF BID SELECTION

Bids will be evaluated after being read in open meeting at the place designated for such bid opening. The low bidders' bids will be reviewed for responsiveness to the requirements of Bid Documents and whether or not the bids contain irregularities which could give any bidder an unfair advantage.

Contract award will be made on the basis of the lowest, total, responsive, qualified bid, which bid shall include the total of all work items listed on the Bid Form. Bid selection will be subject to all requirements and special bidder qualifications contained herein and subject to approval of such resulting Contract in accordance with the Charter and Revised Municipal Code of the City and County of Denver. In addition to all other specified requirements, the City will correct arithmetical errors in all bids and corrected totals only will be considered as the basis of selection.

Upon concluding that the bid is, in fact, the lowest, total, responsive bid to the bidding conditions and that of a responsible, qualified bidder, the City will notify the Apparent Low Bidder.

As its best interests may appear, the City and County of Denver reserves the right to waive informalities in bids, to reject any and all bids and to rebid the Project.

IB-17 NOTICE TO APPARENT LOW BIDDER

Contract No. 201629825 BDP - 6 August 17, 2016

The Notice to Apparent Low Bidder, a form of which is included in the Contract Special Conditions Section of the Contract Documents, is issued by the City directly to the selected bidder and informs the bidder that the Manager intends to seek approval of the execution of the Contract by the City in accordance with the Charter and Revised Municipal Code of the City and County of Denver. Specifically, it informs the bidder of its obligations with respect to execution of the Contract and instructs the bidder on how to proceed toward execution of the Contract. The City reserves the right to notify the Apparent Low Bidder, at any time within one hundred twenty (120) days from the date of the opening of the bids, that approval to contract with the Apparent Low Bidder shall be sought in accordance with the Charter and Revised Municipal Code of the City and County of Denver.

In accordance with the terms and conditions contained in the Bid Form and Submittal Package and any additional requirements set forth in the Notice to Apparent Low Bidder or elsewhere in the Contract Documents, the Apparent Low Bidder shall execute the Contract Form contained in the Contract Documents made available by the City for execution in the appropriate number of counterparts. The Apparent Low Bidder shall return the fully executed Contract Document sets, along with any supplemental documents required herein, to the City and shall comply with all other conditions precedent to Contract execution within five (5) days of the date of issuance of the Notice to Apparent Low Bidder by the City. Failure to comply with each of these requirements within five (5) days of the date of issuance of the Notice to Apparent Low Bidder by the City shall render the bid nonresponsive and may constitute cause for rejection.

Issuance of such Notice shall not, however, constitute a commitment on the part of the City or create any rights in the Apparent Low Bidder to any contract with the City.

IB-18 EXECUTION OF CONTRACT

The process of executing a contract requires action by both the apparent low bidder and the City. After it notifies the Apparent Low Bidder, the City will prepare the Contract Documents by incorporating all of the documents submitted by the Apparent Low Bidder into one or more executable copies. Upon notification that the contract documents are ready for execution the Apparent Low Bidder shall execute the contract documents. At this time, the successful bidder shall also provide certain supplemental documents for incorporation into the Contract Documents. These supplemental documents shall include: the properly executed Certificate of Insurance Forms evidencing the apparent low bidder's satisfactory compliance with the insurance requirements set forth in the Contract Documents; a properly executed Payment and Performance Bond Form and appropriate Power of Attorney evidencing the Apparent Low Bidder's satisfactory compliance with the bonding requirements set forth in the Contract Documents; and documentation of compliance with any other conditions precedent to execution of the Contract by the City set forth in the Contract Documents. The insurance and bond forms contained in the Contract Special Conditions Section of the Contract Documents must be used in satisfying these supplemental document requirements.

These documents are then delivered to the City within the prescribed time period for examination of the documents to determine whether or not the Contractor has correctly executed the Contract and has correctly provided the required supplemental documents and that these documents are satisfactorily and properly completed. From here, all of the documents are forwarded to the City Attorney who will, if the insurance and bonding offered is acceptable and if all other elements of the Contract Documents are in order, recommend that the Manager and the Mayor approve the documents and, when required by the City Charter, prepare an ordinance for submittal to City Council authorizing the execution of the Contract. The City Attorney shall in all applicable instances submit the proposed contract and ordinance to City Council. After City Council approval, the Contract shall be reviewed by the City Attorney and routed for execution by the Mayor, the Clerk for attestation and the Auditor for countersignature and registration. When the total process of contract execution is complete, a Notice to Proceed will be issued and a single executed copy of the Contract will be delivered to the Contractor. Any work performed or materials purchased prior to the issuance of Notice to Proceed is at the Contractor's risk.

IB-19 BONDING REQUIREMENTS

In accordance with the provisions of General Contract Conditions, Title 15, PERFORMANCE AND PAYMENT BONDS, the minimum bonding requirements for this Contract are set forth in the form **CITY AND COUNTY OF DENVER PERFORMANCE AND PAYMENT BOND** contained in the Special Conditions Section of the Contract Documents. Upon receipt of Notice to Apparent Low Bidder, the apparent low bidder must cause this form bond to be purchased, executed and furnished, along with appropriate Powers of Attorney <u>and</u> a surety authorization letter (in form similar to the one attached), to the City.

Contract No. 201629825 BDP - 7 August 17, 2016

IB-20 INSURANCE REQUIREMENTS

The minimum insurance requirements for this Contract are set forth in the Special Conditions Section of the Contract Documents. Bidders are urged to consider, in preparing a bid hereunder, that each condition, requirement or specification set forth in the form certificate must be complied with by the Contractor and all subcontractors performing Work on the Project, unless such requirements are specifically accepted in writing by the City's Risk Management Office. The Contractor must either include all subcontractors performing work hereunder as insureds under each required policy or furnish a separate certificate for each subcontractor. In either case, the Contractor shall insure that each subcontractor complies with all of the coverage requirements.

IB-21 PERMITS AND LICENSES

All permits, licenses and approvals required in the prosecution of the work shall be obtained and paid for by the Contractor.

IB-22 WAGE RATE REQUIREMENTS

In preparing any bid hereunder, the Contractor must comply with and should carefully consider all requirements and conditions of the City's Payment of Prevailing Wages Ordinance, Sections 20-76 through 20-79, D.R.M.C. and any determinations made by the City pursuant thereto.

At the time of the preparation of the Contract Documents, the then-current prevailing wage rates applicable to this Project shall be bound within the Contract Documents made available to potential bidders for the Project. If, more than ten (10) days prior to the actual date of bid opening, the Career Service Board determines that prevailing wages rates different from those bound in the Contract Documents are applicable to one or more of the various classes of laborers, mechanics and workers encompassed by this Project, such different prevailing wage rates shall be provided in an addendum. If different prevailing wage rates are determined by the Career Service Board ten (10) or less days prior to the actual date of bid opening, the City will determine on a case by case basis in its sole discretion whether such different prevailing wage rates are to be included in an addendum. In conjunction with such determination, the City may elect, in its sole discretion, to postpone the date of bid opening on the Project. In any event, the bidder will be held, at the actual date of bid opening, to those prevailing wage rates incorporated into the Contract Documents and as modified by any such addenda.

These prevailing wage rates shall be considered the **minimum** City prevailing wage rates to be paid by all contractors or subcontractors for a period not to exceed one (1) year from the date of the Contract. Increases in prevailing wages subsequent to the date of the Contract for a period not to exceed one (1) year shall not be mandatory on either the contractor or subcontractors. Future increases in prevailing wages on contracts whose period of performance exceeds one (1) year shall be mandatory for the contractor and subcontractors only on the yearly anniversary date of the Contract. The **minimum** City prevailing wage rate for any such subsequent yearly period or portion thereof shall be the wage rates in effect on the yearly anniversary date of the contract which begins such subsequent period. In no event shall any increases in prevailing wages over the amounts thereof as stated in such Technical Specifications and addenda thereto result in any increased liability on the part of the City and the possibility and risk of any such increase is assumed by all contractors entering into any such contract with the City. Decreases in prevailing wages subsequent to the date of the contract for a period not to exceed one year (1) shall not be permitted. Decreases in prevailing wages on contracts whose period of performance exceeds one (1) year shall not be effective except on the yearly anniversary date of the contract.

IB-23 TAX REQUIREMENTS

<u>General</u>. Bidders are referred to the General Contract Condition 323, TAXES, as to taxes to which they may be subject in performing the Work under this Contract, including but not limited to sales and use taxes and the Denver Occupational Privilege Tax. The following instructions are to be considered along with the General Contract Conditions and not in lieu of them.

<u>Sales and Use Tax.</u> Construction and building materials sold to contractors and subcontractors for use on structures, roads, streets, highways, and other public works owned by the City and County of Denver are exempt from state, RTD, and Cultural Facilities District sales and use taxes. However, such materials will be subject to sales and use taxes imposed by the City and County of Denver.

It is the responsibility of the Contractor and its subcontractors to apply to the Colorado Department of Revenue ("CDOR") for a certificate, or certificates, of exemption indicating that their purchase of construction or building materials is for a public project, and to deliver to the City copies of such applications as soon as possible after

Contract No. 201629825 BDP - 8 August 17, 2016

approval by the CDOR. Bidders shall not include in their bid amounts the exempt state, RTD, and Cultural Facilities District Sales and Use Taxes.

<u>Denver Occupational Privilege Tax.</u> Any employee working for a contractor, or a subcontractor, who earns over \$500 working in Denver during a calendar month, is subject to the payment of the Employee Occupational Privilege Tax. The Contractor and any subcontractor must pay the Business Occupational Privilege Tax for each of its employees who is subject to such tax.

IB-24 DIVERSITY AND INCLUSIVENESS IN CITY SOLICITATIONS

Each bidder shall, as a condition of responsiveness to this solicitation, complete and return the "Diversity and Inclusiveness in City Solicitations Information Request Form" with their Bid.

Using the "Diversity and Inclusiveness in City Solicitations Information Request Form" provided please state whether you have a diversity and inclusiveness program for employment and retention, procurement and supply chain activities, or customer service and provide the additional information requested on the form. The information provided on the "Diversity and Inclusiveness in City Solicitations Information Request Form" will provide an opportunity for City contractors to describe their own diversity and inclusiveness practices. Contractors are not expected to conduct intrusive examinations of its employees, managers, or business partners in order to describe diversity and inclusiveness measures. Rather, the City simply seeks a description of the contractor's current practices, if any.

Diversity and Inclusiveness information provided by City contractors in response to City solicitations for services or goods will be collated, analyzed, and made available in reports consistent with City Executive Order No. 101. However, no personally identifiable provided by or obtained from contractor's will be in such reports.

IB-25 MINORITY AND WOMAN BUSINESS ENTERPRISE (M/WBE) REQUIREMENTS

Article III, Divisions 1 and 3 of Chapter 28, Denver Revised Municipal Code (D.R.M.C.), designated as Sections 28-31 - 28-36 and 28-52 - 28-90 D.R.M.C. and referred to in these Bid Documents as the "M/WBE Ordinance" and any Rules or Regulations promulgated pursuant thereto apply to this Project and are incorporated into these Bid Documents by reference. Generally, the M/WBE Ordinance provides for the adoption of a good faith goals program, to be administered by the Division of Small Business Opportunity (DSBO), devised to provide increased bidding opportunities for Minority and Woman Business Enterprises (M/WBEs). As such, each bidder must comply with the terms and conditions of the M/WBE Ordinance in making its bid and, if awarded the Contract, in performing all Work thereunder. A bidder's failure to comply with the M/WBE Ordinance, any Rules or Regulations promulgated pursuant thereto, or any additional requirement contained herein shall render the bid nonresponsive and shall constitute cause for rejection. Failure by the contractor awarded the contract to comply with M/WBE Ordinance requirements during the performance of the contract is a material breach of the contract, which may result in the in the imposition of sanctions on the Contractor, as deemed appropriate by DSBO. Copies of the M/WBE Ordinance and its accompanying Rules and Regulations are available for the use and review of bidders from DSBO. In order to comply with the bid requirements of the M/WBE Ordinance, a bidder shall either meet the established project goal or, in the alternative, demonstrate that the bidder has made sufficient good faith efforts to meet the goal in accordance with the M/WBE Ordinance.

Meeting Established Goal

In preparing a bid to meet the established Project goal, bidders should consider the following instructions relating to compliance with the M/WBE Ordinance:

- 1. Under the M/WBE Ordinance, the Director of DSBO ("Director") is directed to establish project goals for expenditures on construction, reconstruction, and remodeling work performed for the City and County of Denver. The specific goal for this project is stated in the Notice of Invitation for Bids bound herein.
- 2. In preparing its bid, each bidder shall list on the Bid Form pages entitled "List of Proposed MWBE Bidders, Subcontractors, Suppliers, Manufacturers, Manufacturers' Representatives or Brokers" the name, address, work description/supply, committed level of participation and other required information for each M/WBE of any tier which the bidder intends to use in performing the work on this Project. Only the M/WBEs identified and the precise levels of participation listed for each on the Bid Form page, at the time of bid opening, will be considered in determining whether the bidder has met the designated participation goal. Additional, revised or corrected participation submitted after bid

Contract No. 201629825 BDP - 9 August 17, 2016

- opening will not be considered. M/WBE bidders may count self-performance or joint venture activity in meeting the M/WBE project goal, but only for the scope of work performed as a commercially useful function and at a percentage level the M/WBE will be performing itself.
- 3. If a bidder/proposer is participating in a joint venture with a certified M/WBE firm, complete the Joint Venture Eligibility Form and Joint Venture Affidavit contained in this bid document/RFP. Submit the aforementioned forms with the firm's Joint Venture Agreement, to the DSBO Director, at least 10 working days prior to the proposal submittal. The Joint Venture must be approved prior to the bid opening or proposal submittal by the DSBO Director. Approval by the DSBO Director includes determining the amount the Joint Venture will count towards meeting the project goal.
- 4. All M/WBEs listed on the Bid Form must be properly certified by the City on or before the date bids are opened in order to count towards meeting the designated goal. DSBO maintains an M/WBE Directory ("Directory"), which is a current listing of M/WBEs that have been certified by the City. A copy of the DSBO Directory is located at DSBO web site at https://www.denvergov.org/dsbo. Bidders are encouraged to use the Directory to assist in locating M/WBEs for the work and supplies required on the Project. Bidders are reminded that changes may be made to the Directory at any time in accordance with the City's M/WBE Ordinance and procedures established to administer this program and a current copy of the Directory must always be used in preparing a bid. M/WBE certification or listing in the Directory is not a representation or warranty by the City as to the qualifications of any listed M/WBE.
- 5. In accordance with the provisions of the M/WBE Ordinance, DSBO will evaluate each bid to determine the responsiveness of the bid to the requirements of the M/WBE Ordinance. In determining whether a bidder's committed level of participation meets or exceeds the stated M/WBE goal, DSBO shall base its calculation of applicable amounts and percentages on the total base bid amount, not including any listed alternates, of each bid as follows:
 - The bid information provided by the agency will be used to determine the total base bid amount of each bid. Each bidder's total base bid amount will be multiplied by the M/WBE percentage established for the project to determine the exact dollar amount of required M/WBE participation for the Project. This amount will then be compared against the exact dollar amounts for the M/WBE committed for participation by the bidder. If the total dollar amount of participation listed meets or exceeds the established M/WBE dollar amount goal listed, then DSBO will determine that the goal has been met.
 - In addition, DSBO will determine the exact commitment percentage for each listed M/WBE by b. dividing the dollar amount listed for each M/WBE by the total base bid dollar amount submitted by the bidder. These individual percentages, when totaled for all listed M/WBE, will establish the total committed percentage level of M/WBE participation that the bidder must comply with during the life of the contract. In all cases, the committed percentage level of M/WBE participation must equal or exceed the assigned M/WBE goal for the Project.
 - c. In providing the exact dollar amount of participation for each listed M/WBE, a bidder should take care never to round up in determining whether or not the total of these amounts meets or exceeds the established percentage goal. The goal must be met or exceeded by dollar amounts and percentages in order for DSBO to determine that the bidder has met or exceeded the applicable M/WBE goal.
 - As previously mentioned, compliance with the M/WBE goal will be determined on the base bid d. alone. If a bid contains alternates, participation contained in any alternate will not count towards satisfaction of the Project goal. However, should any designated alternate be selected by the City for inclusion in the contract ultimately awarded, the M/WBE goal percentage level submitted at bid time, on the base bid, will also apply to the selected alternates and must be maintained for the life of the contract on the total contract amount, including any alternate work. Thus, even though such participation will not be considered in evaluating bids, bidders are urged to consider participation in preparing bids for designated alternates.

Contract No. 201629825 BDP - 10 August 17, 2016

- d. On projects where force account or allowance bid items have been included, bidders must meet the M/WBE goal percentage based upon the total base bid, including all such items that are submitted to the City. However, when a force account or allowance is designated by the City to be either performed or purchased from a specific company, the bidder may back out the dollar amount of the force account or allowance from the total base bid and meet the M/WBE goal on the remaining reduced amount.
- e. On bids which, at the time of bid opening, are equal to or exceed Five Million Dollars (\$5,000,000.00), including any alternates which may be selected, only sixty percent (60%) of the value of the commercially useful function performed by M/WBE suppliers shall count toward satisfaction of the Project goal. On Projects under Five Million (\$5,000,000.00) the value of the commercially useful function of M/WBE supplier(s) will count at a one hundred percent (100%) level. Manufacturer's representatives and packagers shall be counted in the same manner as brokers.
- f. In utilizing the M/WBE participation of a Broker only the bona fide commissions earned by such Broker for its performance of a commercially useful function will count toward meeting the Project goals. The bidder must separate the bona fide brokerage commissions from the actual cost of the supplies or materials provided to determine the actual dollar amount of participation that can be counted towards meeting the goal.
- 6. On or before the third (3rd) working day after bid opening, all of the Bidders are required to submit an executed "Letter of Intent" for each M/WBE listed on the Bid Form as a joint venture member, subcontractor, supplier, manufacturer, manufacturers' representative or broker of any tier. **An MBE or WBE Prime Bidder needs to submit a Letter of Intent for itself for self-performed work**, and must identify their level of participation on the designated M/WBE participation page bound herein. A Letter of Intent shall be submitted only for the M/WBEs listed at the time of bid opening, since this is the only participation that will be counted toward satisfaction of the project goal. A form for the M/WBE Letter of Intent is included with the Bid Form. The M/WBE Letter of Intent is a written communication from the Bidder to the City evidencing an understanding that the Bidder has or will enter into a contractual relationship with the M/WBE or that its subcontractor(s) and supplier(s), manufacturer(s), manufacturers' representative(s) and broker(s) will do so. Each M/WBE Letter of Intent shall be accompanied by a copy of the City and County of Denver's M/WBE certification letter for each proposed M/WBE identified at bid time. Bidders are urged to carefully review these Letters before submission to the City to ensure that they are properly completed and executed by the appropriate parties.

Good Faith Effort.

In preparing a bid to demonstrate a good faith effort, bidders should consider the following instructions relating to compliance with the M/WBE Ordinance:

- 1. If the bidder or proposer has not fully met the project goal as provided in section 28-60, then it shall demonstrate that it has made good faith efforts to meet such goal. The bidder or proposer shall furnish to the director, within three (3) working days after bid opening by the City or on or before the time of the final project-specific proposal submitted to and authorized by the City pursuant to a competitive selection process, or bid selection by a private owner, a detailed statement of its good faith efforts to meet the project goal set by the director. This statement shall address each of the items in subsection (b) and any additional criteria that the director may establish by rule or regulation consistent with the purposes of this division 3. Good faith efforts must be demonstrated to be meaningful and not merely for formalistic compliance with this Division 3. The scope and intensity of the efforts will be considered in determining whether the bidder or proposer has achieved a good faith effort.
- 2. The statement of good faith efforts shall include a specific response and verification with respect to each of the following good faith effort categories, which may be further defined by rule or regulation. A bidder or proposer may include any additional information it believes may be relevant. Failure of a bidder or proposer to show good faith efforts as to any one (1) of the following categories shall render its overall good faith effort showing insufficient and its bid or proposal non-responsive:
 - a. If prebid or preselection meetings are scheduled by the City at which MBEs and WBEs may be informed of subcontracting or joint venture opportunities under a proposed contract to be bid, or procured pursuant to the competitive selection process, attendance

- at such prebid or preselection meetings is not mandatory; however, bidders and proposers are responsible for the information provided at these meetings.
- b. The bidder or proposer must solicit through all reasonable and available means, the interest of all MBEs and WBEs certified in the scopes of work of the contract. The bidder or proposer must solicit the interest of such MBEs and WBEs within sufficient time, prior to the bid opening or date of final project-specific proposal in the case of a competitive selection process, to allow such MBEs and WBEs to respond to the solicitation. The bidder or proposer must determine with certainty if the MBEs and WBEs are interested by demonstrating appropriate steps to follow up initial solicitations.
- c. The bidder or proposer must select portions of the work of the contract to be performed by MBEs and WBEs in order to increase the likelihood that the project goal will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MBE and WBE participation as subcontractors or joint venturers, and for bidder or proposer self-performed work, as suppliers, manufacturers, manufacturer's representatives and brokers, all reasonably consistent with industry practice, even when the bidder or proposer would otherwise prefer to perform these work items with its own forces. The bidder or proposer must identify what portions of the contract will be self-performed and what portions of the contract will be opened to solicitation of bids, proposals and quotes from MBE and WBEs. All portions of the contract not self-performed must be solicited for MBE and WBE participation. The ability or desire of a bidder or proposer to perform the work of a contract with its own forces does not relieve the bidder or proposer of the responsibility to meet the project goal or demonstrate good faith efforts to do so.
- d. The bidder or proposer, consistent with industry practice, must provide MBEs and WBEs at a clearly stated location with timely, adequate access to and information about the plans, specifications, and requirements of the contract, including bonding and insurance requirements, if any, to assist them in responding to a solicitation.
- e. The bidder or proposer must negotiate in good faith with interested MBEs and WBEs and provide written documentation of such negotiation with each such MBE or WBE.
- f. For each MBE or WBE which contacted the bidder or proposer or which the bidder or proposer contacted or attempted to subcontract or joint venture with, consistent with industry practice, the bidder or proposer must supply a statement giving the reasons why the bidder or proposer and the MBE or WBE did not succeed in negotiating a subcontracting, supplier, manufacturer, manufacturer's representative, broker or joint venture agreement, as applicable.
- 3. The bidder or proposer must provide verification that it rejected each non-utilized MBE and WBE because the MBE or WBE did not submit the lowest bid or it was not qualified. Such verification shall include a verified statement of the amounts of all bids received from potential or utilized subcontractors, suppliers, manufacturers, manufacturer's representatives, brokers or joint venturers on the contract, whether or not they are MBEs or WBEs. In making such a determination of not being qualified, the bidder or proposer shall be guided by the definition of qualified in section 28-54(42), but evidence of lack of qualification must be based on factors other than solely the amount of the MBE's or WBE's bid. For each MBE or WBE found not to be qualified by the bidder or proposer, the verification shall include a statement giving the bidder's or proposer's reasons for its conclusion. A bidder's or proposer's industry standing or group memberships may not be the cause of rejection of an MBE or WBE. A bidder or proposer may not reject an MBE or WBE as being unqualified without sound reasons based on a reasonably thorough investigation and assessment of the MBE's or WBE's capabilities and expertise.
- 4. If requested by a solicited MBE or WBE, the bidder or proposer must make reasonable efforts to assist interested MBEs and WBEs in obtaining bonding, lines of credit, or insurance as required by the City or by the bidder or proposer, provided that the bidder or proposer need not provide financial assistance toward this effort.
- 5. If requested by a solicited MBE or WBE, the bidder or proposer must make reasonable efforts to assist interested MBEs and WBEs in obtaining necessary and competitively priced equipment, supplies,

materials, or related assistance or services for performance under the contract, provided that the bidder or proposer need not provide financial assistance toward this effort.

- The bidder or proposer must use the DSBO MBE/WBE directories to identify, recruit, and place MBEs and WBEs.
- 7. In determining whether a bidder or proposer has satisfied good faith efforts as to a project goal, the success or failure of other bidders or proposers on the contract in meeting such project goal may be considered.

Continuing Commitments.

In accordance with the provisions of the M/WBE Ordinance, the bidder agrees that it is committed to meeting either the M/WBE participation goal or the M/WBE participation set forth in its statement of good faith. This commitment must be expressly indicated on the "Commitment to MWBE SBE Participation" form included with the Bid Form. This commitment includes the following understandings:

- 1. The bidder understands it must maintain M/WBE goals throughout the performance of the Contract pursuant to the requirements set out in D.R.M.C. 28-72.
- 2. The bidder understands that it must establish and maintain records and submit regular reports, as required, which will allow the City to assess progress in achieving the M/WBE participation goal.
- 3. The bidder understands that if change orders or any other contract modifications are issued under the contract, the bidder shall have a continuing obligation to immediately inform DSBO in writing of any agreed upon increase or decrease in the scope of work of such contract, upon any of the bases discussed in Section 28-73 of the M/WBE Ordinance, regardless of whether such increase or decrease in scope of work has been reduced to writing at the time of notification.
- 4. The bidder understands that if change orders or other contract modifications are issued under the contract, that include an increase in scope of work of a contract for construction, reconstruction, or remodeling, whether by amendment, change order, force account or otherwise which increases the dollar value of the contract, whether or not such change is within the scope of work designated for performance by an M/WBE at the time of contract award, such change orders or contract modification shall be immediately submitted to DSBO for notification purposes. Those amendments, change orders, force accounts or other contract modifications that involve a changed scope of work that cannot be performed by existing project subcontractors or by the contractor shall be subject to a goal for M/WBEs equal to the original goal on the contract which was included in the bid. The contractor shall satisfy such goal with respect to such changed scope of work by soliciting new M/WBEs in accordance with Section 28-73 of the M/WBE Ordinance as applicable, or the contractor must show each element of modified good faith set out in Section 28-75(c) of the M/WBE Ordinance. The contractor shall supply to the director the documentation described in Section 28-75(c) of the M/WBE Ordinance with respect to the increased dollar value of the contract.

All bidders are charged with knowledge of and are solely responsible for complying with each and every provision of the M/WBE Ordinance in making a bid and, if awarded, in performing the work described in the Contract Documents. Failure to comply with these provisions could constitute cause for rejection of a bid or subject the selected contractor to sanctions set forth in the M/WBE Ordinance. These instructions are intended only to generally assist the bidder in preparing and submitting a compliant bid. Should any questions arise regarding specific circumstances, bidders must consult the M/WBE Ordinance or contact the Project's designated DSBO representative at (720) 913-1999.

IB-26 DISCLOSURE OF INFORMATION

All submissions and other materials provided or produced pursuant to this Invitation for Bids may be subject to the Colorado Open Records Law, C.R.S. 24-72-201, et seq. As such, bidders are urged to review these disclosure requirements and any exceptions to disclosure of information furnished by another party and, prior to submission of a bid to the City, appropriately identify materials that are not subject to disclosure. In the event of a request to the City for disclosure of such information, the City shall advise the bidder of such request to give the bidder an opportunity to object to the disclosure of designated confidential materials furnished to the City. In the event of the filing of a lawsuit to compel such disclosure, the City will tender all such material to the court for judicial determination of the issue of disclosure and each bidder agrees to intervene in such lawsuit to protect and assert its

Contract No. 201629825 BDP - 13 August 17, 2016

claims of privilege against disclosure of such material. Each bidder further agrees to defend, indemnify and save and hold harmless the City, its officers, agents and employees, from any claim, damages, expense, loss or costs arising out of the bidder's intervention to protect and assert its claims of privilege against disclosure under the Open Records Law including, but not limited to, prompt reimbursement to the City of all reasonable attorney fees, costs and damages that the City may incur directly or may be ordered to pay by such court.

IB-27 GENERAL BIDDING INFORMATION

Bidders are instructed to contact the Contract Administrator designated below for this Project for pre-bid, post-bid and general City bidding information. Bidders can also visit www.work4denver.com for information, both general and project specific. The Contract Administrator assigned to this project is Brenda Hageman who can be reached via email at Brenda.hageman@denvergov.org.

IB-28 PAYMENT PROCEDURE REQUIREMENTS

Contractor recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (CPM System) for this Project. All fees associated with the CPM System are to be paid by the Contractor for billings for work performed. Bidders are required, when preparing a bid, to enter the price of the CPM service on the line provided for the service. The fee is all inclusive of all subcontractor, project and subscription fees associated with the CPM system. The bidder will calculate the fee based on a percentage of their total bid, and then should include it on the line item provided in the bid form labeled "Textura® Construction Payment Management System Fee". This expense becomes part of the contract and billable to the City. Textura will invoice the awarded contractor directly. All costs including but not limited to costs associated with training, entering data or utilizing Textura other than the Textura Construction Payment Management System Fee are overhead and shall not be reimbursed by the City. Contractor is responsible for tax on Textura fee. As with other taxes, the City will not reimburse Contractor for this cost and therefore this cost should be included in Contractor's bid. Textura will invoice the awarded contractor directly.

PROJECT SIZE	FEE (% OF BID)
< \$1,000,000	0.22% (.0022)
\$1,000,001 - \$5,000,000	0.17% (.0017)
\$5,000,001 - \$20,000,000	0.12% (.0012)
\$20,000,001 - \$50,000,000	0.10% (.0010)
\$50,000,001 - \$100,000,000	0.08% (.0008)
\$100,000,001 - \$500,000,000	0.05% (.0005)
> \$500,000,000	CONTACT TEXTURA FOR PROGRAM PRICING

For more information:

http://www.denvergov.org/content/denvergov/en/contract-administration/bidding-process.html

Contract No. 201629825 BDP - 14 August 17, 2016

RULES AND REGULATIONS REGARDING EQUAL EMPLOYMENT OPPORTUNITY

Promulgated and adopted by the Manager of Public Works pursuant to and by authority of Article III, Division 2, Chapter 28 of the Revised Municipal Code of the City and County of Denver, and for the purpose of insuring that contractors, subcontractors and suppliers soliciting and receiving compensation for contract work from or through the City and County of Denver provide equal opportunity in employment without regard to race, color, creed, sex, national origin, age, religion, marital status, political opinion or affiliation or mental or physical handicap and meet certain requirements for the hiring, training, promotion, and treatment during employment of members of ethnic groups subject to differential treatment, including persons of African descent (Black), Spanish-surnamed (Hispanic), Asian-American and American Indian Groups.

RULE I - DEFINITIONS

- A. "City" means the City and County of Denver.
- B. "Manager" shall mean the Manager of Public Works for the City and County of Denver.
- C. "Contract" means a contract entered into with the City and County of Denver, financed in whole or in part by local resources or funds of the City and County of Denver, for the construction of any public building or prosecution or completion of any public work.
- D. "Contractor" means the original party to a contract with the City and County of Denver, also referred to as the "general" or "prime" contractor.
- E. "Director" means the Director of the Division of Small Business Opportunity.
- F. "Subcontractor" means any person, company, association, partnership, corporation, or other entity which assumes by subordinate agreement some or all of the obligations of the general or prime contractor.
- G. The phrase "Bidding Specifications" as used in Article III, Division 2 of Chapter 28 of the Revised Municipal Code shall include BID CONDITION, INVITATION TO BID, and NOTICE OF PROPOSAL.
- H. "Affirmative Action Program" means a set of specific and result-oriented procedures or steps to which a contractor commits himself to apply every good faith effort to employ members of ethnic minority groups, to include persons of African descent (Black), Spanish surnamed (Hispanic), Asian-American, American Indians, and persons with mental or physical handicap.
- I. "Division of Small Business Opportunity" means the City agency established pursuant to Article III, Division 1 of Chapter 28 of the Denver Revised Municipal Code.

RULE II - NOTICE OF HEARING

When results of conciliation efforts are unsatisfactory to the Manager and he is informed in accordance with Article III, Division 2 of Chapter 28 of the Revised Municipal code that a contractor or subcontractor has apparently failed to meet affirmative action and equal employment opportunity requirements after a reasonable period of notice to correct deficiencies, the Manager will, prior to imposition of any sanctions, afford the general contractor a hearing in order to determine whether the contractor or his subcontractors have failed to comply with the affirmative action and equal employment opportunity requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code or of the contract. Written notice of such hearing shall be delivered personally or sent by certified mail, return receipt requested, to the contractor and to any subcontractor involved, at least ten (10) days prior to the date scheduled for the hearing.

Contract No. 201629825 BDP - 15 August 17, 2016

RULE III - HEARING

- A. Contractors will appear at hearings and may be represented by counsel, and may present testimony orally and other evidence.
- B. Hearings shall be conducted by one or more hearing examiners designated as such by the Manager.
- C. The Director of the Division of Small Business Opportunity may participate in hearings as a witness.
- D. Hearings shall be held at the place specified in the notice of hearing.
- E. All oral testimony shall be given under oath or affirmation and a record of such proceedings shall be made.
- F. All hearings shall be open to the public.
- G. The hearing officer shall make recommendations to the Manager who shall make a final decision.

REGULATIONS

REGULATION NO. 1 - ORDINANCE:

The Rules and Regulations of the Manager shall be inserted in the bidding specifications for every contract for which bidding is required.

REGULATION NO. 2 - EXEMPTIONS:

Each contract and subcontract, regardless of the dollar amount, shall be subject to affirmative action requirements unless specifically exempted in writing individually by the Manager. Exemptions apply only to "affirmative action" in equal employment opportunity, and are not to be construed as condonation in any manner of "discrimination" or "discriminatory practices" in employment because of race, color, creed, sex, age, national origin, religion, marital status, political opinion or mental or physical handicap.

REGULATION NO. 3 - DIRECTOR OF CONTRACT COMPLIANCE:

The Director of the Division of Small Business Opportunity shall perform the duties assigned to such official by Article III, Division 2 Chapter 28 of the Revised Municipal Code and by the Manager. (1) The Director of the Division of Small Business Opportunity or designated representatives shall inform bidders and contractors of affirmative action procedures, programs, and goals in accordance with the Ordinance at pre-bid and preconstruction conference; (2) make regular on-site inspections; (3) supply contractors and subcontractors with report forms to be completed by them when requested, and furnished to the Director of the Division of Small Business Opportunity; and (4) review payroll records, employment records and practices of general contractors and their subcontractors and suppliers during the performance of any contract. The Director of the Division of Small Business Opportunity shall promptly report apparent affirmative action deficiencies to the Manager.

REGULATION NO. 4 - GOALS AND TIMETABLES:

In general, goals and timetables should take into account anticipated vacancies and the availability of skills in the market place from which employees should be drawn. In addition, where discrimination in employment by a general contractor or any of his subcontractors is indicated, a corrective action program will take into account the need by the general contractor and his subcontractors to correct past discriminatory practices and reach goals of minority manpower utilization on a timely basis through such recruiting and advertising efforts as are necessary and appropriate.

Contract No. 201629825 BDP - 16 August 17, 2016

REGULATION NO. 5 - AWARD OF CONTRACTS:

It shall be the responsibility of the Director of the Division of Small Business Opportunity to determine the affirmative action capability of bidders, contractors and subcontractors and to recommend to the Manager the award of contracts to those bidders, contractors and subcontractors and suppliers who demonstrate the ability and willingness to comply with the terms of their contract.

REGULATION NO. 6 - PUBLICATION AND DUPLICATION:

Copies of these Rules and Regulations as amended by the Manager from time to time, shall as soon as practicable and after Notice being published will be made a part of all City Contracts.

REGULATION NO. 7 - NOTICE TO PROCEED:

Prior to issuance of the Notice to Proceed a sign-off will be required of the Director of the Division of Small Business Opportunity or his designee.

REGULATION NO. 8 - CONTRACTS WITH SUBCONTRACTORS:

To the greatest extent possible, the contractor shall make a good faith effort to contract with minority contractors, subcontractors and suppliers for services and supplies by taking affirmative actions which include but are not limited to the following:

- 1. Advertise invitations for subcontractor bids in minority community news media.
- 2. Contact minority contractor organizations for referral of prospective subcontractors.
- 3. Purchase materials and supplies from minority material suppliers.

REGULATION NO. 9 - AGENCY REFERRALS:

It shall be no excuse that the union with which the contractor or subcontractor has an agreement providing for referral, exclusive or otherwise, failed to refer minority employees.

REGULATION NO. 10 - CLAUSES:

The Manager shall include the appropriate clauses in every contract and the contractor shall cause to be inserted in every subcontract the appropriate clauses:

- 1. APPENDIX A: City and County of Denver Equal Opportunity Clause ALL CONTRACTS funded only with City and County of Denver monies.
- 2. APPENDIX B: Equal Opportunity Clause (11246) ALL FEDERAL ASSISTED.
- 3. APPENDIX C: Section 3 Assurance of Compliance HUD ASSISTED PROJECTS.
- 4. APPENDIX D: Section 3 Clause HUD ASSISTED PROJECTS.

All amendments to the appendices shall be included by reference.

REGULATION NO. 11 - SHOW CAUSE NOTICES:

When the Manager has reasonable cause to believe that a contractor has violated Article III, Division 2 of Chapter 28 of the Denver Revised Municipal Code, he may issue a notice requiring the contractor to show cause, within fifteen (15) days why enforcement procedures, or other appropriate action to insure compliance, should not be instituted.

Contract No. 201629825 BDP - 17 August 17, 2016

REGULATION NO. 12 - BID CONDITIONS - AFFIRMATIVE ACTION REQUIREMENTS - EQUAL EMPLOYMENT OPPORTUNITY:

- 1. APPENDIX E: The Bid Conditions Affirmative Action Requirements Equal Employment Opportunity as amended and published by the U.S. Department of Labor Employment Standards Administration, Office of Federal Contract Compliance, shall be inserted verbatim for bidding specification for every non-exempt contract involving the use of Federal funds.
- 2. APPENDIX F: The Bid Conditions Affirmative Action Requirements Equal Employment Opportunity as published by the Department of Public Works, City and County of Denver, shall be inserted verbatim as bidding specifications for every non-exempt contract using City funds.

Contract No. 201629825 BDP - 18 August 17, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

APPENDIX A

CITY AND COUNTY OF DENVER EQUAL OPPORTUNITY CLAUSE - ALL CONTRACTS

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, age, national origin, religion, marital status, political opinion or affiliation, or mental or physical handicap.
- 3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. Each Contractor will comply with all provisions of Article III, Division 2 of Chapter 28 of the Revised Municipal Code, and the rules, regulations, and relevant orders of the Manager and the Director.
- 5. The Contractor will furnish all information and reports required by Article III, Division 2 of Chapter 28 of the Revised Municipal Code, and by rules, regulations and orders of the Manager and Director or pursuant thereto, and will permit access to his books, records, and accounts by the Manager, Director, or their designee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts in accordance with procedures authorized in Article III, Division 2, Chapter 28 of the Revised Municipal Code, or by rules, regulations, or order of the Manager.
- 7. The Contractor will include Regulation 12, Paragraph 2 and the provisions of paragraphs (1) through (6) in every subcontract of purchase order unless exempted by rules, regulations, or orders of the Manager issued pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, so that such provisions will be binding on each subcontractor or supplier. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance.

The applicant further agrees to be bound by the above equal opportunity clauses with respect to its own employment practices when it participates in City contracts. The Contractor agrees to assist and cooperate actively with the Manager and the Director in obtaining compliance of subcontractors and suppliers with the equal opportunity clause and the rules, regulations and relevant orders of the Manager, and will furnish the Manager and the Director such information as they may require for the supervision of compliance, and will otherwise assist the Manager and Director in the discharge of the City's primary responsibility for securing compliance. The Contractor further agrees to refrain from entering into any contract or contract modification subject to Article III, Division 2

Contract No. 201629825 BDP - 19 August 17, 2016

of Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who has not demonstrated eligibility for, City contracts.

The Contractor will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the Manager and Director. In addition, the Contractor agrees that failure or refusal to comply with these undertakings the Manager may take any or all of the following actions:

- A. Cancellation, termination, or suspension in whole or in part of this contract.
- B. Refrain from extending any further assistance to the applicant under the program with respect to which the failure occurred until satisfactory assurance of future compliance has been received from such applicant.
- C. Refer the case to the City Attorney for appropriate legal proceedings.

SUBCONTRACTS: Each prime Contractor or Subcontractor shall include the equal opportunity clause in each of its subcontracts.

Contract No. 201629825 BDP - 20 August 17, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

APPENDIX F

AFFIRMATIVE ACTION REQUIREMENTS

EQUAL EMPLOYMENT OPPORTUNITY

For All Non-Exempt Construction Contracts to Be Awarded by the City and County of Denver, Department of Public Works.

NOTICE

EACH BIDDER, CONTRACTOR OR SUBCONTRACTOR (HEREINAFTER THE CONTRACTOR) MUST FULLY COMPLY WITH THE REQUIREMENTS OF THESE BID CONDITIONS AS TO EACH CONSTRUCTION TRADE IT INTENDS TO USE ON THIS CONSTRUCTION CONTRACT, AND ALL OTHER CONSTRUCTION WORK (BOTH CITY AND NON-CITY) IN THE DENVER AREA DURING THE PERFORMANCE OF THIS CONTRACT OR SUBCONTRACT. THE CONTRACTOR COMMITS ITSELF TO THE GOALS FOR MINORITY MANPOWER UTILIZATION, AS APPLICABLE, AND ALL OTHER REQUIREMENTS, TERMS AND CONDITION OF THESE BID CONDITIONS BY SUBMITTING A PROPERLY SIGNED BID.

THE CONTRACTOR SHALL APPOINT A COMPANY EXECUTIVE TO ASSUME THE RESPONSIBILITY FOR THE IMPLEMENTATION OF THE REQUIREMENTS, TERMS AND CONDITIONS OF THESE BID CONDITIONS.

<u>/s/</u>

Manager of Public Works City and County of Denver

Contract No. 201629825 BDP - 21 August 17, 2016

A. REQUIREMENTS - AN AFFIRMATIVE ACTION PLAN:

Contractors shall be subject to the provisions and requirements of these bid conditions including the goals and timetables for minority* and female utilization, and specific affirmative action steps set forth by the Office of Contract Compliance. The contractor's commitment to the goals for minority, and female utilization as required constitutes a commitment that it will make every good faith effort to meet such goals.

1. GOALS AND TIMETABLES:

The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade are as follows:

GOALS FOR MINORITY PARTICIPATION FOR EACH TRADE FEMALE PARTICIPATION FOR EACH TRADE

From January 1, 1982 to Until Further Notice From January 1, 1982 to Until Further Notice

21.7% - 23.5% GOALS FOR 6.9%

The goals for minority and female utilization above are expressed in terms of hours of training and employment as a proportion of the total number of hours to be worked by the contractor's aggregate workforce, which includes all supervisory personnel, in each trade, on all projects for the City and County of Denver during the performance of its contract (i.e., The period beginning with the first day of work on the City and County of Denver funded construction contract and ending with the last day of work).

The hours of minority and female employment and training must be substantially uniform throughout the length of the contract in each trade and minorities and females must be employed evenly on each of a contractor's projects. Therefore, the transfer of minority or female employees from contractor to contractor or from project to project for the purpose of meeting the contractor's goals shall be a violation of these Bid Conditions.

If the Contractor counts the nonworking hours of apprentices they must be employed by the Contractor during the training period; the Contractor must have made a commitment to employ apprentices at the completion of their training subject to the availability of employment opportunities; and the apprentices must be trained pursuant to training programs approved by the Bureau of Apprenticeship and Training.

* "Minority" is defined as including, Blacks, Spanish Surname Americans, Asian-Americans, and American Indians, and includes both men and minority women.

2. SPECIFIC AFFIRMATIVE ACTION STEPS:

No contractor shall be found to be in noncompliance solely on account of its failure to meet its goals, but will be given an opportunity to demonstrate that the contractor has instituted all the specific affirmative action steps specified and has made every good faith effort to make these steps work toward the attainment of its goals within the timetables, all to the purpose of expanding minority and female utilization in its aggregate workforce. A contractor, who fails to comply with its obligation under the Equal Opportunity Clause of its contract and fails to achieve its commitments to the goals for minority and female utilization has the burden of proving that it has engaged in an Affirmative Action Program directed at increasing minority and female utilization and that such efforts were at least as extensive and as specific as the following:

- a. The Contractor should have notified minority and female organizations when employment opportunities were available and should have maintained records of the organization's response.
- b. The Contractor should have maintained a file of the names and addresses of each minority and female referred to it by any individual or organization and what action was taken with respect to each such referred individual, and if the individual was not employed by the Contractor, the reasons. If such individual was sent to the union hiring hall for referral and

Contract No. 201629825 BDP - 22 August 17, 2016

not referred back by the union or if referred, not employed by the Contractor, the file should have documented this and their reasons.

- c. The Contractor should have promptly notified the Department of Public Works, and the Division of Small Business Opportunity when the union or unions with which the Contractor has collective bargaining agreements did not refer to the contractor a minority or female sent by the contractor, or when the Contractor has other information that the union referral process has impeded efforts to meet its goals.
- d. The Contractor should have disseminated its EEO policy within its organization by including it in any employee handbook or policy manual; by publicizing it in company newspapers and annual reports and by advertising such policy at reasonable intervals in union publications. The EEO policy should be further disseminated by conducting staff meetings to explain and discuss the policy; by posting of the policy; and by review of the policy with minority and female employees.
- e. The Contractor should have disseminated its EEO policy externally by informing and discussing it with all recruitment sources; by advertising in news media, specifically including minority and female news media; and by notifying and discussing it with all subcontractors.
- f. The Contractor should have made both specific and reasonably recurrent written and oral recruitment efforts. Such efforts should have been directed at minority and female organizations, schools with substantial minority and female enrollment, and minority and female recruitment and training organizations within the Contractor's recruitment area.
- g. The Contractor should have evidence available for inspection that all tests and other selection techniques used to select from among candidates for hire, transfer, promotion, training, or retention are being used in a manner that does not violate the OFCCP Testing Guidelines in 41 CFR Part 60-3.
- h. The Contractor should have made sure that seniority practices and job classifications do not have a discriminatory effect.
- i. The Contractor should have made certain that all facilities are not segregated by race.
- j. The Contractor should have continually monitored all personnel activities to ensure that its EEO policy was being carried out including the evaluation of minority and female employees for promotional opportunities on a quarterly basis and the encouragement of such employees to seek those opportunities.
- k. The Contractor should have solicited bids for subcontracts from available minority and female subcontractors engaged in the trades covered by these Bid Conditions, including circulation of minority and female contractor associations.

NOTE: The Director and the Division of Small Business Opportunity will provide technical assistance on questions pertaining to minority and female recruitment sources, minority and female community organizations, and minority and female news media upon receipt of a request for assistance from a contractor.

3. NON - DISCRIMINATION:

In no event may a contractor utilize the goals and affirmative action steps required in such a manner as to cause or result in discrimination against any person on account of race, color, religion, sex, marital status, national origin, age, mental or physical handicap, political opinion or affiliation.

4. COMPLIANCE AND ENFORCEMENT:

In all cases, the compliance of a contractor will be determined in accordance with its obligations under the terms of these Bid Conditions. All contractors performing or to perform work on projects subject to these Bid Conditions hereby agree to inform their subcontractors in writing of their respective obligations under the terms and requirements of these Bid Conditions, including the provisions relating to goals of minority and female employment and training.

B. CONTRACTORS SUBJECT TO THESE BID CONDITIONS:

In regard to these Bid Conditions, if the Contractor meets the goals set forth therein or can demonstrate that it has made every good faith effort to meet these goals, the Contractor shall be presumed to be in compliance with Article III, Division 2 of Chapter 28 of the Revised Municipal Code, the implementing regulations and its obligations under these Bid Conditions. In the event, no formal sanctions or proceedings leading toward sanctions shall be instituted unless the contracting or administering agency otherwise determines that the contractor is violating the Equal Opportunity Clause.

- 1. Where the Office of Contract Compliance finds that a contractor failed to comply with the requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code or the implementing regulations and the obligations under these Bid Conditions, and so informs the Manager, the Manager shall take such action and impose such sanctions, which include suspension, termination, cancellation, and debarment, as may be appropriate under the Ordinance and its regulations. When the Manager proceeds with such formal action it has the burden of proving that the Contractor has not met the goals contained in these Bid Conditions. The Contractor's failure to meet its goals shall shift to it the requirement to come forward with evidence to show that it has met the good faith requirements of these Bid Conditions.
- 2. The pendency of such proceedings shall be taken into consideration by the Department of Public Works in determining whether such contractor can comply with the requirements of Article III, Division 2 of Chapter 28 of the Revised Municipal Code, and is therefore a "responsible prospective contractor".
- 3. The Division of Small Business Opportunity shall review the Contractor's employment practices during the performance of the contract. If the Division of Small Business Opportunity determines that the Contractor's Affirmative Action Plan is no longer an acceptable program, the Director shall notify the Manager.

C. OBLIGATIONS APPLICABLE TO CONTRACTORS:

It shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority or female employees. Discrimination in referral for employment, even if pursuant to provisions of a collective bargaining agreement, is prohibited by the National Labor Relations Act, as amended, Title VI of the Civil Rights Act of 1964, as amended, and Article III, Division 2 of Chapter 28 of the Revised Municipal Code. It is the policy of the Department of Public Works that contractors have a responsibility to provide equal employment opportunity, if they wish to participate in City and County of Denver contracts. To the extent they have delegated the responsibility for some of their employment practices to a labor organization and, as a result, are prevented from meeting their obligations pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code, such Contractors cannot be considered to be in compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, or its implementing rules and regulations.

D. GENERAL REQUIREMENTS:

Contractors are responsible for informing their subcontractors in writing regardless of tier, as to their respective obligations. Whenever a Contractor subcontracts a portion of work in any trade covered by these Bid Conditions, it shall include these Bid Conditions in such subcontracts and each subcontractor shall be bound by these Bid Conditions to the full extent as if it were the prime contractor. The Contractor shall not, however, be held accountable for the failure of its subcontractors to fulfill their obligations under these Bid Conditions. However, the prime contractor shall give notice to the Director of any refusal or failure of any subcontractor to fulfill the obligations under these Bid Conditions. A subcontractor's failure to comply will be treated in the same manner as such failure by a prime contractor.

Contract No. 201629825 BDP - 24 August 17, 2016

- 1. Contractors hereby agree to refrain from entering into any contract or contract modification subject to Article III, Division 2, Chapter 28 of the Revised Municipal Code with a contractor debarred from, or who is determined not to be a "responsive" bidder for the City and County of Denver contracts pursuant to the Ordinance.
- 2. The Contractor shall carry out such sanctions and penalties for violation of these Bid Conditions and the Equal Opportunity Clause including suspension, termination and cancellation of existing subcontracts and debarment from future contracts as may be ordered by the Manager pursuant to Article III, Division 2, Chapter 28 of the Revised Municipal Code and its implementing regulations.
- 3. Nothing herein is intended to relieve any contractor during the term of its contract from compliance with Article III, Division 2, Chapter 28 of the Revised Municipal Code, and the Equal Opportunity Clause of its contract with respect to matters not covered in these Bid Conditions.
- 4. Contractors must keep such records and file such reports relating to the provisions of these Bid Conditions as shall be required by the Office of Contract Compliance.
- 5. Requests for exemptions from these Bid Conditions must be made in writing, with justification, to the Manager of Public Works, City and County Building, Room 379, Denver, Colorado 80202, and shall be forwarded through and with the endorsement of the Director.

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

CONTRACT NO. 201629825 2016 On-Call Concrete Repair

CONTRACT

THIS CONTRACT AND AGREEMENT, made and entered into by and between the City and County of Denver, a municipal corporation of the State of Colorado, hereinafter referred to as the "City," party of the first part, and

Keene Concrete, Inc. 30263 WCR 8 Keenesburg, Colorado 80643

hereinafter referred to as the "Contractor," party of the second part,

WITNESSETH, Commencing on August 17, 2016, and for at least three (3) days the City advertised that sealed bids would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the following:

CONTRACT NO. 201629825 2016 On-Call Concrete Repair

WHEREAS, bids pursuant to said advertisement have been received by the Manager of Public Works, who has recommended that a Contract for said work be made and entered into with the above named Contractor who was the lowest, responsive, qualified bidder therefore, and

WHEREAS, said Contractor is now willing and able to perform all of said work in accordance with said advertisement and its bid.

NOW THEREFORE, in consideration of the compensation to be paid the Contractor, the mutual agreements hereinafter contained, and subject to the terms hereinafter stated, it is mutually agreed as follows:

1. CONTRACT DOCUMENTS

It is agreed by the parties hereto that the following list of documents, instruments, technical specifications, plans, drawings and other materials which are attached hereto and bound herewith, incorporated herein by reference or otherwise referenced in these documents constitute and shall be referred to either as the "Contract Documents" or the "Contract," and all of said documents, instruments, technical specifications, Plans, Drawings and other materials taken together as a whole constitute the Contract between the parties hereto, and they are as fully a part of this agreement as if they were set out verbatim and in full herein:

Advertisement of Notice of Invitation for Bids

Instructions to Bidders

Commitment to M/WBE Participation

Article III, Division 1 and 3 of Chapter 28, D.R.M.C.

Bid Bond

Addenda (as applicable)

Equal Employment Opportunity Provisions (Appendix A and Appendix F)

Bid Form

Contract Form

General Contract Conditions

Special Contract Conditions

Performance and Payment Bond

Notice to Apparent Low Bidder

Notice to Proceed

Contract No. 201629825 BDP - 26 August 17, 2016

Contractor's Certification of Payment Form Final/Partial Lien Release Form Final Receipt Change Orders (as applicable) Federal Requirements (as applicable) Prevailing Wage Rate Schedule(s) Technical Specifications Contract Drawings

Authorized Work Orders (including proposal pricing requests and attachments, pricing proposals and any clarifications or modifications)

2. SCOPE OF WORK

The Contractor agrees to and shall furnish all labor, tools, supplies, equipment, materials and everything necessary for and required to do, perform and complete all of the Work described, drawn, set forth, shown and included in said Contract Documents.

The Work contemplated hereunder shall generally consist of all work, including labor, materials, supplies and equipment which is necessary to satisfactorily complete Construction Services related to the Concrete Repair Program as yet to be identified (i.e., the "Projects"). The City anticipates that typical Project Work may include repair and/or replacement of flatwork and other incidental and related infrastructure items including, but not limited to: ADA compliant handicap curb ramps, curbs, gutters, sidewalks, pavements, asphalt, driveways, alleys, crosspans, walkways, rip-rap, water proof membranes, bridge decks, and retaining walls. Incidental repairs to associated storm inlets, pipe, and or landscaping may be required. Each of these Projects will be separately scoped, designed (if deemed necessary by the City) and quantified. The selected contractor shall have all necessary resources available, on an as needed basis, to complete each such Project when directed by the Division. The City may award more than one contract to more than one General Contractor for this procurement.

In order to establish a competitive bidding environment for bidders seeking to perform this Work, the City devised a representative scope of services comprised of work items and units which the City anticipated the successful bidder may be required to perform on the various projects to which the contractor is assigned during the term of this Contract. Each bidder provided a unit price for each representative work item, at the units provided.

The manner in which the projects will be identified and assigned will be as follows:

- Individual projects will be identified and their specific scope of Work will be explained in detail on drawings and supplemental specifications issued to the contractor in the form of a Proposal Pricing Request.
- 2. The Contractor will thoroughly review the scope of Work and provide a price (in the format provided by the City) and a project schedule responsive to each Proposal Request. The bid unit prices must be used for all work that corresponds with the unit price descriptions. Work elements that are not covered by any unit prices shall be priced with using the format and cost categories for labor, material and equipment specified herein. For additional information relating to preparation of Proposal Request pricing refer to Special Contract Conditions.
- 3. Prior to submitting a price, the contractor shall inspect the work site and its surroundings. Although the contractor is not required to make such an inspection before bidding, for purposes of the Contract it shall be conclusively presumed that by failing to make such an inspection, the contractor has waived the right to later claim additional compensation or time extensions for conditions which would have been evident had the site been inspected.

Drawings and Technical Specifications, defining the scope of Work to be done, were prepared on the basis of interpretation by the design professionals of information derived from investigations of the work site. Such information and data are subject to sampling errors, and the interpretation of the information and data depends to a degree on the judgment of the design professional. In view of this, the bidder is invited to make such additional investigations as the bidder's judgment dictates

the need for such investigations. Information about the degree of difficulty of the scope of Work to be done cannot totally be derived from either the Drawings and Technical Specifications or from the Manager or his representatives.

Since the proposal pricing information cannot be guaranteed, the Contractor shall have assumed the risks attendant to successful performance of the scope of Work and shall never make claim for additional compensation or time extensions on the grounds that the nature or amount of work to be done was not understood by the contractor at the time of pricing.

- 4. Upon receipt of the Proposal Request pricing worksheet from the Contractor, negotiation of non-unit price items and agreement on the total price, schedule and any other specific requirements for the requested scope of Work, a Work Order for the specific project will be issued by the City authorizing the Work under the terms and conditions set forth therein and encumbering funds for such Work.
- 5. Upon receipt of a Work Order Notice to Proceed, the Contractor shall have ten (10) consecutive calendar days to commence the work.
- 6. During the course of the Work on each Work Order, the Contractor shall submit regular pay applications. The City shall issue payment for Work completed in accordance with the terms and conditions of the Contract Documents.
- 7. If additions, deletions or other modifications to the scope of Work is required or desired by the City on a particular project authorized by Work Order, a Work Order Change will be issued based on pricing prepared in the same manner as a Proposal Request and under the terms and conditions for issuance of a Change Order under the General Contract Conditions. The Work Order Change will identify any increase or decrease in the cost, change in the period of performance and any other modifications to the performance requirements for that particular Work Order.
- 8. Upon satisfactory completion and final acceptance of each Work Order, a Final Receipt will be issued and final payment for the Work Order will be made.
- 9. It is possible that more than one Work Order may be issued and under construction at the same time.

The Contractor agrees to price all Work described in any Proposal Pricing Request issued hereunder, in accordance with the unit price bids for covered items and the terms and conditions contained herein and further agrees to and shall furnish all labor, tools, supplies, equipment, materials and everything necessary for and required to do, perform and complete all of the Work described in any Work Order issued by the City in accordance with the terms and conditions set forth herein.

3. TERMS OF PERFORMANCE

For any Proposal Pricing Request submitted to the Contractor by the City for pricing, the Contractor agrees to review and, in good faith, submit comprehensive prices for each such Request within fourteen (14) consecutive calendar days of the date of issuance of such Request. In the event the City elects, at its sole discretion, to issue a Work Order pursuant to such a Request, the Contractor agrees to undertake the performance of the specified Work within ten (10) consecutive calendar days of the issuance of a Notice to Proceed for the referenced Work Order. The Contractor agrees to satisfactorily perform and complete all Work or effort required to complete the Work described in each issued Work Order within the period of performance specified in the Work Order and Notice to Proceed, plus such extensions of time as may be granted by the Manager in accordance with the provisions of the General Contract Conditions and Special Contract Conditions incorporated herein.

4. TERMS OF PAYMENT

The City agrees to pay the Contractor for the performance of all of the Work required under each authorized Work Order in accordance with the General Contract Conditions and Special Contract Conditions. In no event, however, shall the total amount of compensation paid to the Contractor by the City exceed the maximum contract amount specified herein.

5. NO DISCRIMINATION IN EMPLOYMENT

Contract No. 201629825 BDP - 28 August 17, 2016

In connection with the performance of the Work under this Contract, the Contractor agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, marital status, or physical or mental disability; and the Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

6. COMPLIANCE WITH M/WBE REQUIREMENT

This Contract is subject to all applicable provisions of Article III, Divisions 1 and 3 of Chapter 28, Denver Revised Municipal Code (D.R.M.C.), designated as Sections 28-31 – 28-36 and 28-52 – 28-90 D.R.M.C. and referred to in this Contract as the "M/WBE Ordinance". Without limiting the general applicability of the foregoing, the Contractor acknowledges its continuing duty, pursuant to Sections 28-72, 28-73 and 28-75 of the D.R.M.C., to maintain throughout the duration of this Contract, compliance with the level of minority and Woman business enterprise participation, upon which the City approved the award of this Contract to the Contractor and the Contractor further acknowledges that failure to maintain such participation commitments or otherwise comply with the requirements of the M/WBE Ordinance shall subject the Contractor to sanctions in accordance with Section 28-77 of the D.R.M.C. Nothing contained in this provision or in the M/WBE Ordinance shall negate the City's right to prior approval of subcontractors, or substitutes therefore, under this Contract

7. WAGE RATE REQUIREMENTS

In performance of all Work hereunder, the Contractor agrees to comply with and be bound by all requirements and conditions of the City's Payment of Prevailing Wages Ordinance, Sections 20-76 through 20-79, D.R.M.C. and any determinations made by the City pursuant thereto.

8. APPLICABILITY OF LAWS

The Agreement between the Contractor and the City shall be deemed to have been made in the City and County of Denver, State of Colorado and shall be subject to, governed by, and interpreted and construed by or in accordance with the laws of the State of Colorado and the Charter, Revised Municipal Code, Rules, Regulations, Executive Orders and fiscal rules of the City. As such, the Contractor shall at all times comply with the provisions of the Charter, Revised Municipal Code, Rules, Regulations, Executive Orders and fiscal rules of the City, and those State of Colorado and Federal Laws, Rules and Regulations, which in any manner limit, control or apply to the actions or operations of the Contractor, any subcontractors, employees, agents or servants of the Contractor engaged in the Work or affecting the materials and equipment used in the performance of the Work, as the same may be, from time to time, promulgated, revised or amended. The Charter and Revised Municipal Code of the City and County of Denver, as the same may be amended from time to time, are hereby expressly incorporated into this Agreement as if fully set out herein by this reference.

9. APPROPRIATION

The amount of money that has been appropriated and encumbered for the purpose of this contract, to date, is equal to or in excess of the Contract Amount. The Manager, upon reasonable written request, will advise the Contractor in writing of the total amount of appropriated and encumbered funds that remain available for payment for all Work under the Contract.

The issuance of any change order or other form or order or directive by the City which would cause the aggregate payable under the contract to exceed the amount appropriated for the contract is expressly prohibited. In no event shall the issuance of any change order or other form of order or directive by the City be considered valid or binding if it requires additional compensable work to be performed, which work will cause the aggregate amount available under the Contract to exceed the amount appropriated and encumbered for this Contract, unless and until such time as the Contractor has been advised in writing by the Manager that a lawful appropriation, sufficient to cover the entire cost of such additional work, has been made.

It shall be the responsibility of the Contractor to verify that the amounts already appropriated for this Contract are sufficient to cover the entire cost of such work, and any work undertaken or performed in excess of the amount appropriated is undertaken or performed in violation of the terms of this contract, without the proper authorization for such work, and at the Contractor's own risk.

10. APPROVALS

Contract No. 201629825 BDP - 29 August 17, 2016

In the event this Contract calls for the payment by the City of five hundred thousand dollars (\$500,000.00) or more, approval by the Board of Councilmen of the City and County of Denver, acting by ordinance, in accordance with Section 3.2.6 of the Charter of the City and County of Denver, is and shall be an express condition precedent to the lawful and binding execution and effect and performance of this contract.

11. ASSIGNMENT

The Contractor shall not assign any of its rights, benefits, obligations or duties under this Contract except upon the prior written consent and approval of the Manager to such assignment.

12. DISPUTE RESOLUTION PROCESS

It is the express intention of the parties to this Contract that all disputes of any nature whatsoever regarding the Contract including, but not limited to, any claims for compensation or damages arising out of breach or default under this Contract, shall be resolved by administrative hearing pursuant to the provisions of Section 56-106, D.R.M.C., or, as applicable, Section 28-33 D.R.M.C. for Minority/Woman Business Enterprise disputes. The Contractor expressly agrees that this dispute resolution process is the only dispute resolution mechanism that will be recognized by the parties for any claims put forward by the Contractor, notwithstanding any other claimed theory of entitlement on the part of the Contractor or its subcontractors or suppliers.

13. CONTRACT BINDING

It is agreed that this Contract shall be binding on and inure to the benefit of the parties hereto, their heirs, executors, administrators, assigns and successors.

14. PARAGRAPH HEADINGS

The captions and headings set forth herein are for convenience of reference only and shall not be construed so as to define or limit the terms and provisions hereof.

15. SEVERABILITY

It is understood and agreed by the parties hereto that, if any part, term, or provision of this Contract, except for the provisions of this Contract requiring prior appropriation and limiting the total amount to be paid by the City, is by the courts held to be illegal or in conflict with any law of the State of Colorado, the validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular part, term or provision held to be invalid.

16. MAXIMUM CONTRACT AMOUNT AND TERM

The maximum Contract Amount to be paid by the City to the Contractor for all Work performed under this Contract shall in no event exceed the sum of Four Million Dollars and No Cents (\$4,000,000.00) unless this Contract is modified to increase said amount by a duly authorized, written contract amendment mutually agreeable to and executed by the parties hereto. The term of this agreement shall be three (3) years from the date of execution of this Contact. Any work order issued prior to the expiration of the term shall be performed to completion, even if such performance extends beyond the expiration date and the term of the contract shall be extended to accommodate completion of all outstanding work orders. Additionally, the contract may be extended by a mutually agreeable contract amendment initiated at the sole discretion of the City. Each project will be assigned and authorized separately and no authorized Project cost will exceed Four Hundred Fifty Thousand Dollars and No Cents (\$450,000.00).

Contract No. 201629825 BDP - 30 August 17, 2016

17. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS:

Contractor consents to the use of electronic signatures by the City. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the City in the manner specified by the City. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

Contract Control Number:	
IN WITNESS WHEREOF, the partie Denver, Colorado as of	es have set their hands and affixed their seals at
SEAL	CITY AND COUNTY OF DENVER
ATTEST:	By
APPROVED AS TO FORM:	REGISTERED AND COUNTERSIGNED
By	By
	By

IN WITNESS WHEREOF, the parties have executed this agreement and affixed their seals at Denver, Colorado as of the day first above written.

Contract Control Number: 201629825

Vendor Name:

Keene Concrete, Inc.

: Chy Ct

Name: (please print)

Title: <u>President</u>

ATTEST: [if required]

By: Dail Jamell

Name: Gail Darne ||

Title: Sec Treas
(please print)



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

General Contract Conditions

INDEX

TITLE 1		
DEFINITIO	NS	1
101	CITY	1
102	CONTRACT	1
103	CONTRACT AMOUNT	1
104	CONTRACT DOCUMENTS	1
105	CONTRACT TIME	1
106	CONTRACTOR	2
107	CONTRACTOR PERSONNEL	2
108	DAYS	2
109	DEPUTY MANAGER	2
110	DESIGNER	2
111	FINAL COMPLETION	2
112	MANAGER	3
113	PRODUCT DATA	3
114	PROJECT	3
115	PROJECT MANAGER	3
116	SAMPLES	3
117	SHOP DRAWINGS	3
118	SUBCONTRACTOR	3
119	SUBSTANTIAL COMPLETION	3
120	SUPPLIER	4
121	WORK	4
TITLE 2		
	NISTRATIVE ORGANIZATIONS; LINE OF AUTHORITY	_
201	DEPARTMENT OF AVIATION	-
201	MANAGER OF AVIATION	4
203	DEPARTMENT OF PUBLIC WORKS	4
203	MANAGER OF PUBLIC WORKS	4
204	BUILDING INSPECTION	4
206	ZONING	4
207	DIVISION OF SMALL BUSINESS OPPORTUNITY	6
208	CITY AUDITOR	6
209	MANAGER OF FINANCE	ć
210	CITY ATTORNEY	6
211	OFFICE OF RISK MANAGEMENT	6
212	CITY'S CONTRACT ADMINISTRATION LINE OF AUTHORITY	6
213	CITY'S COMMUNICATION WITH THE CONTRACTOR	-

TITLE 3		
	TOR PERFORMANCE AND SERVICES	8
301	CONSIDERATION	
	(CONTRACTOR'S PROMISE OF PERFORMANCE)	
302	NOTICE TO PROCEED AND COMPLETION OF THE WORK	8
303	EXACT CONTRACTOR PERFORMANCE	8
304	SUBSTITUTED PERFORMANCE	8
305	WORK PERFORMED UNDER ADVERSE	
	WEATHER CONDITIONS	9
306	WORKING HOURS AND SCHEDULE	9
307	CONTRACTOR'S SUPERINTENDENT	
308	COMMUNICATIONS	
309	CONTRACTOR SUBMITTALS	10
207	AND OTHER WRITTEN COMMUNICATIONS TO THE CITY	10
310	COMPETENCE OF CONTRACTOR'S WORK FORCE	
311	NO EMPLOYMENT OF ILLEGAL ALIENS TO PERFORM WORK UNDER	
311	CONTRACT	
312	CONDUCT OF CONTRACTOR'S PERSONNEL	12
_		
313	SUGGESTIONS TO CONTRACTOR	
314	WORK FORCE	
315	CONSTRUCTION MACHINES AND STANDBY EQUIPMENT	
316	CUTTING AND PATCHING THE WORK	
317	PERMITS AND LICENSES	
318	CONSTRUCTION SURVEYS	14
319	PRESERVATION OF PERMANENT	
	LAND SURVEY CONTROL MARKERS	14
320	TRADEMARKS, COPYRIGHTS AND PATENTED DEVICES,	
	MATERIALS, AND PROCESSES	15
321	PROJECT SIGNS	15
322	PUBLICITY AND ADVERTISING	16
323	TAXES	16
324	DOCUMENTS AND SAMPLES AT THE SITE	
325	CLEANUP DURING CONSTRUCTION	
326	SANITARY FACILITIES	
327	POWER, LIGHTING, HEATING, VENTILATING,	10
321	AIR CONDITIONING AND WATER SERVICES	10
	AIR CONDITIONING AND WATER SERVICES	10
TITLE 4		
	DOCUMENTS (DRAWINGS AND TECHNICAL SPECIFICATIONS)	10
401	CONTRACT DOCUMENTS - REVIEW AND INTERPRETATIONOWNERSHIP OF CONTRACT DRAWINGS	19
402	· · · · · · · · · · · · · · · · · · ·	20
400	AND TECHNICAL SPECIFICATIONS	20
403	CONTRACT DRAWINGS AND TECHNICAL SPECIFICATIONS	
	ISSUED TO THE CONTRACTOR	
404	REQUESTS FOR INFORMATION OR CLARIFICATION	
405	SHOP DRAWINGS, PRODUCT DATA AND SAMPLES	
406	SUBSTITUTION OF MATERIALS AND EQUIPMENT	22
TITLE 5		
SUBCONTR	ACTS	24
501	SUBCONTRACTS	24
502	SUBCONTRACTOR ACCEPTANCE	24
		. = 1
TITLE 6		
	OMMENCEMENT AND COMPLETION	27
601	BEGINNING, PROGRESS AND TIME OF COMPLETION	
602	LIQUIDATED DAMAGES; ADMINISTRATIVE COSTS;	41
002	ACTUAL DAMAGES	27

	603	DELAY DAMAGES	28
	_		
TITLE		ION COODDINATION AND BATE OF BROODESS	20
COOPE		ION, COORDINATION AND RATE OF PROGRESS	29
	701 702	COORDINATION OF THE WORK	
		COORDINATION OF THE WORK	
	703 704	RATE OF PROGRESS	
	704	RATE OF FROORESS	30
TITLE	8		
PROTE	ECTIO	N OF PERSONS AND PROPERTY	32
	801	SAFETY OF PERSONS	32
	802	PROTECTIVE DEVICES AND SAFETY PRECAUTIONS	33
	803	PROTECTION OF PROPERTY AND WORK IN PROGRESS	33
	804	PROTECTION OF MUNICIPAL, PUBLIC SERVICE	
		OR PUBLIC UTILITY SYSTEMS	34
	805	PROTECTION OF STREET AND ROAD SYSTEM	35
	806	PROTECTION OF DRAINAGE WAYS	36
	807	PROTECTION OF THE ENVIRONMENT	
	808	HAZARDOUS AND EXPLOSIVE MATERIALS OR SUBSTANCES	37
	809	ARCHAEOLOGICAL AND HISTORICAL DISCOVERIES	37
TITLE			
COMP			38
	901	CONSIDERATION (CITY'S PROMISE TO PAY)	
	902	PAYMENT PROCEDURE	
	903	SCHEDULE OF VALUES IN LUMP SUM CONTRACTS	
	904	UNIT PRICE CONTRACTS	
	905	PROGRESS PERIOD.	
	906	APPLICATIONS FOR PAYMENT	40
	907	RELEASES AND CONTRACTORS CERTIFICATIONS OF PAYMENT	41
	000		
	908	RETAINAGEADDITIONAL WITHHOLDING OF PROGRESS PAYMENTS	
	909 910	FINAL ESTIMATE AND PAYMENT	
	910	ACCOUNTING OF COSTS AND AUDIT	
	911	ACCOUNTING OF COSTS AND AUDIT	43
TITLE	10		
WAGE			45
		PREVAILING WAGE ORDINANCE	45
		POSTING OF THE APPLICABLE WAGE RATES	
		RATE AND FREQUENCY OF WAGES PAID	
		REPORTING WAGES PAID	
	1005	FAILURE TO PAY PREVAILING WAGES	46
TITLE		NUMBER WORK CONTRACT PRICE OF CONTRACT TIME	47
CHANG		N THE WORK, CONTRACT PRICE OR CONTRACT TIME	
		CHANGE ORDER	
		CITY INITIATED CHANGE BEOLEST	
		CONTRACTOR CHANGE REQUESTADJUSTMENT TO CONTRACT AMOUNT	
		TIME EXTENSIONS	
	1103	TIVIE EATENSIONS	34
TITLE	12		
		OR CLAIMS FOR ADJUSTMENT AND DISPUTES	56
		NOTICE OF INTENT TO CLAIM	
		SUBMITTAL OF CLAIMS	
		WAIVER OF CLAIMS	58

TITLE 13		
DISPUTES		
1301	DISPUTES	59
TITLE 14		
SITE COND	TTIONS	60
1401	DIFFERING SITE CONDITIONS	60
1402	SITE INSPECTIONS AND INVESTIGATIONS	60
TITLE 15		
	NCE AND PAYMENT BONDS	
	SURETY BONDS	
1502	PERFORMANCE BOND	62
1503	PAYMENT BOND	62
TITLE 16		
	E AND INDEMNIFICATION	
1601	INSURANCE	63
1602	DEFENSE AND INDEMNIFICATION	63
TITLE 17		
	N AND DEFECTS	
1701	CONSTRUCTION INSPECTION BY THE CITY	64
1702	AUTHORITY OF INSPECTORS	64
1703	OBSERVABLE DEFECTS	64
1704	DEFECTS - UNCOVERING WORK	64
1705	LATENT DEFECTS	65
1706	REMOVAL OF DEFECTIVE MATERIALS AND WORK	65
TITLE 18		
WARRANTI	ES, GUARANTEES AND CORRECTIVE WORK	66
	CONTRACTOR'S WARRANTIES, GUARANTEES	
	AND CORRECTION OF WORK	66
1802	PERFORMANCE DURING WARRANTY PERIOD	67
TITLE 19		
	AL COMPLETION OF THE WORK	69
	CONTRACTOR'S NOTICE OF SUBSTANTIAL COMPLETION	
	INSPECTION AND PUNCH LIST	
	CERTIFICATE OF SUBSTANTIAL COMPLETION	
	RIGHT OF EARLY OCCUPANCY OR USE	
TITLE 20		
	IPLETION AND ACCEPTANCE OF THE WORK	71
	CLEAN-UP UPON COMPLETION	
	FINAL COMPLETION AND ACCEPTANCE OF THE WORK	
	FINAL SETTLEMENT	
TITLE 21		
	N OF WORK	74
	SUSPENSION OF WORK	
	SUSPENSION OF THE WORK FOR THE	
<u> </u>	CITY'S CONVENIENCE	74
2103	SUSPENSION BECAUSE OF ORDER OF CITY, STATE	
2100	OR FEDERAL COURT OR AGENCY	75
2104	SUSPENSION RESULTING FROM CONTRACTOR'S	
2101	FAILURE TO PERFORM	75

TITLE 22 CITY'S RIGHT TO TERMINATE THE CONTRACT 76 2201 TERMINATION OF CONTRACT FOR CAUSE 76 2202 TERMINATION OF CONTRACT 77 TITLE 23 MISCELLANEOUS PROVISIONS 80 2301 PARTIES TO THE CONTRACT 80 2302 FEDERAL AID PROVISIONS 80 2303 NO WAIVER OF RIGHTS 80 2304 NO THIRD PARTY BENEFICIARY 80 2305 GOVERNING LAW; VENUE 81 2306 ABBREVIATIONS 81 2307 STATUTE OF LIMITATIONS IN C.R.S. § 13-80-102(1)(h) 81

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION

SPECIAL CONTRACT CONDITIONS

SC-1 CONSTRUCTION SPECIFICATIONS

Except as amended herein or in the attached Technical Specifications, all Work performed under the terms of this Contract shall be governed by the applicable provisions of the following latest editions:

City and County of Denver:

Standard Specifications for Construction, GENERAL CONTRACT CONDITIONS, 2011 Edition.

Transportation Standards and Details for the Engineering Division

City and County of Denver Traffic Standard Drawings

Wastewater Management Division

- Standard Detail Drawings
- Public Works Wastewater Capital Projects Management Standard Construction Specifications

Colorado Department of Transportation:

Standard Specifications for Road and Bridge Construction (Sections 200 through 700 of the 2011 Edition)

Federal Highway Administration:

Manual on Uniform Traffic Control Devices for Streets & Highways (MUTCD)

Building & Fire Codes:

Building Code of the City and County of Denver (International Building Code 2009 Series, City and County of Denver Amendments 2011)

National Fire Protection Association Standards
(As referenced in the Building Code of the City and County of Denver)

The aforementioned City and County of Denver documents are available for review at the Capital Projects Management Office, 201 W. Colfax Ave., Dept. 506, (5th floor), Denver, CO 80202. The *Standard Specifications for Construction*, *GENERAL CONTRACT CONDITIONS* is available at: https://www.denvergov.org/content/denvergov/en/contract-administration/contractor-resources.html

Transportation Standards and Details for the Engineering Division and the Wastewater Management Division – Standard Detail Drawings, are available at http://www.denvergov.org.

The "Colorado Department of Transportation Standard Specifications for Road and Bridge Construction" is available for review on CDOT's website at http://www.coloradodot.info/ and can be purchased from the Colorado Department of Transportation.

The Manual on Uniform Traffic Control Devices for Streets & Highways is available for review at the Federal Highway Administration Website at: www.fhwa.dot.gov, The FHWA website also contains purchasing information.

Contract No. 201629825 BDP - 38 August 17, 2016

2016 OCCR

SC-2 DEPUTY MANAGER / CITY ENGINEER

General condition 109 DEPUTY MANAGER is hereby deleted in its entirety and replaced with the following: The "Deputy Manager" means the official who reports directly to the Manager and exercises supervisory responsibility in the City agency defined in Title 2 herein that is responsible for the Project. The Manager hereby designates the City Engineer as the Deputy Manager for purposes of this Contract. The City Engineer shall have responsibility for this Project and shall undertake all duties, responsibilities, rights and authority, including specific actions and decisions, delegated to the Deputy Manager under the various terms and conditions of this Contract.

SC-3 ENGINEERING DIVISION / CITY ENGINEER

The Engineering Division is a unit of the Department of Public Works and is supervised by the City Engineer, who is subordinate to the Manager of Public Works. This Division is responsible for the planning, design, construction, operation and maintenance of all of the City's transportation facilities and the planning, design and construction of all of the City's wastewater facilities, except for the City's Municipal Airport System. All other references to the Transportation Division or the Deputy Manager of Public Works for Transportation are deleted and replaced with references to the Engineering Division and City Engineer, respectively.

SC-4 WASTEWATER MANAGEMENT DIVISION

The Wastewater Management Division is a unit of the Department of Public Works and is supervised by the Deputy Manager of Public Works for Wastewater Management, who is subordinate to the Manager of Public Works. This Division is responsible for the operation and maintenance of the City's wastewater facilities.

SC-5 CITY DELEGATION OF AUTHORITY

With reference to General Contract Condition 109, DEPUTY MANAGER, and General Contract Condition 212, CITY'S CONTRACT ADMINISTRATION LINE OF AUTHORITY, the Manager hereby designates the City Engineer (the "Director") as the City official responsible for those certain actions and decisions designated as the responsibility of the Deputy Manager under the General Conditions and delegates to the Director the authority necessary to undertake those responsibilities under this Contract. The Director shall have supervisory responsibility over the Project Manager. Additionally, Contractor questions concerning the Plans and Technical Specifications shall be directed to:

Denver Department of Public Works

Project Manager
City Project Manager
Heidi Zarnow
City Project Manager
Heidi Zarnow
(303) 446-3419

SC-6 LIQUIDATED DAMAGES

The Contract Time, as that term is defined under the General Conditions, shall be separately set out in each Work Order. Should the Contractor fail to complete all Work within the Contract Time allocated under that Work Order, the Contractor shall become liable to the City and County of Denver for liquidated damages on that Project, and not as a penalty, at the rate of \$500.00 for each Day that the Contractor exceeds the time limits herein specified, all in accordance with provisions of General Contract Condition 602, LIQUIDATED DAMAGES; ADMINISTRATIVE COSTS; ACTUAL DAMAGES, unless a greater or lesser amount in provided for in the authorized Work Order.

Representative hourly rates for the City administrative costs described in General Contract Condition 602.2 shall be as follows for this Project:

Project Manager \$69 per hour
Project Engineer \$63 per hour
Inspector \$49 per hour
Surveying, if necessary \$100 per hour

SC-7 SUBCONTRACTS

In accordance with General Contract Condition 501, SUBCONTRACTS, no limit shall apply to that percentage of the Work which may be sublet providing that the subcontractors receive prior approval in accordance with General Contract Condition 502, SUBCONTRACTOR ACCEPTANCE.

SC-8 RESERVED

SC-9 PAYMENTS TO CONTRACTORS

The application for payment shall be submitted through Textura® Corporations Construction Management Website. Contractor recognizes and agrees that it shall be required to use the Textura Construction Payment Management System for this Project. Contractor further agrees that, to the fullest extent possible within the CPM System, the City shall be entitled to all non-Confidential records, reports, data and other information related to the project that are available to Contractor through the CPM System, including, but not limited to, information related to Contractor and subcontractor billings. To that end, Contractor agrees that it will activate any available settings within the CPM System that are necessary to grant the City access to such non-Confidential information related to the contract and the project. Applications for payment shall be based on the Contract Unit Prices or the approved Schedule of Values described in GC 903.1

In accordance with General Contract Condition 902, PAYMENT PROCEDURE, the party(ies) responsible for review of all Pay Applications shall be:

Agency/FirmNameTelephonePublic Works/Wastewater ManagementHeidi Zarnow303-446-3419

In accordance with General Contract Condition 906, APPLICATIONS FOR PAYMENT, each Application submitted shall include the following:

- 1. The estimate of Work completed shall be based on the approved schedule of values or unit prices, as applicable, and the percent of the Work complete.
- 2. Each Application for Payment shall include each and every independent subcontractor's payroll information including pay dates and pay amounts.
- 3. The Contractor shall also submit to the Auditor and other appropriate officials of the City in a timely fashion, information required by General Contract Condition 1004, REPORTING WAGES PAID.

In accordance with General Contract condition 907, RELEASES AND CONTRACTORS CERTIFICATION OF PAYMENT, Applications for Payment must be accompanied by completed Partial or Final Claim Release Form, as appropriate, from EACH subcontractor and supplier, <u>AND/OR</u> the Contractors' Certification of Payment Form. The forms, Final/Partial Release and Certificate of Payment (Subcontractor/Supplier) and the Contractor's Certification of Payment, both of which must be used are as follows.

Contract No. 201629825 BDP - 40 August 17, 2016

2016 OCCR

DEPARTMENT OF PUBLIC WORKS Engineering Division

FINAL/PARTIAL RELEASE AND CERTIFICATE OF PAYMENT (SUBCONTRACTOR/SUPPLIER)

		Date:	, 20
(PROJECT NO. and NA	AME)		
		Subcontract #:	
(NAME OF CONTRAC	CTOR)		
		Subcontract Value: \$	<u> </u>
(NAME OF CURCONTRACTO	D/CLIDDLIED)	Last Progress Payme	nt: \$
(NAME OF SUBCONTRACTO	R/SUPPLIER)	Total Paid to Data: \$	<u>.</u>
Check Applicable Box: [] MBE [] WBE		Date of Last Work:	<u>.</u>
[] MDE [] WDE		Dute of East Work.	<u> </u>
The Undersigned hereby certifies that all co- undersigned for any work, labor or services per referenced Project or used in connection with full.	erformed and for any	materials, supplies or equip	ment provided on the above
The Undersigned further certifies that each of incurred, on their behalf, costs, charges or referenced Project have been duly paid in full.	expenses in connecti		
In consideration of \$ representing the Total Paid to Date, also referenced above undersigned this day of County of Denver (the "City"), the above refer Contractor from all claims, liens, rights, liabil arising out of or in connection with the performance of the performance of the contractor from the connection with the performance of the contractor from the connection with the performance of the contractor from the connection with the performance of the contractor from the connection with the performance of the contractor from the contractor	e, and other good an, 20, the U enced City Project, th ities, demands and ol	d valuable consideration re- ndersigned hereby releases e City's premises and proper bligations, whether known of	ceived and accepted by the and discharges the City and the above referenced
As additional consideration for the payments a hold harmless the City, its officers, employee all costs, losses, damages, causes of action, ju with any claim or claims against the City or the Effort and which may be asserted by the Unda representatives, officers, agents, or employees	s, agents and assigns adgments under the so the Contractor which a dersigned or any of it	and the above-referenced (abcontract and expenses ariserise out of the Undersigned	Contractor from and agains sing out of or in connection 's performance of the Work
It is acknowledged that this release is for the b	penefit of and may be	relied upon by the City and	the referenced Contractor.
The foregoing shall not relieve the undersigne the subcontract may have been amended, w including, without limitation, warranties, guar	hich by their nature	survive completion of the	
STATE OF COLORADO) ss. CITY OF)			
		(Name of Subcontractor)	ı
Signed and sworn before me this day of, 20	By:		
·	-		
Notary Public/Commissioner of Oaths My Commission Expires	Title:		

		City and County of Denver					Office of Economic Development Compliance Unit			
		City and county of Benver					201 W. Colfax Ave., Dept. 907			
		Divi	sion (of Small Business	Oppor	tunity	Denver, CO 80202			
DENVER'								Phone: 72	20.913.1999	
THE MILE BIGH CITY		Contractor's/Consultant's Certification of Payment (CCP)					Fax: 72	20.913.1803		
Prime Contractor or Consultant:			Phone:			Project Manager:				
Pay Application #:		Pay Period:				Amount Requested: \$				
Project #:		Project Name:								
Current Completion Date:		Percent Complete:				Prepared By:				
(I) - Original Contract Amount: \$					(II) - Curre	ent Contract Amount: \$				
		٨	В	С	D	E	F	G	Н	
Prime/Subcontractor/Supplier Name	M/W/S/ DBE/ NON	Original Contract Amount	% Bld (A/I)	Current Contract Amount Including Amendments	% Revised (C/II)	Requested Amount of this Pay Application	Amount Paid on the Previous Pay Application #	Net Paid To Date	Paid % Achieved (G/II)	
Totals										
The undersigned certifies that the info and listed herein. Please use an addi				rue, accurate and that the	payment	ts shown have been made	to all subcontractors a	nd suppliers used on th	nic project	
Prepared By (\$ignature): Date:					Date:					
			Page	of						
OMP-FRM-027 rev 022311										



Instructions for Completing the Contractor/Consultant Certification of Payment Form

Office of Economic Development Division of Small Business Opportunity Compliance Unit

201 W. Colfax Ave., Dept. 907 Denver, CO 80202 Phone: 720-913-1999 Fax: 720-913-1803 dsbo@denvergov.org

Note: The attached Contractor/Consultant Certification of Payment form must be completed by the Contractor/
Subconsultant and all subcontractors/subconsultant or suppliers used on the project at any tier and submitted with each
pay application. The Contractor/Consultant is responsible for the accuracy of all information provided and is required to
have each subcontractor/subconsultant or supplier fill out the appropriate forms. Please be sure to complete all
information requested at the top of the form, including the name of the person who prepared this form.

If you reproduce this form, you must continue to list each of the originally listed firms, as well as any additional firms used during the performance period of the contract work or task order.

If you have any questions, please call the Compliance Unit of DSBO at 720.913.1999.

Instructions for Completing the Contractor/Consultant Certification of Payment Form, per Column

<u>Contractor/Subcontractor or Subconsultant/Supplier Name</u>: In the space provided, list all subcontractors/ subconsultants and suppliers used on the project. For all M/W/S/E/DBEs use the exact name listed in the DSBO Directory.

M/W/S/E/DBE/NON: For each name listed, indicate whether the entity is a certified M/W/S/E/DBE.

Column A: Provide the contract amount, as listed at bid time, for the Contractor/Consultant and each

subcontractor/subconsultant or supplier.

Column B: Provide the percentage portion of each listed subcontractor/subconsultant or supplier contract amount

(Column A) compared to the total original contract amount in (I).

Column C: Provide the original contract amount (Column A) for each subcontractor/subconsultant or supplier plus any

awarded alternate and/or change order amounts applicable. If an alternate/change order does not apply

to the listed firm, re-enter the original contract amount (Column A).

Column D: Provide the percent portion of each listed subcontractor/subconsultant or supplier contract amount

(Column C) compare to the current total contract amount in (II).

Column E: Provide the amount requested for work performed or materials supplied by each listed

subcontractor/subconsultant or supplier for this pay application. The sum of the items in this column

should equal the estimated amount requested for this pay application.

Column F: Provide the amount paid to each subcontractor/subconsultant or supplier on the previous pay

application. Enter the previous pay application number in the column heading. The sum of the items listed in this column should equal the warrant amount paid to the Contractor/Consultant on the previous pay application. The amounts paid to the subcontractor/subcontractor or suppliers should be the actual

amount of each check issued.

Column G: Provide the net paid to date for the Contractor/Subconsultant and each listed subcontractor/subconsultant

or supplier.

Column H: Provide the percent portion of the net paid to date (Column G) for the Contractor/Subconsultant and each

listed subcontractor/subconsultant or supplier of the current total contract amount in (II).

COMP-REF-031

Rev 03.18.15

SC-10 CONTRACT FORMS

In accordance with the terms and conditions of the Contract Documents, the City requires the use of certain form documents in complying with or satisfying various obligations, notifications and conditions in contracting with the City or performing Work hereunder. These form documents are referenced by title throughout the Contract Documents for mandatory use as directed. The following are the forms that shall be detached and utilized in accordance with the Contract Documents:

- 1. Performance and Payment Bond
- 2. Performance and Payment Bond Surety Authorization Letter

The following are forms that will be issued by the City during construction:

- 1. Notice to Apparent Low Bidder (Sample)
- 2. Notice To Proceed (Sample)
- 3. Certificate of Contract Release (Sample)

SC-11 CONSTRUCTION INSPECTION BY THE CITY

General Condition 1701, CONSTRUCTION INSPECTION BY THE CITY, is modified as follows:

- 1701 Persons who are employees of the City or who are under contract to the City or the City as lessee will be assigned to inspect and test the Work. These persons may perform any tests and observe the Work to determine whether or not designs, materials used, manufacturing and construction processes and methods applied, and equipment installed satisfy the requirements of the drawings and specifications, accepted Shop Drawings, Product Data and Samples, and the General Contractor's warranties and guarantees. The General Contractor shall permit these inspectors unlimited access to the Work and provide means of safe access to the Work, which cost shall be included as a Cost of the Work without any increase to the Guaranteed Maximum Price. In addition, General Contractor shall provide whatever access and means of access are needed to off-site facilities used to store or manufacture materials and equipment to be incorporated into the Work and shall respond to any other reasonable request to further the inspector's ability to observe or complete any tests. Such inspections shall not relieve the General Contractor of any of its quality control responsibilities or any other obligations under the Contract. All inspections and all tests conducted by the City are for the convenience and benefit of the City. These inspections and tests do not constitute acceptance of the materials or Work tested or inspected, and the City may reject or accept any Work or materials at any time prior to the inspections pursuant to G.C. 2002, whether or not previous inspections or tests were conducted by the inspector or a City representative.
- .2 Building Inspection will perform building code compliance inspections for structures designed for human occupancy. It is the General Contractor's responsibility to schedule and obtain these inspections. If a code compliance inspection results in identification of a condition which will be at variance to the Contract Documents, the General Contractor shall immediately notify the Project Manager and confirm such notification with formal correspondence no later than forty-eight (48) hours after the occurrence.
- .3 When any unit of government or political subdivision, utility or Railroad Corporation is to pay a portion of the cost of the Work, its respective representatives shall have the right to inspect the Work. This inspection shall not make any unit of government or political subdivision, utility or Railroad Corporation a party to the Contract, and shall not interfere with the rights of either party.

SC-12 DISPOSAL OF NON-HAZARDOUS WASTE AT DADS

In accordance with the Landfill Agreement made between the City and Waste Management of Colorado, Inc., bidders will be required to haul dedicated loads (non-hazardous entire loads of waste) to the Denver-Arapahoe Disposal Site ("DADS") for disposal. DADS is located at Highway 30 and Hampden Avenue in Arapahoe County, Colorado. The City will pay all fees associated with such disposal but the bidder shall be responsible for the costs of transporting the loads. Non-hazardous waste is defined as those substances and materials not defined or classified as hazardous by the Colorado Hazardous Waste Commission pursuant to C.R.S. §25-15-101(6), as amended from time to time, and includes construction debris, soil and asbestos. Bidders shall not use Gun Club Road between I-70 and Mississippi Avenue as a means of access to DADS.

SC-13 PROHIBITION ON USE OF CCA-TREATED WOOD PRODUCTS

The use of any wood products pressure-treated with chromated copper arsenate (CCA) is prohibited. Examples of CCA-treated wood products include wood used in play structures, decks, picnic tables, landscaping timbers, fencing, patios, walkways and boardwalks.

SC-14 WAIVER OF: PART 8 OF ARTICLE 20 OF TITLE 13, COLORADO REVISED STATUTES

The Contractor specifically waives all provisions of Part 8 of Article 20 of Title 13, Colorado Revised Statutes regarding defects in the Work under this Construction Contract.

SC-15 ATTORNEY'S FEES

Colorado Revised Statute 38-26-107 requires that in the event any person or company files a verified statement of amounts due and unpaid in connection with a claim for labor and materials supplied on this project, the City shall withhold from payments to the Contractor sufficient funds to insure the payment of any such claims. Should the City and County of Denver be made a party to any lawsuit to enforce such unpaid claims or any lawsuit arising out of or relating to such withheld funds, the Contractor agrees to pay to the City its costs and a reasonable attorney's fee which cost shall be included as a Cost of the Work.

Because the City Attorney does not bill City staff for legal services on an hourly basis, the Contractor agrees a reasonable fee shall be computed at the rate of one hundred dollars per hour of City Attorney time.

SC-16 INSURANCE

General Condition 1601 is hereby deleted in its entirety and replaced with the following:

- **General Conditions:** Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period, and for eight (8) years after termination of the Agreement. The required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-"VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies be canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, contractor shall provide written notice of cancellation, non-renewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City's contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.
- Proof of Insurance: Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor may not commence services or work relating to the Agreement prior to placement of coverage. Contractor certifies that the certificate of insurance attached as part of the Contract Documents, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City's contract number be referenced on the Certificate. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.
- (3) <u>Additional Insureds:</u> For Commercial General Liability and Auto Liability, Contractor and subcontractor's insurer(s) shall name the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured.
- **(4)** <u>Waiver of Subrogation:</u> For all coverages, Contractor's insurer shall waive subrogation rights against the City.
- (5) <u>Subcontractors and Subconsultants:</u> All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.
- (6) Workers' Compensation/Employer's Liability Insurance: Contractor shall maintain the coverage as required by statute for each work location and shall maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury claim,

disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.

- (7) <u>Commercial General Liability:</u> Contractor shall maintain a Commercial General Liability insurance policy with limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim, \$2,000,000 products and completed operations aggregate, and \$2,000,000 policy aggregate.
- (8) <u>Business Automobile Liability:</u> Contractor shall maintain Business Automobile Liability with limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement

(9) Additional Provisions:

- (a) For Commercial General Liability, the policies must provide the following:
 - (i) That this Agreement is an Insured Contract under the policy;
 - (ii) Defense costs in excess of policy limits;
 - (iii) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and
 - (iv) A provision that coverage is primary and non-contributory with other coverage or selfinsurance maintained by the City.
- (b) For claims-made coverage:
 - (i) The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier
- (c) Contractor shall advise the City in the event any general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits and furnish a new certificate of insurance showing such coverage is in force.

SC-17 GREENPRINT DENVER

In accordance with the City and County of Denver Executive Order 123: Greenprint Denver Office and Sustainability Policy, as amended, Contractor shall adhere to sections of Executive Order 123 pertinent to the construction of the built environment. This includes but is not limited to: all construction and renovation of buildings shall follow instructions and memorandum for high performance buildings; horizontal projects shall include the use of fly ash concrete and recycled aggregate where possible; and, all projects shall recycle construction and demolition waste, and install materials that contain recycled content whenever possible using the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) as guidance. Non-hazardous solid waste that is eligible for reuse or recycling is not subject to the DADS disposal requirement defined in SC-12.

A completed "Greenprint Denver Closeout Form for Construction Projects" shall be delivered to the Project Manager as a submittal requirement of Final Acceptance.

This form can be found at:

http://www.denvergov.org/constructioncontracts/Home/ContractorResources/tabid/443154/Default.aspx

ON-CALL SPECIFIC SPECIAL CONDITIONS:

SC-18 PERFORMANCE OF WORK, AS DIRECTED BY THE CITY

Titles 1 and 3 of the General Contract Conditions shall generally apply to this Contract as supplemented by the following:

As described elsewhere in the Contract documents, this Contract contemplates performance of services Work by the Contractor on a variety of, as yet to be identified, City construction and demolition Projects on an "as needed" or "on call" bases. Under the terms of this Contract, the City, in its sole discretion, will determine the extent and nature and also specific terms and conditions of each Work scope it requires the Contractor to. Nothing contained herein, however, shall be construed by the Contractor as promise or guarantee of any minimum amount of Work or compensation hereunder.

In the event the City elects to direct the Contractor to perform hereunder, the process by which both a specific Work scope and specific performance terms or conditions will be established prior to commencement of such work shall be as follows:

- 1. The City will identify a Work scope for the Contractor to perform and will issue to the Contractor a Proposal Pricing Request (in the format provided herein) containing, at a minimum, a detailed Work description, drawings, plans, specifications, the specific terms and conditions under which such Work must be performed and other pertinent materials.
- 2. In accordance with the terms and conditions of this Contract, the Contractor will review each Request and provide a price (in the Proposal Request Pricing Worksheet format provided herein) and a project schedule responsive to each Proposal Pricing Request. In preparing its price, the Contractor shall include all bid unit prices for any Work that corresponds with any unit price description. Work elements that are not covered by any unit prices shall be priced using the format and cost categories for labor, material and equipment specified herein.
- 3. Upon receipt of the completed and fully executed Proposal Request Pricing Worksheet from the Contractor, negotiation of non-unit price items and agreement on the total price, schedule and any other specific requirements for the requested scope of Work, a Work Order (in the format provided for herein) for the Work will be issued by the City authorizing the Work under the terms and conditions set forth Work Order and attachments and encumbering funds for the performance of such Work.
- 4. Upon receipt of the fully executed Work Order and a Work Order Notice to Proceed (in the format provided for herein), the Contractor shall have ten (10) consecutive calendar days to commence the Work.
- 5. During the course of performance of the Work authorized by each Work Order, the Contractor shall submit regular pay applications, in accordance with provisions of these Special Contract Conditions. The City shall issue payment for all satisfactorily completed Work authorized by Work Order, in accordance with the terms and conditions of the Contract Documents.
- 6. If additions, deletions or other modifications to the authorized Work scope or other terms or conditions are required or desired in the sole discretion of the City under a particular Work Order, a Work Order Change will be issued based on pricing prepared in the same manner as a Proposal Pricing Request and under the terms and conditions for issuance of a Change Order under the General Contract Conditions. The Work Order Change will identify any increase or decrease in the cost, change in the period of performance and any other modifications to the performance requirements for that particular Work Order.
- 7. Upon satisfactory completion, notice of Substantial Completion and Final Completion of the Work authorized and performed under each Work Order, Work Order Close-Out will occur, a Final Receipt for that Work Order will be issued, and final payment for the Work Order will be made.
- 8. Under this Contract, more than one Work Order may be issued and performed by the Contractor at the same time.

Given that under this Contract, the Contractor is committed to make available to the City and, as from time to time directed by the City under the process described, furnish all labor, tools, supplies, equipment, materials and everything necessary for and required to do, perform and complete all of the Work described in any Work Order issued in accordance with the terms and conditions set forth herein, certain provisions, terms and conditions included in the General Contract Conditions either will not apply or will apply on a Work Order by Work Order basis rather than an overall Contract basis.

As such, the term Work, as used in the Contract Documents shall mean the Contractor's equipment and physical plant, labor, management, administration, supervision, materials and supplies, and all other things needed to assemble, manufacture, complete or perform the various components into finished improvements pursuant to any Work Order issued pursuant to the Contract Documents. Unless otherwise specified or clearly inapplicable from the context of a given provision, each and every General Contract Condition contained or referenced in the Contract Documents shall apply to and control all Work performed hereunder.

SC-19 PERFORMANCE AND PAYMENT BOND

Title 15 of the General Contract Conditions shall generally apply to this Contract as supplemented by the following:

A Performance and Payment Bond, in the form included in these Contract Documents, shall be furnished covering all Work performed hereunder. An initial bond in the amount of <u>Five Hundred Thousand Dollars and No Cents (\$500,000.00)</u> shall be provided at the time of Contract execution. In the event the dollar amount of Work to be performed exceeds this amount on any given Work Order, the Contractor shall provide properly executed bond Change Riders, also in the form included in these Contract Documents immediately after this provision, in the amount(s) of any additional Work Orders issued hereunder.

SC-20 PROPOSAL REQUEST PRICING

Title 9 of the General Contract Conditions shall generally apply to this Contract as supplemented by the following:

- A. In order to initiate Work hereunder, the City must prepare and issue a Proposal Pricing Request, in the form included in these Contract Documents. For each Proposal Pricing Request submitted to the Contractor for pricing, the Contractor shall price the request and submit a completed Proposal Request Pricing Worksheet, in the form included in these Contract Documents immediately after this provision and complying with the terms and conditions set forth on the form, to the Project Manager, with all supporting materials, within fourteen (14) consecutive calendar days of the date of issuance of such Proposal Pricing Request. The Contractor shall price each request and prepare the appropriate documentation in accordance with the requirements stated herein.
- B. Unit Prices In pricing a Request, the bid unit prices shall be fully compensation for the Work identified in the unit price description and corresponding specification section, as well as, all costs associated with field and office supervision required, and general and home office markups, overhead and any other direct or indirect costs of the Work not specifically excluded. The only costs that may be excluded form a bid unit prices must be applied to all Work that corresponds to the unit price description in the Bid Form:
- C. Work Not Covered by Bid Unit Prices In pricing the remaining Work in a Request, the Contractor shall provide itemized and sufficient supporting data, including calculations, measurements, cost records, production rates, equipment types and capacity, labor costs by craft and other information which the City may reasonably require in order for the City to evaluate the Contractor's pricing for Work not covered by unit prices for any Proposal Request and Work Order Change pricing.

Direct labor costs shall include only the cost associated with the workers who actually perform the Work (including fringe benefits and the Contractor's actual cost for Worker's Compensation, Social Security and Payroll taxes). The costs of supervision, management and field or office overhead costs shall not be included or calculated as direct labor cost. For shop or plant components of the Work, the direct labor cost shall include only those workers who work directly on the item being manufactured or the actual operators of the equipment being used to handle the items being manufactured.

Material costs shall include the direct costs of materials, supplies and equipment incorporated in or consumed by the Work. The costs shall be based on buying the material, supplies and equipment other than small tools, or equipment rental rates without markup or operator, as listed in the appropriate rental rate book currently in use by the Colorado Department of Transportation.

Equipment costs shall be the actual cost to the Contractor of owned and/or rented equipment other than small tools, or equipment rental rates without markup or operator, as listed in the appropriate rental rate book currently in use by the Colorado Department of Transportation.

D. **Markup for Overhead and Profit** – The Contractor, subcontractor or sub-subcontractor who actually performs the Work shall be entitled to a markup of 15% on the actual costs identified in item B, only, above. Bonds, insurance and sales tax shall be added **after** markup.

A supervising subcontractor, if any, shall not be entitled to a markup on the actual price charged to the subcontractor by the sub-subcontractor.

The Contractor shall be entitled to a 7% markup on the actual price for the subcontractor's work.

These percentage markups shall be considered to include field and office supervisors and assistants including all clerical and general office help; review and coordination; estimating; expediting; watchmen; small tools; incidental job burdens including office equipment and supplies, temporary toilets, telephone, fax and conformance to OSHA requirements; and general home office expenses. These percentage mark ups shall be applied one time only for each Proposal Request and shall not pyramid in any way.

- E. Bonds, Insurance, Permits and Taxes shall be reimbursed at the actual cost associated with all required bond riders, insurance, permits, licenses, and sales, use or other taxes related to the Work.
- F. If it is later determined that the pricing was not correct due to inaccurate or incomplete pricing data by the Contractor or any subcontractor or supplier, the price shall be reduced accordingly and the Work Order cost modified by a Work Order Change.

SC-21 WORK ORDERS

With respect to Each Work Order Issued hereunder, the General Contract Conditions shall generally apply to this Contract as supplemented by the following:

Upon review of any Proposal Request Pricing Worksheet completed by the Contractor pursuant to a City Proposal Request, the City may, at its sole discretion, reject the pricing submittal or may direct that the Work described in the Proposal Request and priced by the Contractor be completed by issuance of a Work Order, in the form included in these Contract Documents to the Contractor. The City reserves the right to issue such a Work Order, at the price and under the terms of the Contractor's pricing submittal, at any time before the expiration of 120 consecutive calendar days from the date the pricing submittal was received by the City. If no Work Order is issued and the pricing submittal is not rejected within this period, the Contractor's pricing submittal shall be deemed rejected by the City.

SC-22 WORK ORDER NOTICE TO PROCEED

GC-302 of the General Contract Conditions shall generally apply to this Contract as supplemented by the following:

A Work Order Notice to Proceed, in the form included in these Contract Documents for that particular Work Order, will be issued by the Director at such time as the Work Order is executed by the Contractor and all designated City officials, and the Contractor has submitted a Payment and Performance bond or Bond Change Rider for the Work described in the Proposal Request, in accordance with SC-20, PERFORMANCE AND PAYMENT BOND, and which are satisfactory to the City Attorney. Until a Work Order Notice to Proceed is issued, the City shall have no obligation to compensate the Contractor for Work performed.

The Contractor shall commence the Work in accordance with that particular Work Order within ten (10) consecutive calendar days of the date of the Work Order Notice to Proceed, and the Contractor shall prosecute the Work to be accomplished under the Work Order at such time and place as the Work Order directs and shall fully complete in every detail all specified Work in accordance with the terms and conditions of the Work Order and the provisions of these General Contract Conditions and Special Contract Conditions, within the period of performance specified in the Work Order, plus such extensions of time as may be granted by the Manager in accordance with the provisions of this Contract.

SC-23 PROGRESS PAYMENTS FOR WORK ORDERS

Title 9 of the General Contract Conditions shall apply to this Contract as supplemented by the following:

With respect to any Work Order issued hereunder, the terms and conditions of Title 9 shall apply to each Work Order as if such Work Order were a separate Contract. In addition, progress payments for the performance of any Work shall be based on completed Work estimates supported wither by lien releases or properly completed Contractor's Certifications of Payment, in the format included in these Contract Documents, and subject to the following requirements:

- 1. Each estimate of Work completed for each Work Order shall contain a list of subcontractor and material invoices for all subcontractors and suppliers and shall be based on the approved schedule of values certified by the Project Engineer/Manager or the Consulting Architect or Engineer, as appropriate. Each submittal estimate must specify the percent of the Work complete.
- 2. Each estimate of Work completed for each Work Order shall specifically identify those M/WBE Subcontractors or Suppliers that the Contractor is utilizing on the Project pursuant to the requirements of Article III, Division 1 of Chapter 28, of the D.R.M.C.
- 3. Each estimate of Work for each Work Order completed shall be accompanied by either duplicate sets of verified Contractor's Certifications of Payment, in the form included in these Contract Documents, or by verified Partial Release of Contractor forms from each subcontractor and supplier, also in the form included in these Contract Documents. Each estimate of Work for each Work Order completed shall also be accompanied by:
 - a. A written schedule of values, which set out the quantities and costs for the Project; and
 - b. The Project Engineer/Manager's, or as applicable, Consulting Architect/
 Engineer's estimated statement of the percentage of Work completed for each line item of cost for which the Contractor seeks payment. The Contractor shall also submit to the Auditor and other appropriate officials of the City, in a timely fashion, all information required by the General Contract Conditions.
- 4. Each estimate of the percentage of Work completed shall constitute a representation by the Contractor to the City that the Work has progressed to the point indicated; that the quality of the Work covered by the estimate is in accordance with the Contract Documents; that each obligation covered by the estimate (except as otherwise noted) and the payments required will be used to discharge such obligation unless previously discharged; and that the Contractor is entitled to payment in the amount requested. The Project Engineer/Manager or the Consulting Architect/Engineer, as appropriate, with the assistance of input from the Project Manager, in the event that such has been retained, will also verify and certify the estimate prior to acceptance by the City.

- 5. By submitting an application for payment, the Contractor further warrants that:
 - a. Title to Work covered by each submitted estimate of Work completed will pass to the City by incorporation into the completed Work;
 - b. Work covered by previous estimates of Work completed is free and clear of liens, claims, security interests or encumbrances, hereinafter referred to as "liens," except for any interest created by retainage; and
 - c. No Work covered by any estimate of Work completed will have been acquired by the Contractor, or any other person or entity performing Work at the Work site or furnishing materials or equipment for the Project and that no Work covered by any estimate is subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the contractor or such other person or entity.
- 6. Approval of an estimate of Work completed or actual payment by the City shall not foreclose the right of the City to examine the books and records of the Contractor to determine the correctness and accuracy of any estimate item.
- 7. The terms and conditions regarding retainage contained in General Contract Condition 908 shall apply separately to payments made under each and every Work Order issued hereunder. Moreover, applications for a reduction in retainage must be accompanied by Partial Release of Liens form from each subcontractor or suppler, in the form included in these Contract Documents immediately after this provision via the Textura® system.
- 8. Pursuant to General Contract Condition 907, the final estimate for payment shall also be accompanied by Final Release of Liens form from each subcontractor and supplier, in the form included in these Contract Documents.
- 9. Receipt of Contractor's Certification of Payment or Partial Release of Liens form by the City hereunder shall not act to impair the City's obligations imposed by C.R.S. 38-26-107 or successor statue.
- 10. If the Contractor disputes a subcontractor or suppler entitled to a portion of the previous month's payment, the Contractor need not submit a Contractor's Certificate of Payment or Partial Release of Liens form from such subcontractor and/or suppler. However, in lieu of such submittal, the Contractor shall submit to the City a copy of a written communication form the Contractor to such subcontractor and/or supplier explaining the Contractor's determination not to render payment to such subcontractor or supplier, together with proof of service of such written communication upon such subcontractor or supplier.

SC-24 WORK ORDER CHANGES

Title 11 of the General Contract Conditions shall apply to this Contract, on a Work Order by Work Order basis, as supplemented by the following:

In accordance with all terms and conditions provided for standard change orders under Title 11 of the General Contract Conditions, the City may issue Work Order Changes providing for deletions, additions and modifications to the Work under a duly issued Work Order. Work Order Changes must be issued on the Work Order Change Form, in the form included in these Contract Documents.

SC-25 WORK ORDER CLOSE-OUT

Titles 19 and 20 of the General Contract Conditions shall apply to this Contract, on a Work Order by Work Order basis, as supplemented by the following:

Upon Substantial Completion of all Work performed under each Work Order in accordance with the Contract Documents, final close-out for that Work Order shall be made in accordance with the terms and conditions of Title 20 of the General Contract Conditions.

SC-26 CONTRACT CLOSE-OUT

Upon written notification from the City to the Contractor that no further Work Orders will be issued hereunder and the completion of final close-out for any previously issued Work Orders in accordance with SC-19 WORK ORDER CLOSE-OUT, the Contract shall proceed to final close-out. The Contractor agrees to comply with all applicable Contract close-out procedures and requirements set forth in Section 01010 of the Contract Specifications. In addition, the Contractor agrees to execute and deliver to the City a Final Receipt in the forms previously referenced and to provide to the City a consent of surety covering all Work performed hereunder. Until such time as all Contract close-out procedures are completed and each contract close-out requirement is satisfied, the City shall retain from amounts due the Contractor, in addition to any other withholdings provided for hereunder, a sum not greater than one percent (1%) of the maximum contract amount specified herein.

OTHER ON-CALL CONSTRUCTION SERVICES CONTRACTS

In the event the City elects to bid other Construction Services Contracts during the performance period specified herein, the parties specifically agree that the Contractor will not submit a bid or enter into a contract for such Contracts until such time as the City issues to the Contractor written notification that not further Work Orders will be issued hereunder, as provided for in SC-19 CONTRACT CLOSE-OUT.

SC-28 ON-CALL SPECIFIC CONTRACT FORMS

The following listed and attached "Contract Forms" shall be detached and utilized in accordance with the Contract Documents. (forms located at the end of this section, behind title sheet labeled "SC-28 On-Call Specific Contract Forms")

SC-29 EMERGENCY REPAIRS

All other provisions of this Agreement, notwithstanding, the Contractor acknowledges and accepts that the City may require that the Contractor perform emergency bridge repair services immediately after notification from the City. Because of the urgent nature of such emergency repair services, the Contractor agrees to mobilize adequate Emergency Repair Directives within four (4) hours of receiving notice, either verbal or written, from the Project Manager or other authorized City representative. In effecting such emergency repairs, the Contractor shall track and document all costs incurred and report such costs to the City for City review and verification.

The urgent nature of such services requires that the Contractor initiate, with adequate forces and equipment at the site, all Emergency Repair Directives. Should the Contractor fail to commence work within four (4) hours of notice, the Contractor shall become liable to the City and County of Denver for liquidated damages, and not as a penalty, at the rate of **Fifty Dollars** (\$50.00) for each consecutive hour after such notice that the Contractor fails to commence repairs or other Work in accordance with such directive. Work Orders for the emergency services performed will be prepared in an "after the fact" manner in accordance with SC-19 and shall be based on cost tracking and documentation prepared and provided by the Contractor. All work performed for immediate mitigation of the problem on the emergency basis shall be paid at the contract bid unit price plus twenty-five percent (25%). Any subsequent work performed related to the Emergency Work Order, but not under an Emergency Repair Directive shall be paid in accordance with SC-24 PROGRESS PAYMENTS FOR WORK ORDERS and all other applicable provisions.

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned Keene Concrete, Inc., 30263 WCR 8, Keenesburg, Colorado 80643, a corporation organized and existing under and by virtue of the laws of the State of Colorado, hereafter referred to as the "Contractor", and The Ohio Casualty Insurance Company, 62 Maple Avenue, Keen, NH 03431, a corporation organized and existing under and by virtue of the laws of the State of New Hampshire, and authorized to transact business in the State of Colorado, as Surety, are held and firmly bound unto the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado, hereinafter referred to as the "City", in the penal sum of Five Hundred Thousand Dollars (\$500,000.00), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves and our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents;

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT:

WHEREAS, the above bounden Contractor has entered into a written contract with the aforesaid City for furnishing all labor and tools, supplies, equipment, superintendence, materials and everything necessary for and required to do, perform and complete the construction of CONTRACT NO. 201629825 2016 ON-CALL CONCRETE REPAIR, Denver, Colorado, and has bound itself to complete the project within the time or times specified or pay liquidated damages, all as designated, defined and described in the said Contract and Conditions thereof, and in accordance with the Plans and Technical Specifications therefore, a copy of said Contract being made a part hereof;

NOW, THEREFORE, if the said Contractor shall and will, in all particulars well and truly and faithfully observe, perform and abide by each and every Covenant, Condition and part of said Contract, and the Conditions, Technical Specifications, Plans, and other Contract Documents thereto attached, or by reference made a part thereof and any alterations in and additions thereto, according to the true intent and meaning in such case, then this obligation shall be and become null and void; otherwise, it shall remain in full force and effect;

PROVIDED FURTHER, that if the said Contractor shall satisfy all claims and demands incurred by the Contractor in the performance of said Contract, and shall fully indemnify and save harmless the City from all damages, claims, demands, expense and charge of every kind (including claims of patent infringement) arising from any act, omission, or neglect of said Contractor, its agents, or employees with relation to said work; and shall fully reimburse and repay to the City all costs, damages, and expenses which it may incur in making good any default based upon the failure of the Contractor to fulfill its obligation to furnish maintenance, repairs or replacements for the full guarantee period provided in the Contract Documents, then this obligation shall be null and void; otherwise it shall remain in full force and effect;

PROVIDED FURTHER, that if said Contractor shall at all times promptly make payments of all amounts lawfully due to all persons supplying or furnishing it or its subcontractors with labor and materials, rental machinery, tools or equipment used or performed in the prosecution of work provided for in the above Contract and that if the Contractor will indemnify and save harmless the City for the extent of any and all payments in connection with the carrying out of such Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect;

PROVIDED FURTHER, that if the said Contractor fails to duly pay for any labor, materials, team hire, sustenance, provisions, provender, gasoline, lubricating oils, fuel oils, grease, coal, or any other supplies or materials used or consumed by said Contractor or its subcontractors in performance of the work contracted to be done, or fails to pay any person who supplies rental machinery, tools or equipment, all amounts due as the result of the use of such machinery, tools or equipment in the prosecution of the work, the Surety will pay the same in any amount not exceeding the amount of this obligation, together with interest as provided by law;

PROVIDED FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to contracts with others in connection with this project, or the work to be performed thereunder, or the Technical Specifications and Plans accompanying the same, shall in any way affect its obligation on this bond and it does hereby waive notice of any change, extension of time, alteration or addition to the terms of the Contract, or contracts, or to the work, or to the Technical Specifications and Plans.

IN WITNESS WHEREOF, said Contractor and said Surety have executed these presents as of this

Attest:

Secretary Gail Darnell

Keene Concrete, Inc., 30263 WCR 8, Keenesburg, CO 80643

Contractor

By:
President Chris C. Bailey

The Ohio Casualty Insurance Company, 62 Maple Ave., Keene, NH 03431

Surety

By:
Attorney-In-Fact Thomas W. Patton

(Accompany this bond with Attorney-in-Fact's authority from the Surety to execute bond, certified to include the date of the bond).

APPROVED AS TO FORM: Attorney for the City and County of Denver

Assistant City Attorney

APPROVED FOR THE CITY AND COUNTY OF DENVER

By:

By:

MANAGER OF PUBLIC WORKS

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7238424

American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute Annette M. Campbell; Carolyn Evans; Janine Darling; Judith Miller; Mary E. Ficken; Thomas W. Patton; Tristin Rosen; Virginia Shaw

all of the city of GREENWOOD VILLAGE, state of CO each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed _ day of _ January 2016 thereto this 13th

1906 1912

STATE OF PENNSYLVANIA COUNTY OF MONTGOMERY

rate, interest rate or residual value guarantees.

mortgage, note, loan, letter of credit,

Not valid for

currency

American Fire and Casualty Company The Ohio Casualty Insurance Company Liberty Mutual Insurance Company West American Insurance Company

On this 13th day of January 2016, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written. COMMONWEALTH OF PENNSYLVANIA

PAST

Notarial Seal Teresa Pastella, Notary Public Plymouth Twp., Montgomery County My Commission Expires March 28, 2017

Member, Pennsylvania Association of Notaries

Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this

1991



Denver Public Works

Engineering Division
Capital Projects Management – Dept. 506
Right-of-Way Services – Dept 507
Traffic Engineering Services – Dept 508
Policy and Planning – Dept. 509

201 West Colfax Ave, Dept 614 Denver, CO 80202 www.work4denver.com

PERFORMANCE AND PAYMENT BOND SURETY AUTHORIZATION

FAX NUMBER:

IMDED.

720-913-3183

TELEPHONE NUMBER:

720-913-3267

Assistant City Attorney 201 W. Colfax Ave. Dept 1207 Denver, Colorado 80202

RE:

Keene Concrete, Inc.

Contract No:

201629825

Project Name:

2016 On-Call Concrete Repair

Contract Amount:

2016

\$3,231,358.99

Performance and Payment Bond No.:

906005225

Dear Assistant City Attorney,

The Performance and Payment Bonds covering the above captioned project were executed by this agency, through The Ohio Casualty

September 29th

____insurance company, on ____

We hereby authorize the City and County of Denver, Department of Public Works, to date all bonds and powers of attorney to coincide with the date of the contract.

If you should have any additional questions or concerns, please don't hesitate to give me a call at

Thank you.

Sincereiva

Thomas W. Patton, Attorney-in-fact

Surety Advisor, CCIG

DenverGov.org | 311

Protecting the Present & Building the Future

Accountability, Innovation, Empowerment, Performance, Integrity,
Diversity, Teamwork, Respect, Excellence, Safety



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/29/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). CONTACT NAME: PRODUCER **Annette Campbell** PHONE (A/C, No, Ext): E-MAIL CCIG FAX (A/C, No): 5660 Greenwood Plaza Blvd. ADDRESS: annettec@thinkccig.com Suite 500 Greenwood Village, CO 80111 NAIC# INSURER(S) AFFORDING COVERAGE INSURER A : Bituminous Insurance Co. INSURED 41190 INSURER B : Pinnacol Assurance INSURER C: Keene Concrete, Inc. 30263 Weld Co. Road 8 INSURER D : Keenesburg, CO 80643 INSURER E : INSURER F: **REVISION NUMBER:** COVERAGES CERTIFICATE NUMBER: THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE 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. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADDL SUBR INSD WVD INSR LTR TYPE OF INSURANCE POLICY NUMBER X COMMERCIAL GENERAL LIABILITY 1,000,000 EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) A \$ 06/01/2016 06/01/2017 300,000 CLP3638135 X OCCUR X CLAIMS-MADE \$ 10,000 MED EXP (Any one person) \$ 1,000,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ GEN'L AGGREGATE LIMIT APPLIES PER: 2,000,000 X PRODUCTS - COMP/OP AGG POLICY \$ \$ OTHER COMBINED SINGLE LIMIT (Ea accident) 1,000,000 AUTOMOBILE LIABILITY \$ 06/01/2016 06/01/2017 A X X CAP3 638134 BODILY INJURY (Per person) \$ ANY AUTO SCHEDULED AUTOS NON-OWNED AUTOS ALL OWNED AUTOS BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ HIRED AUTOS \$ 5,000,000 UMBRELLA LIAB EACH OCCURRENCE 5 OCCUR **EXCESS LIAB** CUP2 810868 06/01/2016 06/01/2017 5,000,000 A AGGREGATE S CLAIMS-MADE 10,000 DED X RETENTIONS 5 WORKERS COMPENSATION X PER STATUTE AND EMPLOYERS' LIABILITY 4030100 06/01/2016 06/01/2017 1,000,000 В ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) E.L. EACH ACCIDENT N/A 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ If yes, describe under DESCRIPTION OF OPERATIONS below 1,000,000 E.L. DISEASE - POLICY LIMIT \$ DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) RE: Contract No. 201629825, 2016 On-Call Concrete Repair. As required by written contract, The City and County of Denver, its Elected and Appointed Officials, Employees and Volunteers are included as Additional Insured with regards to Commercial General Liability and Automobile Liability. CERTIFICATE HOLDER CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE **Denver Public Works Engineering Division** THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. 201 West Colfax Avenue Denver, CO 80202

AUTHORIZED REPRESENTATIVE

Denver Public Works



Engineering Division
Capital Projects Management – Dept. 506
Right-of-Way Services – Dept 507
Traffic Engineering Services – Dept 508
Policy and Planning – Dept. 509

201 West Colfax Ave, Dept 614 Denver, CO 80202 www.work4denver.com

PERFORMANCE AND PAYMENT BOND SURETY AUTHORIZATION (SAMPLE)

FAX NUMBER:		13-3183
TELEPHONE NUMBER:	720-91	13-3267
Assistant City Attorney		
201 W. Colfax Ave. Dept 120 Denver, Colorado 80202	7	
RE: (Company name)		
	tract No:	201629825
Proje Contract	ct Name:	2016 On-Call Concrete Repair
Performance and Payment B		
Dear Assistant City Attorney,		
The Performance and Paymen	Bonds cove	rering the above captioned project were executed by this agency, through insurance company.
on	, 20	·
We hereby authorize the City attorney to coincide with the d		of Denver, Department of Public Works, to date all bonds and powers of ontract.
If you should have any additio	nal question	ns or concerns, please don't hesitate to give me a call at
Thank you.		



Sincerely,

Protecting the Present & Building the Future
Accountability, Innovation, Empowerment, Performance, Integrity,
Diversity, Teamwork, Respect, Excellence, Safety

Denver Public Works



Engineering Division Capital Projects Management - Dept. 506 Right-of-Way Services - Dept 507 Traffic Engineering Services - Dept 508 Policy and Planning - Dept. 509

> 201 West Colfax Ave, Dept 614 Denver, CO 80202 www.work4denver.com

BIDDER NOTICE OF APPARENT LOW

	(SAMPLE)		
Current Date			

Current Date

To:

Gentlemen:

The MANAGER OF PUBLIC WORKS has considered the Bids submitted on September 08, 2016 for work to be done and materials to be furnished in and for:

PROJECT No. 201629825 2016 ON-CALL CONCRETE REPAIR

as set forth in detail in the Contract Documents for the City and County of Denver, Colorado. It appears that your Bid is fair, equitable, and to the best interest of the City and County; therefore, said Bid is hereby accepted at the bid price contained herein, subject to execution of the Contract Documents and your furnishing the items specified below, the total cost thereof (Contract Amount Written), (Contract Amount Numeric).

It will be necessary for you to appear forthwith at the office of the Department of Public Works, Finance and Administration, 201 W. Colfax Ave., Denver, Colorado 80202, to receive the said Contract Documents, execute the same and return them to the Department of Public Works, Finance and Administration, within the time limit set forth in the Bid Proposal.

In accordance with the requirements set forth in the Contract Documents, you are required to furnish the following documents:

- a. Insurance Certificates: General Liability and Automotive Liability, Workman's Compensation and Employer Liability; or any other coverage required by the contract; and
- One original plus four copies of the Power of Attorney relative to Performance and/or Payment Bond; b.

All construction Contracts made and entered into by the City and County of Denver are subject to Affirmative Action and Equal Opportunity Rules and Regulations, as adopted by the Manager of Public Works, and each contract requiring payment by the City of one-half million dollars (\$500,000.00) or more shall first be approved by the City Council acting by ordinance and in accordance with Section 3.2.6 of the Charter of the City and County of Denver.

Prior to issuance of Notice to Proceed, all Equal Opportunity requirements must be completed. Additional information may be obtained by contacting the Director of Contract Compliance at (720-913-1700).

NOTICE OF APPARENT LOW BIDDER (SAMPLE)

PROJECT NO. <u>201629825</u>	
Page 2	
Bond. In the event you should fail to execute the Contr	arned upon execution of the Contract and furnishing of the Performance ract and to furnish the performance Bond within the time limit specified, anty of Denver as liquidated damages, and not as a penalty for the delay
Dated at Denver, Colorado this day of _	20
	CITY AND COUNTY OF DENVER
	By

Manager of Public Works



Protecting the Present & Building the Future
Accountability, Innovation, Empowerment, Performance, Integrity,
Diversity, Teamwork, Respect, Excellence, Safety

Denver Public Works



Engineering Division Capital Projects Management – Dept. 506 Right-of-Way Services – Dept 507 Traffic Engineering Services – Dept 508 Policy and Planning – Dept. 509

> 201 West Colfax Ave, Dept 614 Denver, CO 80202 www.work4denver.com

Current Date

NOTICE TO PROCEED (SAMPLE)

Name Company Street City/State/Zip

CONTRACT NO. 201629825, 2016 ON-CALL CONCRETE REPAIR

In accordance with General Contract Condition 302 of the Standard Specifications for Construction, General Contract Conditions, 2011 Edition, you are hereby authorized and directed to proceed on with the work of constructing contract number 201629825, as set forth in detail in the contract documents for the City and County of Denver.
With a contract time of calendar days, the project must be complete on or before
If you have not already done so, you must submit your construction schedule, in accordance with General Contract Condition 306.2.B, to the Project Manager within 10 days. Additionally, you must submit your tax exempt certificate, and copies of your subcontractors' certificates, in accordance with General Contract Condition 323.5, to the Project Manager as soon as possible. Failure to submit these certificates will delay processing of payment applications.
Sincerely,
Lesley B. Thomas City Engineer
cc:

FOR CITY SERVICES VISIT | CALL 311

Protecting the Present & Building the Future
Accountability, Innovation, Empowerment, Performance, Integrity,
Diversity, Teamwork, Respect, Excellence, Safety

Denver Public Works



Engineering Division
Capital Projects Management – Dept. 506
Right-of-Way Services – Dept 507
Traffic Engineering Services – Dept 508
Policy and Planning – Dept. 509

201 West Colfax Ave, Dept 614 Denver, CO 80202 www.work4denver.com

Certificate of Contract Release (SAMPLE)

Date

Name
Company
Street
City/State/Zip

RE: Certificate of Contract Release for 201629825, 2016 ON-CALL CONCRETE REPAIR

Received this date of the City and County of Denver, as fu	all and final payment of the cost of the impro-	vements
provided for in the foregoing contract,	dollars and	cents (\$
), in cash, being the remainder of the full amount accruing t	to the undersigned by virtue of said contract; s	aid cash
also covering and including full payment for the cost of all e	xtra work and material furnished by the unders	igned in
the construction of said improvements, and all incidentals the	ereto, and the undersigned hereby releases said	City and
County of Denver from any and all claims or demands what	soever, regardless of how denominated, growing	ig out of
said contract.		
And these presents are to certify that all persons performing w	ork upon or furnishing materials for said impro	vements
under the foregoing contract have been paid in full and this p	payment to be made is the last or final payment	-
Contractor's Signature	Date Signed	
If there are any questions, please contact me by telephone at	(720) 913-XXXX. Please return this documer	nt via



Protecting the Present & Building the Future
Accountability, Innovation, Empowerment, Performance, Integrity,
Diversity, Teamwork, Respect, Excellence, Safety

facsimile at (720) 913-1805 and mail to original to the above address.

SC-28

On Call Specific Contract Forms





Department of Public Works
Engineering Department
201 W. Colfax Avenue
Denver, CO 80202
www.denvergov.org/PublicWorks

CHANGE RIDER

For Bond No.	on behalf of				
	dated		, and in favo	or of the City a	and County of
Denver.					
The surety hereby give	s its consent to the incorpor	ration of the	obligations and	requirements se	et forth in Work
Order No. 201629825,	Proposal Request No,	Contract Co	ontrol No		, 2016 ON-
	REPAIR, and under Bond				
	ed by				
	_ cents (\$)				
Provided, however, tl	hat the aggregate liability	y of the sure	ty for any loss	es occurring pr	rior to the
effective date of this	change shall not exceed	\$, unl	less modified b	y subsequent
	event shall the suretys'				

Except as modified herein, Bond No. _______, dated ______, _____, is affirmed and ratified in each and every particular.

Executed this ______ day of ______, 20___.

(Contractor) (Surety)

Approved for the City and County of Denver

By:_____



Department of Public Works
Engineering Department
201 W. Colfax Avenue
Denver, CO 80202
www.denvergov.org/PublicWorks

CONTRACT NO. 201629825 – 2016 ON-CALL CONCRETE REPAIR

DEPARTMEN	INTY OF DENVER, PROJECT MANAGMENT OFF ENT OF PUBLIC WORKS, 201 W. COLFAX AVE. FAX (720) 913-XXXX	
PROJECT ID WORK ORDI	D#: DATE DER NAME: T NOPROJECT	OSAL REQUEST NO: ::
Submit an item described work Worksheet.	mized quotation for the work described below. Inclurk, and the MBE & WBE participation (percentage	ide all costs, time necessary to perform the of work) on the Proposal Request Pricing
This is not a ch	hange order, field order or a notice to proceed with the	work described.
Description:		
	ork shall be performed under Annual Contract No. 201 Pamages for this Project will be \$ per day.)	.629825 dated, 20
Proposal Reque	uest Pricing Worksheet to be returned by	, 20
Attachments:	:	
ISSUED BY:		
ISSCED D1.	PUBLIC WORKS/TRANSPORTATION/PROJECT	Γ MANAGEMENT OFFICE
cc:		

PROPOSAL REQUEST PRICING WORKSHEET

CONTRACT NO.

PROJECT NAME
CITY & COUNTY OF DENVER
CITY ENGINEERING, PROJECT MANAGEMENT OFFICE
DEPARTMENT OF PUBLIC WORKS 201 W. COLFAX AVE.; DEPT. 509-DENVER, CO 80202-(720)913-4511, FAX (720)913-4544

CONTRACTOR:			PROPOSAL REQ	UEST NO.:		
			WORK ORDER N	0.		
CONTRACT NO.		-	WORK ORDER N	0.:		
PROJECT NAME:		-	DATE:			
UNIT PRICES: Provide Unit Price Sh	eets for Proposal Requests, identifying applicable unit	prices			TOTALS	
ITEM NO		M DESCRIPITION				
		- 7 <i>11/11/1</i>	= =	5		
	BIS THUS BOLDS ALIBYAYA					
	BID UNIT PRICE SUBTOTAL					
SUBCONTRACTOR 13	RS - Provide Subcontractor Worksheets for each	subcontractor.			TOTALS	
14						
15						
16 17						
18						
19						
20 21	SUBCONTRACTOR TOTAL (Lines 12 through	191				
22	G. C. MARK-UP ON SUBCONTRACTOR WORK	(7% OF LINE 20)				
23 TOTAL FOR SUBCONTRACTORS						
	GENERAL CONTRACTOR	LABOR	MATERIAL	:QUIPMEN	TOTALS	
24	PERMITS					
25	MOBILIZATION			_		
26 27						
28		+				
29						
30						
31						
32						
33 34	TOTAL (Lines 23 through 30)		+	_		
35	G. C. Overhead & Profit @ 15% (Direct Work)					
36	Sales Tax on materials (3.5% of line 31)		-			
37	TOTAL FOR G.C. (Lines 31 through 33)					
38 39	Unit Price Total - Line 11 Subcontractor Total - Line 22					
40	Subtotal					
41	Bond Cost (1.5% of Line 37)					
42	Total Proposal Request Line 37 + 38					
		PROPOSAL REQUE	EST PRICE			
TIME TO COMPL	ETE THE WORK IN THIS PROPOSAL REQU	JEST			CALENDAR DAYS	
	TOTAL MBE COST OF WORK		PERCENTAGE			
	TOTAL WBE COST OF WORK		PERCENTAGE			
CONTRACTORICON	CNATIGE			DATE		
CONTRACTOR'S SI	SNATURE			DATE		

PROPOSAL REQUEST PRICING WORKSHEET CONTRACT NO.

PROJECT

CITY & COUNTY OF DENVER

CITY ENGINEERING, PROJECT MANAGEMENT OFFICE DEPARTMENT OF PUBLIC WORKS-201 W. COLFAX AVE., DEPT. 509-DENVER, CO 80202-(720) 913-4511, FAX (720) 913-4543

CONTRACTOR:			PROPOSAL RE	QUEST NO.:		
CONTRACT NO. 201	207366		WORK ORDER	NO.:		
PROJECT NAME:				Date:		
UNIT PRICES:						
Provide Unit Price Sh	eets for Proposal Requests, identifying applicable unit	prices		OLIANITITY		
ITEM NO	ITEM DESCRIPITION	UNIT PRICE, B	ID	QUANTITY	QUAI	VIIIY
	BID UNIT PRICE SUBTOTAL				¢	
	BID ONIT PRICE SUBTOTAL				\$	•
SUBCONTRACTOR	RS - Provide Subcontractor Worksheets for each	subcontractor			тот	ΔΙς
13	Trovide Subconfidetor Worksheets for each	Subcontractor.			101	ALO
14						
15 16						
17						
18 19						
20						
21						
22 23	SUBTOTAL FOR SUBCONTRACTORS				\$	
20	ODDITIALI ON ODDOMINACIONO				Ÿ	
	GENERAL CONTRACTOR		UNIT COST	QUANTITY	тот	ALS
24						
25				\neg —		
26		/	$H \longmapsto r$	_		
27 28		<i>┪</i> ∦₩₩₩₽,	H	7		
29						
30					OTALS JANTITY OTALS OTALS IDAR DAYS	
31						
32						
33	SUBTOTAL				\$	-
34		-				
35 36						
37						
38	Unit Price Total				\$	-
39	Subcontractor Total				\$	-
40 41	Subtotal				\$	-
42	Total Proposal				\$	
					•	
		PROPOSAL REQUE	ST PRICE		\$	-
TIME TO COMPI	ETE THE WORK IN THIS PROPOSAL REQ	UEST			CALFND	AR DAYS
	TOTAL MBE COST OF WORK		PERCENTAGE		•	2,0
	TOTAL WBE COST OF WORK		PERCENTAGE			
CONTRACTOR'S SIG	GNATURE				DATE:	

SUBCONTRACTOR WORKSHEET FOR PROPOSAL REQUESTS MASTER CONTRACT NO.

Project Name CITY & COUNTY OF DENVER

CITY ENGINEERING, PROJECT MANAGEMENT OFFICE

DEPARTMENT OF PUBLIC WORKS-201 W. COLFAX AVE., DEPT. 509-DENVER, CO 80202- (720) 913-4511, FAX (720) 913-

CONTRACTOR:	DATE:
MASTER CONTRACT NO.	PROPOSAL REQUEST NO.:
PROJECT NAME:	
CURSONITE LOTOR LULLE	

SUBCONTRACTOR NAME:

	WORK ITEMS		UNIT PRICE	QUANTITY	TOTALS	
1						
2						
3		ח חל				
4		(7) ITH	7 i 17 D 17			
5	77 (7474				
6		7 — 17 /1		7	\$	-
7					\$	-
8					\$	-
9					\$	-
10					\$	
12					\$	-
13					\$	-
14					\$	-
15	SUBTOTAL	-		-	\$	-
16						
17						
18	SUBTOTAL				\$	-
19						
20	TOTAL				\$	-

\$ -



On-Call Construction Work Order

Department of Public Works
Engineering - Capital Project Management
201 W. Colfax Avenue, Dept 506, Denver, CO 80202
p: 720-913-4501 f: 720-913-4544

p: 720-913-4501 f: 720-913-4544 www.denvergov.org/Capital_Projects_Center

Contractor:	Busines	s Unit:	
Vendor ID:	Project	No.:	
		Name:	
		Manager:	
Fund/Org/Acct:	Alfresco	Number:	
		signed by the contracting parties, the following deerms of the Contract except as herein stipulated an	
described scope of work, and the Contractor he for further moneys, extensions of time or other THE CONTRACTOR AGREES to furnish all	ereby agrees to make no consideration for the a material and labor and	ion, payment and satisfaction to the Contractor for b further claims, demands, or requests of any kind bove described scope of work to the Contract. perform all work required to complete the above to the Work Order, except as otherwise stipulated here.	whatsoever described
following considerations: The Sum of \$,		
Work Order Duration timeCalendar	r Davs		
Completion Date:	24,5		
		T10	
Accepted for Contractor by		TitleDate	!
WORK ORDER NO. COST S	SUMMARY	7	
(By Project Manager)			
Original Work Order Amount	<u>\$</u>	Approved - City Attorney (if applicable)	Date
Previous Work Order Additions	\$		
SUB-TOTAL	<u>\$</u>		
Previous Work Order Change Deductions	<u>\$</u>		W / / _
Net prior to this Work Order Change	<u>\$</u>		// / / /
This Work Order Change – Add <deduct> REVISED TOTAL WORK ORDER AMO</deduct>	S S S S S S S S S S S S S S S S S S S	Appi ed-7 A e	4
REVISED TOTAL WORK ORDER AMO	UNI <u>5</u>		
COST SUMMARY FOR CONT	PACTNO	Approved – Director, CPM	Date
Total of all Work Orders Issued	\$0.00	Approved - Director, CFM	Date
Previous Additions/ Deductions	\$0.00		
Net Prior to this Change	\$0.00	Approved - Using Agency (If non PW)	Date
This Change - ☐ Add or ☒ Delete	\$0.00		
Revised Contract Amount	\$0.00	Approved – Project Supervisor	Date
Maximum Contract Amount	\$500,000.00	,,	
Amount Available	\$500,000.00		

NOTE: No person shall authorize or perform any of the above work until the work order has all signatures and has been distributed. Distribution: Prevailing Wage: AUDPWPayRequest@denvergov.org.: DSBO@ci.denver.co.us. Project Manager e-mail, Using Agency and pw.contracts@denvergov.org. (for pre-encumbrance).



On-Call Construction Work Order Change Department of Public Works

Engineering

201 W. Colfax Avenue, Dept 506, Denver, CO 80202 p: 720-913-4501 f: 720-913-4544 www.denvergov.org/publicworks

Contractor:	Business	Unit:	_
Vendor ID No	Project N	o	_
Master Contract/Contract #		ame:	_
Work Order No:		[anager	
Change Order No.: Subclass/Program	Fund/Org	.	_
Suociass/Piogram			
		en signed by the contracting parties, the following de is of the Contract except as herein stipulated and agr	
the above described changes to the Contract	, and the Contractor hereb	consideration, payment and satisfaction to the Contra y agrees to make no further claims demands, or requ onsideration for the above described changes to the 0	ests of
		perform all work required to complete the above des the Contract, except as otherwise stipulated herein,	
☐ Add or ☐ Subtract to the Contract the Sun	1 of		
Adjust the Contract completion by C	alendar Days		
New Completion Date:			
Accepted for Contractor by	Title	Date	
WORK ORDER NO. COS	T SUMMARY		
(By Project Manager)			
Original Work Order Amount	<u>\$</u>	Approved - City Attorney (If Bond rider)	Date
Previous Work Order Additions	\$	1	
SUB-TOTAL	<u>\$</u>		
Previous Work Order Change Deductions	<u>\$</u>	Acknowledged by Director – DSBO	Date
Net prior to this Work Order Change	<u>\$</u>		
This Work Order Change - Add < Deduct>	<u>\$</u>		
REVISED TOTAL WORK ORDER AN	IOUNT §		
		Approv Iav (r o li li	Dat
COST SUMMARY FOR CO	NTRACT NO.		
Total of all Work Orders Issued	\$	Approved - Director, CPM	Date
Previous Additions/ Deductions	\$		
Net Prior to this Change	\$		
This Change – ☐ Add or ☐ Delete	\$	Approved – Project Supervisor	Date
Revised Contract Amount	\$		
Maximum Contract Amount	\$500,000.00	7	
Amount Available	\$500,000.00	Approved – Project Manager	Date

NOTE: No person shall authorize or perform any of the above work until the change order has all signatures and has been distributed. Distribution: Prevailing Wage: AUDPWPayRequest@denvergov.org; Auditor: Aud_Import@denvergov.org; DSBO@ci.denver.co.us, Project Manager e-mail, Using Agency.

CITY AND COUNTY OF DENVER

STATE OF COLORADO



PREVAILING WAGE RATES

Contract No. 201629825

2016 ON-CALL CONCRETE REPAIR

August 17, 2016

Office of Human Resources





201 W. Colfax, Department 412
Denver, CO 80202
p: 720.913.5751
f: 720.913.5720
www.denvergov.org/csa

TO: All Users of the City of Denver Prevailing Wage Schedules

FROM: Alena Duran, Associate Human Resource Professional

DATE: June 6, 2016

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, and highway construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor in accordance with the Davis-Bacon Act.

The effective date for this publication will be **Friday June 3, 2016** and applies to the City and County of Denver for **HEAVY CONSTRUCTION PROJECTS** in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO160012 Superseded General Decision No. CO20150012 Modification No. 7 Publication Date: 6/3/2016 (8 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in, a bona fide apprenticeship program registered with the U.S. Department of Labor (DOL). The employer and the individual apprentice must be registered in a program, which has received prior approval, by the DOL. Any employer, who employs an apprentice and is found to be in violation of this provision, shall be required to pay said apprentice the full journeyman scale.

For questions please call (720) 913-5018

Attachments as listed above.



General Decision Number: CO160012 06/03/2016 CO12

Superseded General Decision Number: CO20150012

State: Colorado

Construction Type: Heavy

Counties: Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo and Weld

Counties in Colorado.

HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	01/22/2016
3	03/11/2016
4	03/18/2016
5	03/25/2016
6	05/06/2016
7	06/03/2016

ASBE0028-001 10/01/2014

Asbestos Workers/Insulator	
(Includes application of	
all insulating materials,	
protective coverings,	
coatings and finishings to	

Rates

Fringes

all types of mechanical

systems).....\$ 28.83 13.53

BRC00007-004 01/01/2016

ADAMS, ARAPAHOE, BOULDER, BROOMFIELD, DENVER, DOUGLAS AND JEFFERSON COUNTIES

BRICKLAYER\$ 26.01	7.71

EL PASO AND PUEBLO COUNTIES

	Rates	Fringes
BRICKLAYER	.\$ 24.44	8.90
ELEC0012-004 09/01/2015		
PUEBLO COUNTY		
	Rates	Fringes
ELECTRICIAN Electrical contract over \$1,000,000 Electrical contract under \$1,000,000		11.00+3% 11.00+3%
* ELEC0068-001 06/01/2016		
ADAMS, ARAPAHOE, BOULDER, BROOMFI JEFFERSON, LARIMER, AND WELD COU		R, DOUGLAS,
	Rates	Fringes
ELECTRICIAN	.\$ 33.85	13.99
ELEC0111-001 01/01/2016		
	Rates	Fringes
Line Construction: Groundman Line Equipment Operator Lineman and Welder	.\$ 29.40	22.25%+\$5.45
ELEC0113-002 06/01/2015		
EL PASO COUNTY		
	Rates	Fringes
ELECTRICIAN		14.95
ELEC0969-002 06/01/2015		
MESA COUNTY		
	Rates	Fringes
ELECTRICIAN	•	7.92
ENGI0009-001 10/23/2013		
	Rates	Fringes
Power equipment operators: Blade: Finish Blade: Rough	.\$ 24.73 .\$ 24.73	9.15 9.15 9.15 9.15

Cranes: 51 to 90 tons		
		9.15
Cranes: 91 to 140 tons		9.15
Cranes: 141 tons and over.		9.15
Forklift	•	9.15
Mechanic Oiler	•	9.15 9.15
Scraper: Single bowl	\$ 24.01	9.15
under 40 cubic yards	\$ 24.88	9.15
Scraper: Single bowl,		
including pups 40 cubic		
yards and over and tandem	A OF O4	0.15
bowls Trackhoe		9.15 9.15
	, 24.00 	
IRON0024-003 11/01/2013		
	Rates	Fringes
		5
Ironworkers:	\$ 24.80	18.77
LAB00086-001 05/01/2009		
	Rates	Fringes
	races	1111900
Laborers:	+ 10 50	
Pipelayer		6.78
* PLUM0003-005 06/01/2016		
ADAMC ADADAHOE DOULDED DDOOM	TEID DEMMED	DOLLCT & C
ADAMS, ARAPAHOE, BOULDER, BROOM		DOUGLAS,
JEFFERSON, LARIMER AND WELD COII	NTTES	
JEFFERSON, LARIMER AND WELD COU	NTIES	
JEFFERSON, LARIMER AND WELD COU		
JEFFERSON, LARIMER AND WELD COU	NTIES Rates	Fringes
JEFFERSON, LARIMER AND WELD COUL	Rates	Fringes 15.19
	Rates	_
PLUMBER	Rates\$ 38.43	15.19 Fringes
PLUMBER	Rates\$ 38.43	15.19
PLUMBER	Rates\$ 38.43	15.19 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015	Rates\$ 38.43	15.19 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters	Rates\$ 38.43	15.19 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015	Rates\$ 38.43	15.19 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015	Rates\$ 38.43 Rates\$ 34.30	15.19 Fringes 14.38
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015 PUEBLO COUNTY Plumbers and Pipefitters	Rates\$ 38.43 Rates\$ 34.30	15.19 Fringes 14.38 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015 PUEBLO COUNTY	Rates\$ 38.43 Rates\$ 34.30	15.19 Fringes 14.38 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015 PUEBLO COUNTY Plumbers and Pipefitters	Rates\$ 38.43 Rates\$ 34.30	15.19 Fringes 14.38 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015 PUEBLO COUNTY Plumbers and Pipefitters PLUM0145-002 07/01/2013	Rates\$ 38.43 Rates\$ 34.30 Rates\$ 34.30	15.19 Fringes 14.38 Fringes 14.38
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015 PUEBLO COUNTY Plumbers and Pipefitters PLUM0145-002 07/01/2013 MESA COUNTY	Rates\$ 38.43 Rates\$ 34.30 Rates\$ 34.30	15.19 Fringes 14.38 Fringes
PLUMBER PLUM0058-002 07/01/2015 EL PASO COUNTY Plumbers and Pipefitters PLUM0058-008 07/01/2015 PUEBLO COUNTY Plumbers and Pipefitters PLUM0145-002 07/01/2013	Rates\$ 38.43 Rates\$ 34.30 Rates\$ 34.30	15.19 Fringes 14.38 Fringes 14.38

ADAMS, ARAPAHOE, BOULDER, BROOMFIELD, DENVER, DOUGLAS, JEFFERSON, LARIMER AND WELD COUNTIES

	Rates	Fringes
PIPEFITTER	\$ 35.35	13.39
SHEE0009-002 07/01/2015		
	Rates	Fringes
Sheet metal worker		14.63
TEAM0455-002 07/01/2015		
	Rates	Fringes
Truck drivers: Pickup Tandem/Semi and Water	\$ 20.29	4.02 4.02
SUCO2001-006 12/20/2001		
	Rates	Fringes
BOILERMAKER	\$ 17.60	
Carpenters: Form Building and Setting All Other Work		2.74 3.37
Cement Mason/Concrete Finisher	\$ 17.31	2.85
IRONWORKER, REINFORCING	\$ 18.83	3.90
Laborers: Common	\$ 8.91	2.92 3.80 3.21
Painters: Brush, Roller & Spray	\$ 15.81	3.26
Power equipment operators: Backhoe Front End Loader Skid Loader	\$ 17.24 \$ 15.37	2.48 3.23 4.41

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Office of Human Resources

Supplemental rates (Specific to the Denver Projects) (Supp #74, Date: 02-03-2012)

Classification		Base	Fringe
Millwrights		\$28.00	\$10.00
Line Construction:		*	
	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck	•	*
	Crew	\$25.74	\$8.09
Power Equipment Operators (Tunnels Above and Below Ground, shafts and raises):			
	GROUP 1	\$25.12	\$10.81
	GROUP 2	\$25.47	\$10.85
	GROUP 3	\$25.57	\$10.86
	GROUP 4	\$25.82	\$10.88
	GROUP 5	\$25.97	\$10.90
	GROUP 6	\$26.12	\$10.91
	GROUP 7	\$26.37	\$10.94
Power Equipment Operators:			
	GROUP 1	\$22.97	\$10.60
	GROUP 2	\$23.32	\$10.63
	GROUP 3	\$23.67	\$10.67
	GROUP 4	\$23.82	\$10.68
	GROUP 5	\$23.97	\$10.70
	GROUP 6	\$24.12	\$10.71
	GROUP 7	\$24.88	\$10.79
Ironworkers (Ornamental)		\$24.80	\$10.03
Laborers:			
	GROUP 1	\$17.68	\$8.22
	GROUP 2	\$18.18	\$8.27
	GROUP 3	\$21.59	\$8.61
Laborers: (Tunnel)			
	GROUP 1	\$18.53	\$8.30
	GROUP 2	\$18.63	\$8.31
	GROUP 3	\$19.73	\$8.42
	GROUP 4	\$21.59	\$8.61
	GROUP 5	\$19.68	\$8.42
Laborers (Removal of Asbestos)		\$21.03	\$8.55
Truck Drivers:			
	GROUP 1	\$18.42	\$10.00
	GROUP 2	\$19.14	\$10.07
	GROUP 3	\$19.48	\$10.11
	GROUP 4	\$20.01	\$10.16
	GROUP 5	\$20.66	\$10.23
	GROUP 6	\$21.46	\$10.31

<u>POWER EQUIPMENT OPERATOR CLASSIFICATIONS</u> (TUNNELS ABOVE AND BELOW GROUND, SHAFTS, AND RAISES):

GROUP 1 - Brakeman

GROUP 2 - Motorman

GROUP 3 - Compressor

GROUP 4 - Air Tractors; Grout Machine; Gunnite Machine; Jumbo Form

GROUP 5 - Concrete Placement Pumps; Mucking Machines and Front End Loaders, Underground,

Slusher; Mine Hoist Operator; Mechanic

GROUP 6 - Mechanic Welder

GROUP 7 - Mole

NOTE: Any equipment listed below being used in tunnel work, below or above ground shall be paid not less than \$2.00 per hour above the listed wage rates.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1 - Air compressor, brakeman, drill operator - smaller than Watson 2500 and similar, operators of 5 or more light plants, welding machines, generators, single unit conveyor, pumps, vacuum well point system, tractor, under 70 hp with or without attachments compressors, 360 C.F.M. or less.

GROUP 2 - Conveyor, handling **building** materials, ditch witch and similar trenching machine, haulage motor man, pugmill, portable screening plant with or without a spray bar, screening plants, with classifier.

GROUP 3 - Asphalt screed, asphalt plant, backfiller, bituminous spreader or laydown machine; cableway signalman, caisson drill, William MF, similar or larger; C.M.I. and similar, concrete batching plants, concrete finish machine, concrete gang saw on concrete paving, concrete mixer, less than 1 yd., concrete placement pumps, under 8 inches, distributors, bituminous surfaces dozer, drill, diamond or core, drill rigs, rotary, churn, or cable tool, elevating graders, elevator operator, equipment, lubricating and service engineer, grout machine, gunnite machine, hoist, 1 drum, horizontal directional drill operator, sandblasting machine, single unit protable crusher, with or without washer, tie tamper, wheel mounted, tractor, 70 hp and over with or without attachments, trenching machine operator, winch on truck.

GROUP 4 - Cable operated power shovels, draglines, articulated truck operator, clamshells, and backhoes, 5 cubic yards and under, concrete mixer over 1 cubic yard, concrete paver 34E or similar, concrete placement pumps, 8 inches and over, grade checker, hoist, 2 drums, hydraulic backhoe, 3/4 yds and over, loader, over 6 cubic yards, mechanic, mixer mobile, multiple unit portable crusher, with or without washer; pile driver, tractor with side boom, roto- mill and similar, welder.

GROUP 5 - Cable operated power shovels, draglines, clamshells and backhoes over 5 cubic yards, caisson drill Watson 2500 similar or larger, hoist 3 drum or more, mechanic – welder (heavy-duty).

GROUP 6 - Cableway, derrick, quad nine push unit, wheel excavator, belt or elevating loader

GROUP 7 - tower cranes all types

LABORER CLASSIFICATIONS:

GROUP 1 - Janitors; Yardmen

GROUP 2 –Erosion Control, Dowel Bars; Fence Erectors; Gabion Basket and Reno mattresses; Signaling, Metal Mesh; Stake Caser; Traffic Control Devices; Tie Bars and Chairs in Concrete; Paving; Waterproofing Concrete; Air, Gas, Hydraulic Tools and Electrical Tool Operators; Barco Hammers; Cutting Torches; drill; diamond and core drills; Core, diamond, air track including but not limited to; Joy, Mustang, PR-143, 220 Gardner-**Denver**, Hydrosonic, and water blaster operator; Chuck Tender; Electric hammers; Jackhammers; Hydraulic Jacks; Tampers; Air Tampers; Automatic Concrete Power Curbing Machines; Concrete Processing Material; Concrete Tender; Operators of concrete saws on pavement (other than gangsaws); Power operated Concrete Buggies; Hot Asphalt

Labor; Asphalt Curb Machines; Paving Breakers; Transverse Concrete Conveyor Operator; Cofferdams; Boxtenders; Caisson 8' to 12'; Caisson Over 12'; Jackhammer Operators in Caissons over 12'; Labor applicable to Pipe coating or Wrapping; Pipe Wrappers, Plant and Yard; Relining Pipe; Hydroliner (a plastic may be used to waterproof); Pipelayer on Underground Bores; Sewer, Water, Gas, Oil Conduit; Enamalers on Pipe, inside and out, Mechanical Grouters; Monitors; Jeep Holiday Detector Men; Pump Operators; Rakers; Vibrators; Hydro- broom, Mixer Man; Gunnite Nozzelmen; Shotcrete Operator; and chain saws, gas and electric; Sand Blaster; Licensed Powdermen; Powdermen and Blaster; Siphons; Signalmen; Dumpman/spotter; Grade Checker.

GROUP 3 - Plug and galleys in dams; Scalers; any work on or off Bridges 40' above the ground performed by Laborers working from a Bos'n Chair, Swing Stage, Life Belt, or Block and Tackle as a safety requirement.

TUNNEL LABORER CLASSIFICATIONS:

- GROUP 1 Outside Laborer Above ground
- GROUP 2 Minimum Tunnel Laborer, Dry Houseman
- GROUP 3 Cable or Hose Tenders, Chuck Tenders, Concrete Laborers, Dumpmen, Whirley Pump Operators
- GROUP 4 Tenders on Shotcrete, Gunniting and Sand Blasting; Tenders, core and Diamond Drills; Pot Tenders

GROUP 5 - Collapsible Form Movers and Setters; Miners; Machine Men and Bit Grinders; Nippers; Powdermen and Blasters; Reinforcing Steel Setters; Timbermen (steel or wood tunnel support, including the placement of sheeting when required); and all Cutting and Welding that is incidental to the Miner's work; Tunnel Liner Plate Setters; Vibrator Men, Internal and External; Unloading, stopping and starting of Moran Agitator Cars; Diamond and Core Drill Operators; Shotcrete operator; Gunnite Nozzlemen; Sand Blaster; Pump Concrete Placement Men.

<u>Laborers (Removal of Asbestos)</u> Removal or encapsulation of Asbestos Material (including removal of asbestos from mechanical systems that are going to be scraped) and work involving the removal, handling, or dealing with toxic or hazardous waste.

TRUCK DRIVER CLASSIFICATIONS:

- GROUP 1 Sweeper Truck, Flat Rack Single Axle and Manhaul, Shuttle Truck or Bus.
- GROUP 2 Dump Truck Driver to and including 6 cubic yards, Dump Truck Driver over 6 cubic yards to and including 14 cubic yards, Straddle Truck Driver, Liquid and Bulk Tankers Single Axle, Euclid Electric or Similar, Multipurpose Truck Specialty and Hoisting.
- GROUP 3 Truck Driver Snow Plow.
- GROUP 4 Cement Mixer Agitator Truck over 10 cubic yards to and including 15 cubic yards.

WELDERS: Receive rate prescribed for craft performing operation to which welding is incidental.

Career Service Authority





TO: All Users of the City of Denver Prevailing Wage Schedules

FROM: Seth Duhon-Thornton Staff HR Professional

DATE: Tuesday, January 26, 2016

DENVER

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, and highway construction trades have not been updated by the United States Department of Labor (DOL) since March 1, 2002. The Career Service Authority Board, in their meeting held on April 21, 2011, approved the use of the attached supplemental wage rates until prevailing wage rates for these classifications of work are again published by the United States Department of Labor in accordance with the Davis-Bacon Act.

The effective date for this publication is **Friday January 8, 2016** and applies to the City and County of Denver for **HIGHWAY CONSTRUCTION PROJECTS** in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO160019
Superseded General Decision No. CO20150019
Modification No. 0
Publication Date: 1/8/2016
(8 pages)

Unless otherwise specified in this document, apprentices shall be permitted only if they are employed pursuant to, and individually registered in, a bona fide apprenticeship program registered with the U.S. Department. Of Labor (DOL). The employer and the individual apprentice must be registered in a program, which has received prior approval, by the DOL. Any employer, who employs an apprentice and is found to be in violation of this provision, shall be required to pay said apprentice the full journeyman scale.

For questions call (720) 913-5018

Attachments as listed above.



General Decision Number: CO160019 01/08/2016 CO19

Superseded General Decision Number: CO20150019

State: Colorado

Construction Type: Highway

Counties: Denver and Douglas Counties in Colorado.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date Ω 01/08/2016

* CARP9901-008 05/01/2013

	Rates	Fringes
CARPENTER (Form Work Only)	\$ 25.00	5.39
ELEC0068-016 03/01/2011		

Rates Fringes TRAFFIC SIGNALIZATION: Traffic Signal Installation Zone 1.....\$ 26.42 4.75%+8.68 Zone 2.....\$ 29.42 4.75%+8.68

TRAFFIC SIGNAL INSTALLER ZONE DEFINITIONS

Zone 1 shall be a 35 mile radius, measured from the following addresses in each of the following cities:

Colorado Springs - Nevada & Bijou Denver - Ellsworth Avenue & Broadway Ft. Collins - Prospect & College Grand Junction - 12th & North Avenue

Pueblo - I-25 & Highway 50

All work outside of these areas shall be paid Zone 2 rates.

._____

ENGI0009-008 10/23/2013

Rates Fringes

POWER EQUIPMENT OPERATOR:

(2) 1 1 - 11		
(3)-Hydraulic Backhoe		
(Wheel Mounted, under 3/4		
yds), Hydraulic Backhoe		
(Backhoe/Loader		
combination), Drill Rig		
Caisson (smaller than		
Watson 2500 and similar),		
Loader (up to and	0.4 50	0.15
including 6 cu. yd.)\$	24.73	9.15
(3)-Loader (under 6 cu.		
yd.)	0.4 57.2	0.15
Denver County\$	24./3	9.15
(3)-Motor Grader (blade-		
rough)	04 72	0 15
Douglas County\$	24.73	9.15
<pre>(4)-Crane (50 tons and under), Scraper (single</pre>		
bowl, under 40 cu. yd)\$	24 88	9.15
(4)-Loader (over 6 cu. yd)	24.00	9.13
Denver County\$	24 88	9.15
(5)-Drill Rig Caisson	21.00	J. ± 3
(Watson 2500 similar or		
larger), Crane (51-90		
tons), Scraper (40 cu.yd		
and over),\$	25.04	9.15
(5)-Motor Grader (blade-		
finish)		
Douglas County\$	25.04	9.15
(6)-Crane (91-140 tons)\$		9.15
SUCO2011-004 09/15/2011		
	Rates	Fringes
1		J
		Fringes 5.08
CARPENTER (Excludes Form Work)\$		J
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER	19.27	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$	19.27 20.18	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER	19.27 20.18	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$	19.27 20.18	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$	19.27 20.18 18.75	5.08
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$	19.27 20.18 18.75	5.08 5.75 3.00
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver\$ Douglas\$	19.27 20.18 18.75	5.08 5.75 3.00
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13	5.08 5.75 3.00
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13	5.08 5.75 3.00 6.83
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13	5.08 5.75 3.00 6.83
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13	5.08 5.75 3.00 6.83
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13	5.08 5.75 3.00 6.83
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20 3.21
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20 3.21
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20 3.21
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89	5.08 5.75 3.00 6.83 3.20 3.20 3.21
CARPENTER (Excludes Form Work)\$ CEMENT MASON/CONCRETE FINISHER Denver	19.27 20.18 18.75 35.13 13.02 12.89 12.62 13.89	5.08 5.75 3.00 6.83 3.20 3.20 3.21

LABORER		
Asphalt Raker\$		4.25
Asphalt Shoveler\$		4.25
Asphalt Spreader\$	18.58	4.65
Common or General		
Denver\$	16.76	6.77
Douglas\$	16.29	4.25
Concrete Saw (Hand Held)\$	16.29	6.14
Landscape and Irrigation\$	12.26	3.16
Mason Tender-		
Cement/Concrete		
Denver\$	16.96	4.04
Douglas\$		4.25
Pipelayer		
Denver\$	13 55	2.41
Douglas\$		2.18
Traffic Control (Flagger)\$		3.05
Traffic Control (Sets	J.33	3.03
Up/Moves Barrels, Cones,		
Install Signs, Arrow Boards and Place		
Stationary Flags)(Excludes	10 40	2 22
Flaggers)\$	12.43	3.22
DAINTED (Comor Only)	16.00	2 07
PAINTER (Spray Only)\$	16.99	2.87
DOMED FOLLDWING ODED A GOD:		
POWER EQUIPMENT OPERATOR:		
Asphalt Laydown	00.65	0 70
Denver\$		8.72
Douglas\$	23.67	8.47
Asphalt Paver	0.4.05	
Denver\$		6.13
Douglas\$	25.44	3.50
Asphalt Roller	00.10	
Denver\$		7.55
Douglas\$		6.43
Asphalt Spreader\$	22.67	8.72
Backhoe/Trackhoe		
Douglas\$		6.00
Bobcat/Skid Loader\$		4.28
Boom\$	22.67	8.72
Broom/Sweeper		
Denver\$		8.72
Douglas\$		8.22
Bulldozer\$	26.90	5.59
Concrete Pump\$	21.60	5.21
Drill		
Denver\$	20.48	4.71
Douglas\$	20.71	2.66
Forklift\$	15.91	4.68
Grader/Blade		
Denver\$	22.67	8.72
Guardrail/Post Driver\$	16.07	4.41
Loader (Front End)		
Douglas\$	21.67	8.22
Mechanic		
Denver\$	22.89	8.72
Douglas\$		8.22
Oiler		
Denver\$	23.73	8.41
·		

Douglas\$ Roller/Compactor (Dirt and Grade Compaction)	24.90	7.67
Denver\$		5.51
Douglas\$ Rotomill\$		4.86 4.41
Screed	10.22	4.41
Denver\$		8.38
Douglas\$		1.40
Tractor\$	13.13	2.95
TRAFFIC SIGNALIZATION:		
Groundsman	15 00	2 41
Denver\$		3.41
Douglas\$	18.67	7.17
TRUCK DRIVER		
Distributor		
Denver\$		5.82
Douglas\$	16.98	5.27
Dump Truck	15.05	- OF
Denver\$		5.27
Douglas\$		5.27
Lowboy Truck\$		5.27
Mechanic\$	26.48	3.50
Multi-Purpose Specialty & Hoisting Truck		
Denver\$	17 49	3.17
Douglas\$		2.88
Pickup and Pilot Car	20.03	2.00
Denver\$	14.24	3.77
Douglas\$		3.68
Semi/Trailer Truck\$		4.13
Truck Mounted Attenuator\$		3.22
Water Truck		
Denver\$	26.27	5.27
Douglas\$		2.58

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Office of Human Resources Supplemental rates (Specific to the Denver Projects) (Supp 35, Date: 01-13-2012)

Classification		Base	<u>Fringe</u>
Millwrights		\$28.00	\$10.00
Line Construction:			
	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck		
	Crew	\$25.74	\$8.09
Power Equipment Operators			
(Tunnels Above and Below			
Ground, shafts and raises):		A · -	•
	GROUP 1	\$25.12	\$10.81
	GROUP 2	\$25.47	\$10.85
	GROUP 3	\$25.57	\$10.86
	GROUP 4	\$25.82	\$10.88
	GROUP 5	\$25.97	\$10.90
	GROUP 6	\$26.12	\$10.91
	GROUP 7	\$26.37	\$10.94
Power Equipment Operators:			
	GROUP 1	\$22.97	\$10.60
	GROUP 2	\$23.32	\$10.63
	GROUP 3	\$23.67	\$10.67
	GROUP 4	\$23.82	\$10.68
	GROUP 5	\$23.97	\$10.70
	GROUP 6	\$24.12	\$10.71
	GROUP 7	\$24.88	\$10.79
Ironworkers (Ornamental)		\$24.80	\$10.03
Laborers (Removal of			
Asbestos)		\$21.03	\$8.55
Plumbers		\$30.19	\$13.55
Pipefitters		\$30.45	\$12.85
Truck Drivers:			
	GROUP 1	\$18.42	\$10.00
	GROUP 2	\$19.14	\$10.07
	GROUP 3	\$19.48	\$10.11
	GROUP 4	\$20.01	\$10.16
	GROUP 5	\$20.66	\$10.23
	GROUP 6	\$21.46	\$10.31

<u>POWER EQUIPMENT OPERATOR CLASSIFICATIONS</u> (TUNNELS ABOVE AND BELOW GROUND, SHAFTS, AND RAISES):

GROUP 1 - Brakeman

GROUP 2 - Motorman

GROUP 3 - Compressor

GROUP 4 - Air Tractors; Grout Machine; Gunnite Machine; Jumbo Form

GROUP 5 - Concrete Placement Pumps; Mucking Machines and Front End Loaders, Underground, Slusher; Mine Hoist Operator; Mechanic

GROUP 6 - Mechanic Welder

GROUP 7 - Mole

NOTE: Any equipment listed below being used in tunnel work, below or above ground shall be paid not less than \$2.00 per hour above the listed wage rates.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1 - Air compressor, brakeman, drill operator -smaller than Watson 2500 and similar, operators of 5 or more light plants, welding machines, generators, single unit conveyor, pumps, vacuum well point system, tractor, under 70 hp with or without attachments compressors, 360 C.F.M. or less

GROUP 2 - Conveyor, handling building materials, ditch witch and similar trenching machine, forklift, haulage motor man, pugmill, portable screening plant with or without a spray bar, screening plants, with classifier, self-propelled roller, rubber-tires under 5 tons.

GROUP 3 - asphalt plant, backfiller; cableway signalman; C.M.I. and similar, concrete batching plants, concrete finish machine, concrete gang saw on concrete paving, concrete mixer, less than 1 yd., under 8 inches, distributors, bituminous surfaces dozer, drill, diamond or core, elevating graders, elevator operator, lubricating and service engineer, grout machine, gunnite machine, hoist, 1 drum, horizontal directional drill operator, hydraulic backhoes; road stabilization machine, sandblasting Machine, single unit portable crusher, with or without washer, Tie tamper, wheel mounted, trenching machine operator, winch on truck.

GROUP 4 - Cable operated power shovels, draglines, articulated truck operator, clamshells, 5 cubic yards and under, concrete mixer over 1 Cubic yard, concrete pavers 34E or similar, grade Checker, hoist, 2 drums, mechanic, mixer mobile, Portable crusher, with or without washer; tractor with sideboom, roto-M ill and similar, welder.

GROUP 5 - Cable operated power shovels, draglines, clamshells and Backhoes over 5 cubic yards, caisson drill Watson 2500 similar or larger, motor grader blade-finish, hoist 3 drum or more.

GROUP 6 - Cableway, derrick, quad nine push unit, wheel excavator, belt or elevating loader.

GROUP 7 - tower cranes all types.

TRUCK DRIVER CLASSIFICATIONS:

GROUP 1 - Greasemen, Servicemen and Ambulance Drivers, Battery Men, Shuttle Truck or Bus, Flat Rack Tandem Axle.

GROUP 2 - Fork Lift Driver, Straddle Truck Driver, Lumber Carrier, Liquid and Bulk Tankers Single Axle, Combination, Euclid Electric or Similar, Specialty and Hoisting, Truck Drivers Fuel Truck, Grease Truck, Combination Fuel and Grease.

GROUP 3 - Truck Driver Snow Plow, Truck Driver Dump or Type Jumbo and similar type equipment.

GROUP 4 - Cement Mixer Agitator Truck over 10 cubic yards to and including 15 cubic yards, Tire Man, Cab Operated Distributor Truck Driver.

GROUP 5 - Heavy Duty Diesel Mechanic, Body Man, Welders or Combination Men.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

CITY AND COUNTY OF DENVER

STATE OF COLORADO



TECHNICAL SPECIFICATIONS

Contract No. 201629825

2016 ON-CALL CONCRETE REPAIR

August 17, 2016



ENGINEERING DIVISION

Wastewater Capital Projects Management

SPECIAL PROVISIONS

STANDARD CONCRETE CONSTRUCTION DETAILS AND TECHNICAL SPECIFICATIONS

It is the intent of the City to use the City of Denver Public Works "Transportation Standards and Details for the Engineering Division" 2015 edition, the Wastewater Management Division Standard Details and Drawings (when applicable) and the Contractor shall additionally abide by all rules and guidelines as required by the City And County of Denver Right of Way Street Occupancy Permit.

It is further the intent of the City to use applicable specifications from the Colorado Department of Transportation "Standard Specifications for Road and Bridge" 2011 edition with revisions listed in the "Index of Revisions to the 2011 Colorado Department of Transportation Standard Specifications for Road and Bridge Construction."

INDEX OF REVISIONS TO THE 2011 CDOT Standard Specifications for Road and Bridge Construction

<u>Item</u>	<u>Description</u>	<u>Page</u>
201	CLEARING AND GRUBBING	TS-2
202	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	TS-3
203	EXCAVATION AND EMBANKMENT	TS-9
206	EXCAVATION AND BACKFILL FOR STRUCTURES	TS-11
208	EROSION CONTROL	TS-12
209	WATERING AND DUST PALLIATIVES	TS-26
210	RESET STRUCTURES	TS-27
212	SEEDING, FERTILIZER AND SODDING	TS-29
304	AGGREGATE BASE COURSE	TS-31
306	RECONDITIONING	TS-32
401 & 403	PLANT MIX PAVEMENTS	TS-33
412	PORTLAND CEMENT CONCRETE PAVEMENT	TS-35
413	CONCRETE PATCHING AND CURB HEAD REPLACEMENT	TS-42
601	STRUCTURAL CONCRETE	TS-45
603	CULVERTS AND SEWERS	TS-47
604	MANHOLES, INLETS AND METER VAULTS	TS-50
608	SIDEWALKS AND BIKEWAYS	TS-52
609	CURB AND GUTTER	TS-56
613	LIGHTING	TS-59
614	TRAFFIC CONTROL DEVICES	TS-60
623	IRRIGATION SYSTEM	TS-61
625	CONSTRUCTION SURVEYING	TS-62
626	MOBILIZATION	TS-63
627	PAVEMENT MARKING	TS-64
630	CONSTRUCTION ZONE TRAFFIC CONTROL	TS-65
631	PUBLIC INFORMATION SERVICES	TS-68
705	JOINT, WATERPROOFING AND BEARING MATERIALS	TS-69
711	CONCRETE CURING MATERIALS AND ADMIXTURES	TS-70

APPENDICES

- A. Work Initiation Form
- **B.** Field Measurement Report
- C. Potential Work Locations Map

REVISION OF SECTION 201 CLEARING AND GRUBBING

Section 201.01 of the Standard Specifications is hereby revised as follows:

The Contractor shall only perform work consisting of clearing, grubbing, removing, and disposing of vegetation and debris within 12" of the proposed concrete repair and only as needed to set forms and complete the required concrete construction or repairs unless otherwise directed by the Project Inspector/Manager.

Section 201.03 of the Standard Specifications shall be deleted and replaced with:

Clearing and Grubbing shall not be measured separately and all costs associated with Clearing and Grubbing shall be included in the related concrete construction or repair work.

Section 201.04 of the Standard Specifications shall be deleted and replaced with:

Clearing and Grubbing shall not be paid separately and all costs associated with Clearing and Grubbing shall be included in the related concrete construction or repair work.

When the Contract does not include pay items in Section 201, "Clearing and Grubbing", the removal will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 201

WCPM Standard Concrete Construction Details & Technical Specifications



TS-2 July 2016

REVISION OF SECTION 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Section 202 of the Standard Specifications is hereby revised as follows:

All equipment, labor, hauling, sorting, removal, delivery and documentation of recyclable materials as per SC-20 "Greenprint Denver Requirements" will not be paid separately; all costs incurred by the Contractor to meet the requirements of SC-20 shall be included in the removal of the related appurtenance. All non-hazardous waste is to be hauled to Denver Arapahoe Disposal Site (DADS) as per "SC-12 DISPOSAL OF NON-HAZARDOUS WASTE AT DADS" of the Contract. All costs of removal, loading, hauling and disposal of all excavations, unsuitable and excess materials and removal items are included in the related Removal Pay Item and will not be paid separately.

Subsection 202.02 shall be revised to include the following:

The Project Inspector will mark the limits of removals in the field.

Removals in the vicinity of trees to remain shall conform to applicable provisions of the Tree Retention and Protection specification, as prepared by Denver Forestry. It shall be the responsibility of the Contractor to notify the City of Denver Forestry and coordinate with the Construction Project Manager and the adjacent property owner for any damages to the tree, its roots and/or the need to coordinate with City of Denver Forestry to remove the tree.

Subsection 202.03 is hereby replaced as follows:

All salvageable material shown on the plans shall be removed, without unnecessary damage, in sections or pieces that may be readily transported, and delivered by the Contractor to the location noted on the plans, or as directed by the Project Manager. The Contractor shall be held responsible for the safekeeping of all salvageable materials during the period of the Contract until they are delivered to the City. The Contractor shall make good or replace at the contractor's own expense any such materials damaged, stolen or otherwise lost prior to receipt by the City. All salvageable materials, as designated on the plans, shall remain the property of the City. The bid item "Removal and Reset Flagstone (Includes Salvage and Storage) shall include all costs associated with the means and method required to carefully remove, handle, palletize, and salvage existing flagstone, store the flagstone material, transport as needed, prep subgrade as needed and reset flagstone at locations designated by the Project Inspector/Manager.

Subsection 202.07 is hereby replaced as follows:

All concrete pavement, sidewalks, structures, curbs, gutters, asphalt pavement, etc., designated for removal, shall be broken into pieces and disposed of outside the limits of the project at a concrete recycling site if possible, unless otherwise designated on the plans, or as directed by the Project Manager.

Old concrete construction which abuts new construction, edges of pavement, sidewalks, curbs, etc., to be left in place shall be saw-cut at the nearest joint to true line with a vertical face.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-3 July 2016

Where old asphalt construction abuts new construction, edges of asphalt pavement, patching, etc., asphalt to be left in place shall be saw-cut to a neat vertical face with minimal jagged edges to the satisfaction of the Project Manager.

Removal of stone curb shall include the complete removal of the curb head and concrete foundation. No payment will be made for sprinkler relocation, utility relocation, etc., beyond the limits of construction as shown on the plans. Stone curb designated for salvage shall be carefully removed to prevent damage and delivered to the location indicated in the plans or specifications, or as directed by the Project Manager.

Subsection 202.08 shall be revised to include the following:

All trip hazards will be saw cut to fulfill the requirements of the Americans with Disabilities Act. Each offset will be tapered at a minimum 1:12 slope and shall have a smooth uniform appearance and texture. Method of trip hazard removal shall entail precise saw cutting of the concrete only. Grinding and/or pulverization of the concrete are not acceptable or allowed. All saw work shall be done with hand-held electrical powered equipment, capable of cutting at any angle and able to remove the concrete completely from all edges of the trip hazard and around obstacles that may be encountered. All saw cutting shall be taken to an absolute zero point of differential to the adjacent opposing side, and to both edges of the sidewalk to eliminate the trip hazard in its entirety over the full width of the sidewalk. The adjacent stone, along with any wall and/or obstacles abutting up to the sidewalk, shall not be cut into or marked in any way when saw cutting the trip hazard. Cutting into any landscaping, grass, rocks, walls, etc.; will not be permitted. Should damage occur to adjacent structures/landscaping the contractor shall repair the structure/landscaping at no cost to the project. Fugitive dust shall be collected using a high-powered dust control system that will prevent fugitive dust from going into the air. The suction device shall be attached to hand-held electrical powered cutting equipment to assure the maximum amount of fugitive dust will be collected before it has a chance to be released into the atmosphere. All debris and concrete dust that remains on the sidewalk shall be completely cleaned from the surface as well as the surrounding area, i.e. landscaping, walls, etc. and be hauled off and disposed of at an approved site. All costs incurred for disposal of waste material shall be included in unit cost and will not be paid for separately. Temporary asphalt ramps at trip hazards shall be removed at the time of cutting. No additional payment shall be made for removal of asphalt ramps. The maximum average vertical cut allowed for repair is 1 ½ inches. It is the Contractor's responsibility to adhere to the grades required (minimum of 1:12 slopes). Inspection and approval of work shall not relieve the Contractor from achieving all requirements set forth in these specifications. The Contractor shall be responsible to repair any work improperly performed. There will be no additional payment for these repairs, if required.

Subsection 202.09 shall be revised to include the following:

Removal of asphalt mat from gutters shall be accomplished by planing, and/or scraping. If the existing gutter is to remain, the gutter shall be cleaned by sandblasting until the pan is completely clean of residue. Fugitive dust shall be collected using a high-powered dust

WCPM Standard Concrete Construction Details & Technical Specifications



TS-4 July 2016

control system that will prevent fugitive dust from going into the air. Gutters which are excessively (greater than one-quarter inch in depth) planed or damaged shall be removed and replaced by the Contractor at the Contractor's expense. If gutter is designated for removal, no separate payment shall be made for asphalt removal.

Subsection 202.11 shall be revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Removal of concrete paving, crosspans, curb ramps, driveways will be measured by area in square yards, regardless of thickness and includes re-grading.

Removal of asphalt mat will be measured by square yard. If the existing asphalt mat is over 9" asphalt mat will be paid at twice the unit price. If the asphalt mat is more than 5" and is over concrete pavement, both asphalt removal and concrete pavement removal will be paid. If the asphalt mat is less than 5" and is over concrete pavement, only concrete pavement removal will be paid.

Removal of asphalt mat (planning or milling) will be measured by the square yard, regardless of thickness.

Removal of trolley tracks will be measured by centerline lineal track foot, and shall include the removal of rails, ties, connections, cobblestones and concrete runners.

Removal of asphalt mat from concrete gutter and other concrete designated to remain shall be measured by the square yard. Removal of asphalt mat from gutter shall include sandblasting and compressed air cleaning as part of that pay item. Fugitive dust shall be collected using a high-powered dust control system that will prevent fugitive dust from going into the air. Remove Siphon will be measured as a lump sum for each siphon and shall include: removing the connector pipe, two (2) inlets, grates and frames, any related materials, concrete, metal, sealant, debris, excavation and suitable backfill placed and compacted, all materials, labor equipment, hauling and disposal needed to complete this item.

Subsection 202.12 is hereby deleted and replaced as follows:

The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

Clearing and grubbing includes any and all excavation, removal and hauling to DADS of all

WCPM Standard Concrete Construction Details & Technical Specifications



TS-5 July 2016

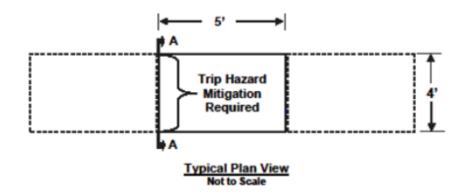
existing landscape materials including soil, sodding, plants, shrubs, landscape rock of any size or gradation, brick, stone pavers, stacked block wall, edging material, landscape fabric and fencing is included in the cost of the related work and is included in the cost of the related work and will not be paid separately unless otherwise noted under "PAY ITEMS".

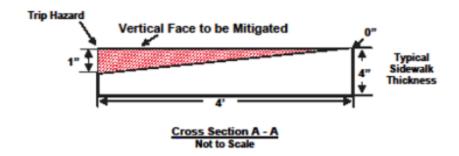
Trip Hazard Sawing repairs performed shall be measured by INCH-FEET of repair made. This will be calculated by measuring the width of the sidewalk to the nearest 0.5 feet in width and multiplying by the average height in inches of the cut to be performed. The vertical cut to be made will be measured by averaging the height of the offset at the two corners of the sidewalk (or other concrete flatwork) to be cut to the nearest 0.25 inches in height as compared to the finished surface. The vertical cut (in inches) shall be multiplied by the concrete width in feet and the resulting product is INCH-FEET. Field measurements will be submitted in neat tabular form by physical address or intersection of completed work items shall be done jointly by the City Inspector and the Contractor. All invoices shall list work by each specific physical street address. See Trip Hazard Sawing measurement example next page:



WCPM Standard Concrete Construction Details & Technical Specifications

TS-6 July 2016





Pay Quantity Calculation Example:

End Area =
$$\frac{1"+0"}{2}$$
 x 4' = 2 Inch Feet

Pay quantity is based on "End Area", in units of inch feet, for trip hazard cut.

Payment will be made under:

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Remove Inlet	EA
Remove Siphon	EA
Removal of Sidewalk	LF
Removal of Curbhead	LF
Removal of Curb and Gutter	LF
Removal of Combination Curb, Gutter and Sidewalk	LF

WCPM Standard Concrete Construction Details & Technical Specifications



TS-7 July 2016

Removal and Reset Flagstone (Includes Salvage and Storage)	SY
Removal of Concrete Pavement	SY
Removal of Asphalt Mat	SY
Removal of Fence	LF
Trip Hazard Sawing (>5 locations) (1Week Completion)	IN-FT
Trip Hazard Sawing (<=5 locations) (1 Month Completion)	IN-FT

When the Contract does not include pay items in Section 202, "Removal of Structures and Obstructions", the removal will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 202



TS-8 July 2016

REVISION OF SECTION 203 EXCAVATION AND EMBANKMENT

Section 203 of the Standard Specifications is hereby revised as follows:

Subsection 203.04 shall include the following:

The Contractor shall protect and promptly dewater and recondition all excavations from water regardless of source.

Subsection 203.05 (c), first paragraph, shall include the following:

Approved backfill material shall be Aggregate Base Course (Class 6) or other material approved by the Project Manager.

Subsection 203.07 shall include the following:

Unless otherwise indicated on the plans, the density requirements for embankment material shall be: clay soils – 95% of the maximum density determined in accordance with AASHTO T-99; granular soils – 90% of the maximum density determined in accordance with AASHTO T-180.

Proof rolling of the subgrade shall be required. Proof rolling shall be done after specified compaction has been obtained. Proof rolling shall be conducted with a double tandem ten wheel end-dump truck, loaded to a minimum gross weight of 45,000 pounds, or other equipment as approved by the Project Manager. Areas found to be weak and those areas which failed shall be ripped, scarified, dried or wetted as necessary and re-compacted to the requirements for density and moisture at the Contractor's expense.

Where unsuitable material is encountered below proposed subgrade, the Project Manager may require the Contractor to remove the unsuitable materials and backfill to the finished grade with Class 6 aggregate base course, or other approved material. The Project Manager may designate as unsuitable those soils that are detrimental to the finished roadway. All unsuitable material shall be disposed of as directed. Excavation including unsuitable material, hauling and disposal of unsuitable material and concrete or any debris related to infrastructure removal (except asbestos or radioactive material), installation of aggregate base course, grading and compaction of suitable material or aggregate base course to proposed subgrade elevation will not be paid for separately but shall be included in the work associated with Section 202, Removal of Structures and Obstructions.

Subsection 203.13 is hereby deleted and replaced as follows:

Muck Excavation, Barrow, Embankment Material, Stripping, Blading and Dozing will not be paid separately but shall be included in the cost of the related work.

Proof rolling, blading, wetting, drying, dozing and sub-grade reconditioning, will not be measured and paid for separately, but shall be included in the cost of the work.

Haul and disposal will not be measured and paid for separately but shall be included in the cost of the work.

Unclassified Excavation will only be measured for payment at work locations where new ADA ramps are constructed replacing sidewalk or existing landscaped areas and new crosspan installations. The measurement for Unclassified Excavation shall be equal to the newly constructed ADA Ramp/crosspan area in square yards multiplied by the depth of soil removed and converted to cubic yards for example; Take the area of the ADA ramp/crosspan measured in square yards then multiply by 1/3 for a quantity that is one foot of depth per square yard and convert that volume to cubic yards of Unclassified Excavation.

3-Man Labor Crew will be measured as the actual number of hours worked and shall include with

WCPM Standard Concrete Construction Details & Technical Specifications



TS-9 July 2016

each application for payment the name, date and hours worked agreed to daily as directed by the City's Construction Project Manager.

Payment will be made under:

PAY ITEMS	PAY UNIT
Unclassified Excavation	СУ
3-Man Labor Crew	HR

When the contract does not include pay items for Unclassified Excavation and Embankment Material, these items will not be paid for separately but shall be included in the work.

WCPM Standard Concrete Construction Details & Technical Specifications

END OF REVISION OF SECTION 203



TS-10 July 2016

REVISION OF SECTION 206 EXCAVATION AND BACKFILL FOR STRUCTURES

Section 206 of the Standard Specifications is hereby revised as follows: Subsection 206.02 shall include the following:

For areas between the flowline and property lines the Contractor shall only use Structural Backfill Class 1, crushed concrete materials are not allowed between the flowline and property lines. Only Structural Backfill Class 1 or existing native sub-grade material will be allowed for fill or fine grading between the flowline and property line.

Flow fill may only be used between the flowlines in the street and only if approved by the Project Manager.

Subsection 203.13 is hereby deleted and replaced as follows:

The Contractor is required to provide submittals for approval for both Structural Backfill Class 1 and Structural Backfill (Flow Fill).

No additional payment will be made for Structural Backfill Class 1 or reused excavated material and retempering and compacting of existing/native material used between the flowline and property line if needed for fill or fine grading. Concrete Roadbase will not be allowed between the flowline and property line.

Only Structural Backfill (Flow fill) will be considered for payment and shall be measured by cubic yards delivered. For acceptance and payment the Contractor must provide copies of load tickets with a summary in tabular form to the Project Manager for review with each pay application for which payment for this item is requested.

Payment will be made under:

PAY ITEM PAY UNIT

Structural Back Fill (Flow Fill)

CY

When the contract does not include pay items for Excavation and Backfill for Structures these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 206



TS-11 July 2016

REVISION OF SECTION 208 EROSION CONTROL

Section 208 of the Standard Construction Specifications is hereby removed in its entirety and replaced with the following:

PART I: DEFINITIONS

Definitions used for this Section shall consist of those listed in Title 1 of the City and County of Denver "Standard Specifications for Construction, General Contract Conditions", 2011 edition.

Definitions used for this Section hereby incorporate those identified within the City and County of Denver Construction Activities Stormwater Manual (CASM).

Additional Definitions applicable to this Section are listed heretofore:

Basis of Payment: The terms under which "Work" is paid, as a designated "Pay Item" in accordance with the quantity measured and the "Pay Unit."

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, installation of devices, maintenance procedures, and other management practices deployed to stabilize the construction site to prevent or reduce the pollution of State Waters (see definition below). Stormwater BMPs can be classified as "structural" (i.e., devices installed or constructed on a site) or "non-structural" (procedures, such as modified landscaping practices).

Colorado Department of Health and Environment (CDPHE): State of Colorado, Water Quality Control Division responsible for issuance of State Construction Stormwater Permit.

Construction Activities Stormwater Discharge Permit (CASDP): Permit issued by the City for compliance with City & County of Denver Revised Municipal Code and Department of Public Works Rules & Regulations concerning the discharge of pollutants in storm generated runoff from construction sites to Municipal Separate Storm Sewer System (MS4, see definition below) or State Waters, via the Municipal Separate Storm Sewer System (MS4).

Construction Activities Stormwater Manual (CASM): City and County of Denver Construction Activities Stormwater Manual (CASM), 2010 edition.

Colorado Department of Transportation (CDOT): State agency that has published standards for Erosion Control with accompanying Erosion Control Supervisor certification courses.

Erosion Control Supervisor (ECS): The Erosion Control Supervisor is assigned by the Contractor to perform duties as described in this Section. The ECS shall be properly trained in BMPs per requirements of Part V below, and shall be under the direction of a Professional Engineer licensed in the State of Colorado when performing any modifications to the Project Stormwater Management Plan (SWMP), as

WCPM Standard Concrete Construction Details & Technical Specifications



TS-12 July 2016

required by CDPHE.

Final Stabilization: Point of construction when all ground surface disturbing activities at the site have been completed and uniform vegetative cover has reached 70% of pre-disturbance vegetative cover (as judged by comparison to nearest fallow vegetation), or equivalent permanent features have been employed. At this point, all temporary BMPs can be removed, all construction and equipment maintenance wastes have been disposed of properly; and all elements of the Stormwater Management Plan have been completed.

Major SWMP Modification: Changes to the original SWMP that removes or adds additional area to the Project, or modifies the hydrology or drainage of the Project. A Major SWMP Modification requires the submission of revised Stormwater Management Plan (SWMP) elements to the Permit Authority for review and approval. Any adjustments to a SWMP must be performed either by or under the direction of a Professional Engineer licensed in the State of Colorado.

Minor SWMP Modification: Modification to the SWMP that does NOT increase the scope or change hydrology of the Project but: modifies/improves specific BMPs in use at site, indicates progression in phasing of the Project, or specifies relocation of previously approved BMPs within the Project. Any adjustments to a SWMP must be performed either by or under the direction of a Professional Engineer licensed in the State of Colorado.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- a) owned or operated by a State, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of stormwater or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the Federal Clean Water Act that discharges to State Waters;
- b) designed or used for collecting or conveying stormwater;
- c) which is not a combined sewer; and
- d) which is not part of a Publicly Owned Treatment Works (POTW).

Permit Authority: The Department authorized by the City to review and process CASDP Applications for Capital and/ or governmental sponsored Projects. The responsible City department serving as the Permit Authority is the Engineering, Regulatory and Analytics Office. As a clarification, the Denver Department of Development Services is the single intake point for all permits

Permit Enforcement Authority: The Department authorized by the City to inspect and enforce CASDP Rules and Conditions for all construction Projects within the City's MS4 Boundary. The responsible City department serving as the Permit Enforcement Authority is the Wastewater Management Division of the Department of Public Works.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-13 July 2016

State Construction Stormwater Permit: Colorado Revised Statues require that all construction sites/development Projects, which, by definition, disturb one or more acres in area, shall be covered by a State issued general permit for construction activities. Information on the application requirements for the State permit can be obtained by phone at 303-692-3500; or by visiting their offices located at 4300 Cherry Creek Drive South, Denver, CO 80246 – 1530 or on the Web at: https://www.colorado.gov/pacific/cdphe/news/water-quality-permits

State Waters: Any and all surface waters which are contained in or flow in or through this State, not to include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

Examples of State Waters include, but are not limited to, perennial streams, intermittent or ephemeral gulches and arroyos, ponds, lakes, reservoirs, irrigation canals or ditches, wetlands, stormwater conveyances (when they discharge to a surface water), and groundwater.

Stormwater Management Plan (SWMP): The Stormwater Management Plan contains the requirements necessary to accomplish all the following:

The SWMP establishes a minimum standard to construct, install, maintain, and remove required BMPs during the life of the Contract to prevent or minimize pollution of stormwater due to erosion, sediment transport, and construction related pollutant generated during all phases of the Project. A SWMP consists of the following elements:

- (i) CASDP Narrative Worksheet with Narrative Report. The Narrative Report and supporting documents should fully address the methods to be used to prevent sediment, debris, and other pollutants from entering the MS4 and/ or State Waters in and around the Project area. Proposed structural and non-structural BMPs should be described with sufficient implementation detail to insure that the logical phases of the proposed construction Project meet the performance standards listed in the CASM.
- (ii) Proposed site drawings and Best Management Practice (BMP) installation details as they apply to the site conforming to the Urban Storm Drainage Criteria Manual, Vol. 3, "Best Management Practices", most current version as issued by the Urban Drainage and Flood Control District (UDFCD), or those established by the City's Department of Public Works. If erosion control drawings were included within the bid documents for the Project, they shall be used for bid purposes and initial planning/ deployment of BMPs on the Project. If provided drawings are signed/ sealed by a Professional Engineer, they have been pre-approved by the Permit Authority and may be used without revision for purposes of submitting for CASDP. If provided drawings do not have signature/ seal of Professional Engineer licensed by the State of Colorado, they will require revision by the Contractor with Professional Engineer signature/ seal prior to submission to the City and County of Denver for CASDP.
- (iii) Supporting documentation related to proposed BMPs that are not currently identified in WCPM Standard Concrete Construction Details & Technical Specifications



TS-14 July 2016

UDFCD Vol. 3 or as otherwise published by the City.

Any preparation of or adjustments to a SWMP must be performed either by or under the supervision of a Professional Engineer licensed in the State of Colorado. SWMP elements submitted to the City shall also meet currently established criteria of the CDPHE as the SWMP must meet all local, State and Federal requirements.

Substantial Completion of Erosion Control: Point of construction when permanent BMPs have been installed, initial growth is in place, and the site is waiting for vegetative cover to reach 70% of predisturbance vegetative cover.

PART II: DESCRIPTION

This Work shall consist of constructing, installing, maintaining, and removing when required, BMPs during the life of the Contract until Final Stabilization to prevent or minimize erosion, sedimentation, and pollution of any waters including storm, drainage-ways, MS4, State Waters, and/ or wetlands. Work under this Section includes the Contractor obtaining required Permits, utilizing SWMP elements provided in the Contract, and/ or SWMP elements specifically prepared by the Contractor as defined herein. The work shall also consist of providing on-going maintenance and monitoring of the SWMP as may be necessary due to the specific and/or dynamic needs of the Project as well as meet all requirements set forth within the CASM.

The Contractor shall coordinate the construction of temporary BMPs with the construction of permanent BMPs to assure economical, effective, and continuous erosion and sediment control and water pollution prevention throughout the construction period until Final Stabilization is achieved

When a provision of this Section or an order by the Permit Enforcement Authority requires that an action be immediate or taken immediately, it shall be understood that the Contractor shall at once begin effecting completion of the action and pursue it to completion in a manner acceptable to the Permit Enforcement Authority, and in accordance with applicable Permitting requirements.

PART III: MATERIALS

The materials to be used for BMPs shall conform to each specific detail as set forth within the Project SWMP or as noted on the Contract Drawings.

PART IV: EROSION CONTROL PERMIT STATUS

The current SWMP status for the Project is as follows:

A SWMP is currently not required for this project as the proposed disturbed area and/ or proximity to stream does not meet the minimum criteria for requiring a CASDP. However, the responsibilities for

WCPM Standard Concrete Construction Details & Technical Specifications



TS-15 July 2016

minimizing sediment pollution from the Project have not been waived, and as such, the City hereby requires the Contractor to perform as specified in the following notes. Because a SWMP and CASDP are not necessary for the Project, all cost for performance of the following notes shall not be paid for separately, but shall be included in the work.

"A CASDP Permit will not be required for this project, however, the <u>Contractor and/or their authorized agents</u> shall ensure that all potential pollutants generated during demolition, excavation, trenching, boring, grading, or other construction Work associated with this permit, be prevented from discharge to stormwater conveyance systems in the vicinity of the Project.

The Contractor and/or their authorized agents shall remove all sediment, mud, construction debris, or other potential pollutants that may have been discharged to or, accumulate in the flow lines of storm drainage appurtenances and public rights of ways of the City and County of Denver as a result of construction activities associated with this Project. All removals shall be conducted in a timely manner.

The Contractor shall be held responsible for remediation of any adverse impacts to the MS4, State Waters, waterways, wetlands, and or other public or private properties, resulting from work done as part of this Project.

The Contractor and/or their authorized agents shall insure that all loads of cut and fill material imported to or exported from the Project shall be properly covered to prevent loss of the material during transport on public rights of way." (Sec.49-552; Revised Municipal Code)

Approved erosion and sediment control 'Best Management Practices' shall be maintained and kept in good repair for the duration of the Project. All necessary maintenance and repair shall be completed immediately upon discovery of any deficiency or defect.

<u>The Contractor and/or their authorized agents</u> shall implement the following Best Management Practices (BMPs) on site during construction. Best Management Practice (BMP) installation details and maintenance shall conform to the Urban Storm Drainage Criteria Manual, Vol. 3, "Best Management Practices", most current version as issued by the Urban Drainage and Flood Control District (UDFCD), or those established by the City's Department of Public Works.

- 1. VEHICLE TRACKING CONTROL: This BMP is required at all access points to a construction site that are used by vehicular traffic or construction equipment.
- INLET PROTECTION: This BMP is required on all existing or proposed storm sewer
 inlets in the vicinity of the construction site that may receive site runoff. The BMP
 must be appropriate to the type of storm inlet and appropriate for the ground
 surface at the inlet.
- 3. INTERIM SITE STABILIZATION: This BMP is required to provide a measure for preventing the discharge of sediment from construction sites where overlot grading or

WCPM Standard Concrete Construction Details & Technical Specifications



TS-16 July 2016

other site disturbance has occurred. This BMP is particularly necessary on sites where construction activities/disturbance will be limited to small areas of the project site. Acceptable BMPs include:

- a. Preserving existing vegetation
- b. Seeding and planting
- c. Mulching
- d. Mulching and seeding
- e. Temporary/Permanent re-vegetation operations
- f. Chemical soil stabilizer application (requires Permit Enforcement Authority approval)
- 4. WASTE MANAGEMENT/CONTAINMENT: This BMP requires that all construction wastes, fuels, lubricants, chemical wastes, trash, sanitary wastes, contaminated soils or debris shall be contained on site, protected from contact with precipitation or surface runoff, periodically removed from the construction site, and properly disposed of.
- 5. SPILL PREVENTION /CONTAINMENT: This BMP defines the measures proposed for preventing, controlling, or containing spills of fuel, lubricants, or other pollutants; and protecting potential pollutants from contact with precipitation or runoff.
- 6. CHUTE WASHOUT CONTAINMENT: Water used in the cleaning of ready mixed concrete truck delivery chutes shall be discharged into a predefined, bermed containment area on the job site. The required containment area is to be bermed so that wash water is totally contained. Wash water discharged into the containment area shall be allowed to infiltrate or evaporate. Dried concrete waste shall be removed from the containment area and properly disposed of.

 The direct or indirect discharge of water containing waste concrete to the storm sewer system is prohibited (Sec.56-102a, c; Revised Municipal Code, City and County of Denver).
- 7. STREET SWEEPING: This BMP requires that paved surfaces which are adjacent to construction sites be swept in a timely manner when sediment and other materials are tracked or discharged on to them. Either sweeping by hand or use of street sweepers is acceptable. Street sweepers using water while sweeping is preferred in order to minimize dust. Flushing off paved surfaces with water is prohibited.
- 8. PERIMETER CONTROL: This BMP requires that a construction site install a perimeter control measure along the edge of the construction site, to prevent, or filter the discharge of surface runoff from the construction site. The type of perimeter control used shall be determined based on site conditions and location. Maintenance and repair of the control measure shall occur as needed, in a timely manner.
- 9. STOCK PILES: Soils that will be stockpiled for more than thirty (30) days shall be protected from wind and water erosion within fourteen (14) days of stockpile construction. Stabilization of stockpiles located within 100 feet of an MS4 or State Waters, or with slopes 3 to 1 or greater shall be completed within seven (7) days following stockpile construction. Stabilization and protection of the stockpile may be accomplished by any of the following: Mulching, Temporary/Permanent Revegetation Operations, Chemical Soil Stabilizer Application (requires Permit Enforcement Authority approval), or erosion control matting/Geotextiles. If stockpiles are located

WCPM Standard Concrete Construction Details & Technical Specifications



TS-17 July 2016

- within 100 feet of top of bank of an MS4 or State Waters, a drainage-way or the site perimeter, additional sediment controls shall be required.
- 10. SAW CUTTING OPERATIONS: The Contractor shall protect all storm sewer facilities adjacent to any location where pavement cutting operations involving wheel cutting, saw cutting, or abrasive water jet cutting are to occur. The Contractor shall remove and properly dispose of all waste products generated by said cutting operations on a daily basis or as needed throughout the work day. The discharge of any water contaminated by waste products from cutting operations to the storm sewer system is prohibited. (Sec.56-102a, c; Revised Municipal Code, City and County of Denver)."

PART V: CONSTRUCTION REQUIREMENTS

A) SCHEDULES:

At least 10 working days prior to the beginning of any construction work, the Contractor shall submit for approval a schedule for accomplishment of temporary and permanent BMPs shown in the SWMP. This schedule shall specifically indicate the sequence of clearing and grubbing, earthwork operations, and construction of temporary and permanent BMPs. The schedule shall include BMPs for all areas within the Project boundaries, including but not limited to, haul roads, borrow pits, and storage and other staging sites. Work shall not be started until the BMP schedule has been approved in writing by the Project Manager, and on site pre-construction inspection is performed and approved by CCD's NPDES inspector. Once the work has started, and during the active construction period, the Contractor shall update the schedule for all BMPs on a regular basis, and as required to keep the SWMP in compliance.

- B) <u>CONSTRUCTION IMPLEMENTATION:</u> The Contractor shall incorporate into the Project all BMPs that are appropriate for the current phase of work, as outlined in the accepted schedule.
- C) <u>UNFORSEEN CONDITIONS:</u> The Contractor shall direct the ECS (under the supervision of a Professional Engineer licensed in the State of Colorado) to design and implement BMPs for correcting conditions unforeseen during design of the Project, or as possible for emergency situations, which arise during construction. The Project's SWMP, UDFCD Vol 3 standards and details, and CDOTs "Erosion Control and Storm-Water Quality Guide," and any approved modification to these documents as proposed by the Contractor, shall be used as reference documents for the purpose of designing appropriate BMPs. Measures and methods proposed by the Contractor to deal with unforeseen conditions shall be reviewed and approved in writing by the Permit Enforcement Authority and the Project Manager prior to implementation and construction.

In an emergency situation, the Contractor shall use best judgment for immediately responding to the emergency situation as it arises, and shall notify the Permit Enforcement Authority and ECS of the emergency situation and BMPs employed in response as soon as practical after installation.

D) PERMITS:

The Contractor shall obtain all required permits for the Project including those required by federal, state, and local agencies. The Contractor shall obtain (or transfer from the City when specified) required

WCPM Standard Concrete Construction Details & Technical Specifications



TS-18 July 2016

erosion control and water quality permits and shall be responsible for compliance with all requirements under any such permits.

E) **EROSION CONTROL SUPERVISOR:**

Contractor shall assign to the Project an employee or subcontractor to serve as Erosion Control Supervisor (ECS). The ECS shall be a person other than the Contractor's superintendent, foreman, or equivalent supervisory position. The ECS shall be experienced in aspects of BMP construction and have satisfactorily completed a Colorado DOT or equivalent ECS training program authorized by the City. Proof that this requirement has been met shall be submitted to the Project Manager at least ten working days prior to the beginning of any soil disturbance work. A list of authorized ECS training programs is available from the City upon request. Additionally, per definition, the ECS shall be under the direction of a Professional Engineer licensed in the State of Colorado when performing any modifications to the Project Stormwater Management Plan (SWMP).

The ECS shall be responsible for oversight of the implementation, maintenance, and revision of the SWMP for the duration of the Project. CCD requires the ECS to fulfill responsibilities as outlined by CDPS such as having financial control and authority to implement BMPs. The ECS's responsibilities shall be as follows:

- 1) Ensure compliance with all water quality permits or certifications in effect during the construction work.
- 2) Supervise the installation, construction, and maintenance of all BMPs specified in the Contract and coordinate the construction of BMPs with all other construction operations.
- 3) Direct the implementation of suitable BMPs as necessary to correct unforeseen conditions or emergency situations. Direct the dismantling of those features when their purpose has been fulfilled due to completion of each Project phase unless the Permit Enforcement Authority agrees that the features be left in place.
- 4) Attend the preconstruction conference, erosion control preconstruction inspection, Project scheduling meetings, weekly construction/ field meetings, substantial completion and final stabilization inspections, and other meetings regarding construction that could impact water quality.
- 5) Evaluate all non-stormwater coming onto the site, such as springs, seeps, and landscape irrigation return flow. If such flow is identified, the ECS shall propose appropriate SWMP modifications to the Contractor to protect off-site water from becoming contaminated with sediment or other pollutants.
- 6) Coordinate with the Contractor to implement necessary actions to reduce anticipated or presently existing water quality or erosion problems resulting from construction activities.
- 7) Coordinate with the Contractor to ensure all labor, material, and equipment deployed to meet SWMP requirements is judged appropriately.
- 8) During construction, update and record the following items in the SWMP as changes occur:
 - (i) Construction boundaries (may require Major SWMP Modification)
 - (ii) Areas of disturbance (may require Major SWMP Modification)
 - (iii) Areas used for storage of construction materials, equipment, soils, or wastes.
 - (iv) Location of any dedicated asphalt or concrete batch plants.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-19 July 2016

- (v) Location of construction offices and staging areas.
- (vi) Location of work access routes during construction.
- (vii) Location of borrow and waste.
- (viii) Location of temporary and permanent stabilization

The ECS shall start a new site map before the current one becomes illegible. All site maps shall remain with the SWMP paperwork.

- 9) Amend the SWMP whenever there are: additions, deletions, or changes in locations of BMPs SWMP revisions shall be recorded immediately. Items shall be dated and signed at time of occurrence. Specifically, amendments shall include the following:
 - (i) A change in design, construction, operation, or maintenance of the site which would require the implementation of new or revised BMPs; or
 - (ii) Changes when the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity.
 - (iii) Changes when temporary BMPs are no longer necessary from changes in Project phase and are removed. All inspection and maintenance activities or other repairs shall be documented.

All inspection and maintenance activities or other repairs shall be documented. The SWMP and documentation shall be kept on the Project site at all times.

- 10) Modify the site map with arrows to indicate direction of surface and storm water flowing across the Project site.
- 11) When adding or revising BMPs in the SWMP, amend the narrative to explain what, when, where, why, and how the BMP is being used, and add a detail to the SWMP.
- 12) If using existing topography, vegetation, etc. as a BMP, label it as such in the SWMP site map; amend the Narrative to explain when, why, and how the BMP is being used in the SWMP.
- 13) Record on the SWMP, and implement the approved plan for concrete and asphalt saw cutting, grinding, and milling containment and removal.
- 14) Update the potential pollutants list in the SWMP throughout construction meeting CASDP requirements.
- 15) Spills, leaks, or overflows that result in the discharge of pollutants shall be documented on the inspection form. The ECS shall record the time and date, weather conditions, reasons for spill, and how it was remediated. The ECS shall immediately report to the Contractor and Project Manager the following instances of noncompliance:
 - (i) Noncompliance which may endanger health or environment.
 - (ii) Spills or discharge of hazardous substance or oil which may cause pollution of the City MS4 or State Waters.
 - (iii) Discharge of stormwater which may cause an exceedance of a water quality standard.
- 16) Perform a thorough inspection of the stormwater management system at least every seven (7) days and within 24 hours after any precipitation or snowmelt event with the potential to cause surface erosion. If no land disturbing construction activities are present—during a storm event, post-storm event inspections shall be conducted prior to commencing—any new land disturbing construction activities, but no later than seventy-two (72) hours—following the storm event. The inspection records shall be kept on-site in a written or previously

WCPM Standard Concrete Construction Details & Technical Specifications



TS-20 July 2016

approved format. Inspections shall be conducted during the progress of the work, during work suspensions, or until Final Stabilization of all disturbed areas is approved by Permit Enforcement Authority and shall include the following services at a minimum:

- (i) The construction site perimeter, disturbed areas, and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. BMPs identified in the SWMP shall be observed to ensure that they are operating correctly.
- (ii) The description of potential pollutant sources, and the BMPs identified in the SWMP, shall be revised and modified as appropriate based on the results of the inspection as soon as practicable after such inspection. Modification to the SWMP shall be implemented in a timely manner and in accordance with applicable Permit requirements.
- (iii) The operator shall keep a record of inspections. Uncontrolled releases of sediment or polluted storm water or measurable quantities of sediment found off the site shall be recorded with a brief explanation as to the measures taken to prevent future releases as well as any measures taken to clean up the sediment that has left the site. Inspection records shall be made available to the City upon request. Note: documentation of uncontrolled releases at site DOES NOT alleviate any State or Federal requirements for reporting of discharges or upset conditions. Care shall be taken to ensure compliance with all regulatory requirements at site.
- (iv) Seven (7) day inspections are required during construction and at all times until Final Stabilization has been achieved. Seeding and mulching of disturbed areas does NOT count as final stabilization until such time as 70% pre disturbed vegetative cover has been achieved. Sites with growth in place sufficient to deter erosion that have not yet achieved final stabilization may petition the City to grant an alternative inspection schedule while awaiting additional growth for final stabilization. These inspections must be conducted in accordance with the above paragraphs.

F) APPLYING BMPs TO STABILIZE SITE:

The duration of the exposure of incomplete construction to the effects of weather shall be as short as practicable. BMPs such as: seeding, surface roughening, mulching, applying tackifier, use of geotextiles and matting, permanent landscaping, or other selected BMPs shall be applied within fourteen (14) calendar days of completion of grading/soil disturbance activities to stabilize the construction site unless disturbed area is within 100 feet of an MS4 or State Waters or has slopes of 3 to 1 or greater in which case BMPs shall be implemented within seven (7) calendar days of completion of grading activities. Disturbed areas where work is temporarily halted shall be temporarily stabilized within seven (7) days after the activity ceased unless work is to be resumed within thirty (30) calendar days after the activity ceased.

Clearing and grubbing operations shall be scheduled and performed to minimize both the area of the Project disturbed at a given time and the amount of time that disturbed areas remain open. BMPs such as temporary seeding are required between successive construction stages when disturbed areas will not be stable or active for thirty (30) calendar days or more. No payment will be made for

WCPM Standard Concrete Construction Details & Technical Specifications



TS-21 July 2016

additional work required because the Contractor has failed to properly coordinate the BMP schedule, thus causing previously stabilized areas to be disturbed by operations that could have been performed prior to the stabilization. Upon failure of the Contractor to coordinate the permanent BMPs with the grading operations in a manner to effectively control erosion and prevent water pollution, the Permit Enforcement Authority can suspend the Contractor's grading operations and the Project Manager can withhold monies due to the Contractor on current estimates until such time that all aspects of the work are coordinated in an acceptable manner.

- G) <u>WORK OUTSIDE LIMITS OF CONSTRUCTION</u>: Non-contiguous areas outside the limits of construction that are used by the Contractor that include, but are not limited to, borrow pits, haul routes, storage and disposal areas, field offices, maintenance, batching areas, etc., shall have appropriate BMPs implemented by the Contractor at the Contractor's expense. Should said areas meet applicable CASDP Permit criteria, the Contractor shall obtain a separate CASDP or amend existing CASDP for each area as applicable at no additional expense to the City.
- H) <u>MAINTENANCE</u>: The Contractor shall continuously maintain erosion and sediment control BMPs on a daily basis or as directed by the ECS so that they function properly during and after construction (including work suspensions) until Final Stabilization has been approved by the Permit Enforcement Authority Maintenance includes, but is not limited to, the following items:
 - (i) From the time seeding and mulching work begins until the date the Project has reached Substantial Completion of Erosion Control, the Contractor shall keep all seeded areas stabilized at all times. Any damage to seeded areas or to mulch materials shall be promptly repaired.
 - (ii) All inspection sediment removal, and BMP maintenance activities to comply with all Federal, State & Local erosion control permit requirements until Final Stabilization is reached.
 - (iii) All removal and replacement of existing BMPs due to damage to same suffered either by the contractor, outside agencies, the public, or acts of God.
 - (iv) All required mechanical and/ or manual street sweeping.
 - (v) Discretionary changes required of any regulatory enforcement officer.

If the Contractor fails to maintain the BMPs in accordance with the Contract, or as directed, the City may at the expiration of a period of 48 hours, after having given the Contractor written notice, proceed to maintain BMPs as deemed necessary. The cost thereof will be deducted from any compensation due, or which may become due to the Contractor under this Contract.

- I) MINOR SWMP MODIFICATIONS: Shall be made in the field by the Contractor and thoroughly documented in the Contractor's SWMP narrative and drawings. Should the Permit Enforcement Authority deem minor field modifications inadequate, the Contractor may be required to a) make specific modifications as requested by the Permit Enforcement Authority or
- b) Return to the original approved design specifications. Minor SWMP Modifications are allowed, covered under the original CASDP, and required as part of standard maintenance and operation.
- J) MAJOR SWMP MODIFICATION: The City reserves the right to require changes in the Work or Project Limits that may require a Major Modification to the SWMP and/ or CASDP due to unforeseen WCPM Standard Concrete Construction Details & Technical Specifications

DENVER PUBLIC WORKS

TS-22 July 2016

circumstances. Should this occur, the Contractor will be responsible for the following (as applicable) and applying for CASDP amendment:

- (i) Make required revisions to comply with changing Federal or State rulemaking if it occurs within timeframe of the Project
- (ii) Make required revisions due to unforeseen or unplanned conditions leading to deficient Drawings/ SWMP (hazardous materials encountered, landfills, expansion of work limits, etc.)
- (iii) Prepare revised SWMP elements endorsed by a Professional Engineer licensed in the State of Colorado.
- K) <u>SUBSTANTIAL COMPLETION OF EROSION CONTROL:</u> When a CASDP is required for the Project, Substantial Completion of the Project as defined by the City and County of Denver General Contract Conditions cannot be reached until Substantial Completion of Erosion Control has been granted. Granting of Substantial Completion of Erosion Control must be requested by the Contractor and be approved by the Permit Enforcement Authority in the form of a "Certificate of Substantial Completion of Erosion Control".
- L) <u>FINAL STABILIZATION:</u> Granting of Final Stabilization must be requested by the Contractor and be approved by the Permit Enforcement Authority. Other permanent soil stabilization techniques may be proposed, in writing, by the Contractor and used upon approval, in writing, by the Project Manager and Permit Enforcement Authority.

The Contractor shall follow the following procedures for approval of Final Stabilization:

- (i) The Contractor shall file Inactivation Request for Construction Activities Stormwater Discharge Permit (available within CASDP guidance documents) with the Permit Enforcement Authority.
- (ii) The Contractor shall coordinate with the Permit Enforcement Authority to hold a Final Inactivation Inspection.
- (iii) If passing, the Permit Enforcement Authority transmits a letter of approval for Final Stabilization.
- (iv) If not passing, the Permit Enforcement Authority transmits a letter of denial for Final Stabilization with associated inspection report to Contractor.
- (v) Stabilization, inspection and maintenance requirements shall continue until confirmation of having met final closure requirements have been granted in writing by the Permit Enforcement Authority.
 - When Final Stabilization has been reached, the Permit Enforcement Authority shall issue a "Certificate of Final Stabilization".
- (vi) Once the Inactivation request is approved by the City and County of Denver, the contractor can apply to close the State Stormwater Permit.

M) FINAL ACCEPTANCE:

CASDP obligations (including reaching Final Stabilization) may hinder the ability to reach Final Acceptance for the overall Project as defined in the City General Contract Conditions.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-23 July 2016

PART VI: CONSTRUCTION OF BMPs

BMPs shall be constructed so that they conform to all requirements as set forth within the Project SWMP. They shall meet all requirements set forth within each BMP detail and shall be installed and maintained so that they function in an effective and operable manner.

PART VI: METHOD OF MEASUREMENT

Because a SWMP and CASDP are not necessary for the Project, all cost for performance of the Best Management Practices, with the exception of inlet protection, shall not be paid for separately but shall be included in the work. Inlet protection shall be paid on a per unit basis.

Removal of sediment & trash that is or is not generated by construction activities will not be measured separately but shall be included in the work.

Any excavation required for the removal of sediment from traps, basins, areas adjacent to silt fences and erosion bales, and any other cleanout excavation of accumulated sediment, and removal of check d a m s or storm drain inlet protection will not be measured separately but shall be included in the work.

PART VII: BASIS OF PAYMENT

Because a SWMP and CASDP are not necessary for the Project, all cost for performance of the Work to furnish, install, maintain, replace (if not due to contractor negligence), remove, and dispose of BMPs specified in the Contract shall not be paid for separately, but shall be included in the work. Only Storm Drainage Inlet Protection will be measured and each Bid Item unit includes all materials, equipment and labor necessary to protect each inlet regardless of the size, type or timeframe as per the current City of Denver Stormwater Management Plans / (SWMP) requirements The cost for any corrective actions required by the State or City due to contractor's failure to obtain or comply with applicable Permits will be borne by the Contractor, including fines and penalties. In the case of failures on the part of the Contractor in controlling erosion, sedimentation, and/or water pollution, the City may provide the necessary corrective actions. All corrective action costs, including Project Managing costs, will be charged to the Contractor, and appropriate deduction will be made from the Contractor's monthly pay estimate. The sole remedy for additional costs associated with installation of BMPs as required by regulatory agencies to ensure compliance with local and State requirements shall be included in the cost of the adjacent concrete repair work as provided in the Bid Schedule of this Contract. The Contractor however may submit a separate itemized Change Order for any required Major SWMP Modification proposed by the City during the course of the Project.

All other work required as set forth in this Revised Section 208—Erosion Control including all materials, equipment and labor, to permit, set-up, maintain, document, remove and clean-up all erosion control BMP's as per current City of Denver Stormwater Management Plans/ (SWMP) requirements will not be paid separately; all costs incurred by the Contractor to meet the requirements of this Section regarding Erosion Control unless provided for in the Bid shall be included in the related appurtenance.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-24 July 2016

Payment will be made under:

PAY ITEM PAY UNIT

Storm Drainage Inlet Protection

EΑ

Only Storm Drainage Inlet Protection will be measured for payment and each Bid Item unit includes all materials, equipment and labor necessary to protect each inlet regardless of the size or type as per the current City of Denver Stormwater Management Plans / (SWMP) requirements. All other work required as set forth in this Revised Section 208 – Erosion Control including all materials, equipment and labor, to permit, set-up, maintain, document, remove and clean-up all erosion control BMP's as per current City of Denver Stormwater Management Plans / (SWMP) requirements will not be paid separately; all costs incurred by the Contractor to meet the requirements of this Section regarding Erosion Control unless provided for in the Bid shall be included in the related appurtenance. When the contract does not include pay items for Erosion Control, these items will not be paid for separately but shall be included in the work.

Payment for each BMP item will be full compensation for all work, materials and equipment required to furnish, install, maintain, remove, and dispose of it. BMPs as deployed per the SWMP requiring replacement due to Contractor negligence and or carelessness shall be provided at the Contactor's expense.

Temporary BMPs required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or for the Contractor's convenience, shall be performed at the Contractor's expense.

If the Contractor fails to complete construction within the approved contract time, payment will not be made for Section 208 pay items for the period of time after expiration of the approved contract time. These items shall be provided at the Contractor's expense.

The cost for any corrective actions required by the State or City due to contractor's failure to obtain or comply with applicable Permits will be borne by the Contractor, including fines and penalties. In the case of failures on the part of the Contractor in controlling erosion, sedimentation, and/or water pollution, the City may provide the necessary corrective actions. All corrective action costs, including Project engineering costs, will be charged to the Contractor, and appropriate deduction will be made from the Contractor's monthly pay estimate.

The sole remedy for additional costs associated with installation of BMPs as required by regulatory agencies to ensure compliance with local and State requirements shall be per unit BMP as provided in the Bid Schedule of this Contract. The Contractor however may submit a separate itemized Change Order for any required Major SWMP Modification proposed by the City during the course of the Project.

When the contract does not include pay items for Erosion Control these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 208

WCPM Standard Concrete Construction Details & Technical Specifications



TS-25 July 2016

REVISION OF SECTION 209 WATERING AND DUST PALLIATIVES

Section 209 of the Standard Specifications is hereby revised as follows:

Subsections 209.07 and 209.08 shall be revised as follows:

Watering and Dust Palliatives will not be measured and paid for separately but shall be included in the cost of the work.

END OF REVISION OF SECTION 209

WCPM Standard Concrete Construction Details & Technical Specifications



July 2016 TS-26

REVISION OF SECTION 210 RESET STRUCTURES

Section 210 of the Standard Specifications is hereby revised as follows:

Subsection 210.09 shall include the following:

Signs and traffic signals shall be reset in accordance with the City and County of Denver Transportation Engineering Services requirements needed to remove and restore existing signage and at locations indicated on the plans, or as directed by the Project Manager. It will be the Contractor's responsibility to supply and install any new materials needed to restore the signs and traffic signals to service at the new location.

Subsection 210.10 shall include the following:

Manholes, water meters, inlet castings, valve boxes and pull boxes shall be adjusted in accordance with the applicable standards of the Utility Owner. The Contractor shall be responsible for determining the proper Utility Owner and coordinating these adjustments. Survey range boxes shall be adjusted as directed by the Project Manager. Bid Item "Reset Inlet Grate, Frame and Adjustable Curbhead with new castings" will include for each existing single inlet all materials, equipment and labor, to remove and dispose of the existing castings and provide and place new castings with mounting hardware, grout and up to 1 course of standard brick riser as per Wastewater Standard Details DRWG NO. S-716 and all other labor, equipment, materials and hauling and disposal necessary to complete the work. Both Bid Items; "Adjust Inlet Frame" and "Adjustable Curbhead and reset Inlet Frame, Grate and Adjustable Curbhead" shall include all related work required to construct the rebar reinforced 8" x 12" x inlet width concrete Curb Head Beam as per Wastewater Standard Details Drawings 616.1-3. Restoration of landscaping beyond 12" limits outlined on the plans and/or as marked in the field by the Project Manager will not be paid for.

Subsection 210.12 shall include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Subsection 210.13 shall be revised to include the following:

The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage.

<u>PAY ITEMS</u>	PAY UNIT
Reset Ground Sign	EA
Adjust Manhole, Meter, Valve Box, Pull Box	EA
Adjust Inlet Frame and Adjustable Curb Head	EA

WCPM Standard Concrete Construction Details & Technical Specifications



TS-27 July 2016

EΑ

When the contract does not include pay items for Reset Structures, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 210



WCPM Standard Concrete Construction Details & Technical Specifications

REVISION OF SECTION 212 SEEDING, FERTILIZER AND SODDING

Section 212 of the Standard Specifications is hereby revised as follows:

All landscape restoration will be completed and accepted prior to consideration of the reduction of retainage. Normally landscape restoration will start as soon as possible after concrete construction has been completed but landscape restoration shall be completed within 7 calendar days after the date the adjacent concrete was poured. Minor exceptions may be requested by the Contractor in writing for consideration by the Project Manager during cold weather months when landscape work is not practical.

Subsection 212.01 shall include the following:

This work shall include restoring all existing landscaping that is within twelve inches (12") of the concrete repair reconstruction areas that are damaged as a result of the reconstruction activity. The bid item "Restore Landscaping, In Kind" item shall apply to all landscaping within the limits of construction unless agreed upon in writing by the Project Manager in advance of the related concrete repair work. Materials used to restore landscaping shall be replaced "in-kind" unless otherwise approved by the Project Manager. All landscaped area to be restored shall be backfilled and compacted with native soil so that they may have a minimum of 4" and a maximum of 6" of amended topsoil or planters mix placed in lieu of existing backfill material in the top 4" cross sectional vertical area below finish grade that is hand tamped and topped off to avoid settlement. Amended topsoil or planter's mix shall be 70% top soil with 30% compost and the source must be submitted and approved by the Project Manager prior to use. Seeding areas larger than twelve inches must include hydraulic mulching with all costs to be included in the square foot price of "Restore Landscaping, In-Kind". Only at the direction of the Project Manager will seeding be accepted in lieu of sodding. Amended Top Soil and Planter's Mix samples and mix design and supplier must be submitted for approval prior to use.

"Restore Landscaping, In Kind" shall include restoring all landscaping that is disturbed within the limits of construction. This includes any and all landscape plants, trees, shrubs, or other materials including concrete, asphalt, pavers or blocks (concrete or brick), landscape rock, sodding, flowers, shrubs and landscape timbers or statuaries. The Contractor shall be required to maintain the landscaping planting in accordance with Section 214.

Subsection 212.01 shall include the following:

Work performed in areas under the jurisdiction of Denver Parks and Recreation Department shall conform to the standards of that Department. All costs related to acquiring the Denver Parks ROW permit are included in the Restore Landscaping, In-Kind Pay Item and will not be paid separately.

Subsection 212.07 is hereby revised to include the following:

Only the work restoring existing landscaping that is within twelve inches (12") of the concrete repair reconstruction areas that are damaged as a result of the reconstruction activity will be measured for payment. Any areas beyond twelve inches (12") that are damaged by the Contractor will not be measured for payment and will be repaired by the Contractor at no

WCPM Standard Concrete Construction Details & Technical Specifications



TS-29 July 2016

expense to the City. Copies of Top Soil load tickets including a summary sheet shall be submitted for review and acceptance in advance of each pay application.

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

<u>PAY ITEMS</u>	PAY UNIT
Sodding	SF
Restore Landscaping, In-Kind	SF
Amended Top Soil or Landscape Planter's Soil Mix	CY

When the contract does not include pay items for landscape repair, top soil, fertilizer, seeding or sodding, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 212

WCPM Standard Concrete Construction Details & Technical Specifications



TS-30 July 2016

REVISION OF SECTION 304 AGGREGATE BASE COURSE

Section 304 of the Standard Specifications is hereby revised as follows: Subsection

304.01 is revised as follows:

This work includes any type of removal or excavation of in-fill material, loading, removal, hauling and disposal of unsuitable materials and consists of furnishing and placing aggregate base course, only if required or at the direction of the Project Inspector or Project Manager on prepared subgrade. The Contractor shall work to minimize the removal of suitable undisturbed existing subgrade when performing the removal of existing concrete or asphalt infrastructure or grading existing soil.

Subsection 304.02 is revised as follows:

The use of Aggregate Road Base made from recycled concrete is prohibited between the flowline and property line and in any work areas adjacent to landscaped areas.

Subsection 304.06 is revised as follows:

All material within the street section shall be compacted to 95% of maximum density as determined in accordance with AASHTO T-99; all areas outside the street section shall be compacted to 90% of the maximum density determined in accordance with AASHTO T-180. It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal approved by the City Project Manager. Quality Control testing, reports and submittals will not be paid for separately but shall be included in the work.

Subsection 304.07 is hereby revised as follows:

Aggregate Base Course will be measured by the ton. All quantities to be submitted for payment must include copies of the load tickets, delivered to the project location, accompanied by a summary including the load ticket number supplier, date and weight in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and must be submitted for review and acceptance in advance of each pay application.

Subsection 304.08 is hereby revised as follows:

Payment for the accepted quantities of Aggregate Base Course measured per ton shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including excavation, removal, hauling and disposal of removal items, excavation of subgrade material, installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation.

PAY ITEM PAY UNIT

Aggregate Base Course (Class 6) (Complete in-Place)

TN

When the contract does not include pay items for Aggregate Base Course, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 304

WCPM Standard Concrete Construction Details & Technical Specifications



TS-31 July 2016

REVISION OF SECTION 306 RECONDITIONING

Section 306 of the Standard Specifications is hereby revised as follows:

Subsection 306.01 shall be revised to include the following:

All existing subgrade on alleys and streets from back of curb to back of curb shall be reconditioned.

Subsection 306.02 shall be revised to include:

Unless otherwise indicated on the plans, the density requirements for reconditioning shall be:

- Clay Soils 95% of the maximum density determined in accordance with AASHTO T-99
- Granular Soils 90% of the maximum density determined in accordance with AASHTO T-180

It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and compile comprehensive reports as per Pre- construction submittal approved by the City Project Manager. Quality Control material testing, reports and submittals will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum the QCP shall include the following:

- 1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
- 2. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
- 3. Sub-grade compaction and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance. High Early Strength Concrete is used.
- 4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 306.04 is revised as follows:

Reconditioning will not be measured and paid for separately but shall be included in the work.

END OF REVISION OF SECTION 306

WCPM Standard Concrete Construction Details & Technical Specifications



TS-32 July 2016

REVISION OF SECTION 401 AND 403 PLANT MIX PAVEMENTS

Sections 401 and 403 of the Standard Specifications for Road and Bridge Construction are hereby deleted and replaced with the Comprehensive Specifications for the Metropolitan Government Pavement Project Managers Council (MGPEC), included herein. Section 9.16 and section 9.17 of the MGPEC Specifications is hereby deleted and replaced as follows:

HMAP patching or overlay shall be paid by the ton by batch ticket. Tack Coat will not be measured and paid for separately but shall be included in the cost of the work.

All Asphalt Mix Designs are a required submittal and must be approved prior to use in the City and County of Denver.

It is the Contractor's responsibility to provide Quality Control testing for material density and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work. Quality Control material testing, reports and submittals will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum the QCP shall include the following:

- 1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
- 2. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
- Sub-grade compaction and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance High Early Strength Concrete is used.
- 4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

METHOD OF MEASUREMENT

Section 401.22 and 403.04 of the Standard Specifications is hereby revised as follows:

All work performed will be measured by the ton based on copies of the approved supplier's asphalt load tickets provided with a summary table with each Application for Payment.

WCPM Standard Concrete Construction Details & Technical Specifications



Payment will be made under:

PAY ITEM PAY UNIT

HBP Patch/Overlay TON

When the contract does not include pay items for Plant Mix Pavements, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 401 / 403

TS-34 July 2016

REVISION OF SECTION 412 PORTLAND CEMENT CONCRETE PAVEMENT

Section 412 of the Standard Specifications is hereby revised as follows:

Subsection 412.01 shall be revised to include the following:

This work shall also include concrete streets, driveways, crosspans, valley gutter, bus pads and alley paving.

Subsection 412.03 shall be revised to include the following:

All Portland Cement used on this Contract shall be a minimum 4200psi 28 day design CDOT Class P with 20% maximum fly ash and shall be reinforced with polypropylene fibers. Polypropylene fibers shall be FIBERMESH® or APPROVED EQUIVALENT. Length of fibers shall be as recommended by the manufacturer. Add 1.5 pounds FIBERMESH® or APPROVED EQUIVALENT per cubic yard of concrete. The Contractor is required to submit copies of all concrete batch tickets for loads delivered during the previous pay period with each Application for Payment to the Project Manager on the Contract. All Portland Concrete Cement All Asphalt Mix Designs are a required submittal and must be approved prior to use in the City and County of Denver.

It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Preconstruction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work. Quality Control material testing, reports and submittals will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum the QCP shall include the following:

- 1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
- The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
- 3. Sub-grade compaction, HBP asphalt patch and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance High Early Strength Concrete is used. For Concrete Strength Cylinder test a minimum of 1 set of four cylinders taken in the first 100CY then again in the second hundred cubic yards then every 500CY thereafter provided all tests exceed minimum strength requirements except as noted above for additional high early concrete tests.
- 4. Written test reports including all pertinent information in a form acceptable to the

WCPM Standard Concrete Construction Details & Technical Specifications



TS-35 July 2016

Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 412.04 shall be deleted and replaced with Subsection 601.05, with the following revisions:

Calcium chloride (up to 1 percent by weight of cement) or Type C or E accelerators may be used under the following conditions:

- a) The median daily temperature is less than 55 degrees (Average of previous three days).
- b) The date of placement is between September 30th and May 30th.
- c) The concrete temperature may not exceed 80 degrees F prior to placement.

Difficulties encountered as a result of use of accelerators, the costs of associated delays, and corrective action costs shall be borne by the Contractor.

When High Early Strength is requested by the City's Project Manager for the convenience of the City, field strength of 3000 psi shall be achieved in 24 hours or less. An additional charge per cubic yard will be negotiated and paid for high early concrete when directed to be used by the Project Manager. If high early concrete is placed by the contractor without the request of the City the entire additional cost will be borne by the contractor. When directed by the Project Manager, a maturity meter (James Instrument Model No. 3006) shall be used to monitor on-site maturity of pavement concrete. The Contractor shall provide the Project Manger data outlining an established maturity versus strength relationship for the concrete mixture being used. This correlation may be achieved by casting and curing cylinders on site, monitoring temperature and maturity of cylinders and paving concrete versus time, and testing cylinders at time intervals to establish the correlation.

Subsection 412.10 shall be revised to include the following:

The Contractor is required to submit a detailed breakdown of paving equipment, vibratory devices, finishing tools, and provisions for protection from or avoidance of damage from weather impacts. This information shall be submitted for approval by the Project Manager prior to commencing any construction activities.

Subsection 412.12 shall be revised to include the following:

The Contractor shall insure that new concrete items built under this contract drain properly and, as such, there are no areas of standing water on new concrete items.

The Contractor shall protect all new concrete items built under this Contract against defacement, or other injury, from any cause. If said damage cannot be adequately repaired to the satisfaction of the Project Manager or if there are any areas of standing water, the Contractor shall remove and replace the unacceptable items at Contractor's expense.

Subsection 412.13(a) 1, shall be deleted and replaced with the following:

Longitudinal Construction Joints.

Deformed steel tie bars of specified length, size, spacing, and material shall be placed

WCPM Standard Concrete Construction Details & Technical Specifications



TS-36 July 2016

perpendicular to the longitudinal joints by an approved method. When adjacent lanes of pavement are constructed separately, Grade 40 (not Grade 60) tie bars may be bent at right angles against the form of the first lane constructed and straightened into final position before the concrete of the adjacent lane is placed. If epoxy-coated steel tie bars are bent and then straightened into final position, at the Project Manager's discretion the bars shall be repainted with epoxy coating prior to placement of the adjacent concrete. The tie bars shall be inserted into the plastic state concrete between the auger and the vibrators. Other methods of the bar placement may be acceptable if the Contractor can demonstrate satisfactory performance of his alternate method. Proposals of alternate methods or additional costs associated with other methods shall be at the Contractor's expense.

Subsection 412.13(b), delete the first sentence and replace it with the following:

Weakened plane joints shall be formed by sawing to the depth specified on the drawings, in accordance with the requirements of this subsection or as otherwise approved by the Project Manager, except as follows: The contractor shall adhere to the City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), joints shall be formed initially by deep tooling or "soft-cut" methods, followed by sawing at the first available time within the ordinance.

Subsection 412.13(b) 2, delete the first and second paragraphs and replace with the following:

Transverse weakened plane joints shall be formed by sawing a groove in hardened concrete in accordance with City of Denver Transportation Standards and Details for the Engineering Division as per STD. DWG. NO. 11.3 Concrete Pavement Joint Sealant plan details.

The Contractor shall cut the transverse and longitudinal joints to the width and depth required in accordance with City of Denver Transportation Standards and Details for the Engineering Division. The cut shall be made with a power driven saw. Any damage to the concrete pavement such as spalling or fracturing shall be repaired by the Contractor as directed by the Project Manager at no cost to the project. The joints shall be immediately flushed with water to remove any sawing residue from the joint and pavement surface.

If concrete approaches or any widening beyond the width of the initial pass is constructed subsequent to the driving lanes, transverse weakened plane joints shall immediately be formed in the approaches extending from any joints in the driving lanes.

Subsection 412.13(b) 2, shall be revised to include the following:

The time schedule for sawing weakened plane joints shall be as follows: Every second joint shall be sawed 2 to 12 hours after pavement placement, provided the concrete has sufficiently set so as to preclude the dislodging of aggregate particles by the saw. Unless otherwise directed by the Project Manager, the exact time of sawing shall be determined by the Contractor and will be dependent on weather conditions, ambient temperature, mix characteristics and other factors that may affect the setting time of the concrete. Every effort shall be made to saw early enough to control or limit random cracking. The intermediate joints shall be sawed prior to opening to traffic, but in no case longer than 48 hours after placement of the concrete.

The Contractor shall adhere to the City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36). In the event that the need for saw cutting is anticipated during restricted time periods, a "soft-cut" saw shall be used before restricted hours, or deep tooling of joints shall be

WCPM Standard Concrete Construction Details & Technical Specifications



TS-37 July 2016

performed on plastic concrete, followed by saw cutting of the concrete as soon as possible during unrestricted hours. At the discretion of the Project Manager, saw cutting will be prohibited between 10:00 p.m. and 7:00 a.m.

Subsection 412.14 and referenced Section 711.01 Concrete Curing Materials shall be modified, allowable curing compound types and specification for all Portland Cement Concrete Pavement placed on this Contract shall be a combination cure-sealer that meets or exceeds ASTM-1315 Type I, Class A (clear, non-yellowing). The compound must be an acrylic copolymer type, non-freezing solvent based, with a minimum of 25% solids content. Compound must be VOC compliant in accordance with EPA 40 CFR Part 59. The final gloss appearance will serve as proof of application.

The Contractor shall use the cure-sealer according to the manufacturers recommendations so that when applied it will not adversely affect the skid resistance of the pavement.

Subsection 412.18 shall be deleted and replaced with the following:

412.18 Sealing Joints.

This work shall consist of sawing, cleaning and sealing Portland cement concrete pavement joints for new pavements. All Joint Sealing methods and products must be submitted to and approved by the Project Manager in advance of scheduling the work.

Cleaning, repairing and proper curing of any spalls, fractures, breaks or voids in the concrete surface of the joints shall be accomplished at least 4 days prior to installing the backer rod material or joint sealant. Joint sealing or resealing shall be performed only when the ambient and pavement temperatures are 50 degrees F or higher, unless otherwise approved by the Project Manager. The pavement surface and joints shall be dry and the sealant shall not be placed unless the weather conditions are dry. The sealant shall be placed a minimum of 4 days after joints are washed clean.

The Contractor shall thoroughly clean the joint and adjacent pavement for a width of not less than one inch on each side of the joint of all scale, dirt, dust, residue, or any foreign material that will impair bonding of the joint sealant. Immediately prior to the placement of backer rod material and the sealant, the joints shall be cleansed using a minimum of 100 psi compressed air.

Work shall be stopped when and if it is found that there oil or moisture in the compressed air. Work shall not resume until suitable adjustments are made. The Contractor is to check for such oil or moisture at the start of every work cycle and periodically during the cycle using a Project Manager approved method. The backer rod shall be placed in such a manner that the grade for the proper depth of the sealant material is maintained. Under no conditions shall the Contractor place the backer rod material or the sealant if there is dust, moisture, oil or any foreign material on that portion of the concrete that is to receive the backer rod material or joint sealant.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-38 July 2016

A copy of the manufacturer's recommendations pertaining to the heating and application of the sealant—shall be submitted to the Project Manager prior to the beginning or work, and these recommendations shall be adhered to by the Contractor, with such exceptions as this specification may require.

The sealant material shall be hot applied into the joint using equipment and techniques recommended by the joint sealant manufacturer. The surface of the finished joint seal shall have a flat level surface that is 3/16+/-1/16 inch below the surface of the concrete pavement. Sealant not placed within these tolerances will not be measured and paid for, and the Contractor shall remove the joint sealant material and clean and reseal these joints in accordance with the criteria outlined in the special provision at no additional cost to the project. If, in the opinion of the Project Manager, the Contractor shows an inconsistency in his ability to fill the joints to the required dimensions, the Contractor shall cease his operations until such time as he can comply with the required criteria in a consistent manner.

In addition, the Project Manager may elect to check for bonding or adherence to the sides of the joint. Material shall conform to Subsection 705.01(a).

The joint material must withstand a 20 pound pull force applied perpendicular to the joint as indicated in "COLORADO PROCEDURE 67-90".

Subsection 412.22 shall be deleted and replaced with the following:

The pavement shall be cleaned and opened to traffic in accordance with the time requirements shown on the plans or in the specifications.

Pavement shall not be opened until it has reached a compressive strength of 2500 psi inplace, regardless of the curing time required by the Traffic Control Plan. The TCP may necessitate the required compressive strength to be attained within 72 hours or less.

Subsection 412.24 shall be revised to include the following:

Payment under Concrete Pavement shall be full compensation for all materials and labor required to complete the various pavement sections, including the areas of thickened edges, driveways, bus pads and alley paving.

New curb and gutter that is adjacent to new concrete pavement will not be measured and paid for separately but included in the square yard measurement for concrete pavement. Measurement and payment will be to back of curb except where curb ramp limits overlap.

Subsection 412.23 shall be revised to include the following:

This work shall also include concrete streets, driveways, crosspans, bus pads and alley paving with the finished area measured by the square yard and paid by their respective thickness as Concrete Pavement.

Subsection 412.24 shall be revised to include the following:

Geo-Tech Material Testing Concrete quantities to be measured will include all equipment, materials and labor to sample concrete at the site of the pour, perform air and slump test,

WCPM Standard Concrete Construction Details & Technical Specifications



TS-39 July 2016

batch weight, make cylinders, transport to lab and perform cylinder strength compression break tests (at 7, 14 and two at 28 days unless otherwise specified for high early strength concrete by the Project Inspector/Manager) for 4 cylinders for each test including report as outlined in Subsection 412.03 all to be completed by a Certified Laboratory/Personnel. Concrete strength test reports submitted to the Project Manager in advance of each Pay Application to be considered for payment.

The accepted quantities for "Concrete Pavement (-") will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, joint sealing, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

When authorized for use by the Project Manager/Inspector the accepted quantities for "High Early Strength Concrete" and "Concrete Class D (Colored)" will be compensation only for the difference in concrete cost per cubic yard and extra labor per yard for all work performed using High Early Strength Concrete and Concrete Class D (Colored) will be measured by the cubic yard based on copies of the approved supplier's concrete load tickets provided with a summary in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, with each Application for Payment. Copies of all concrete tickets are required for concrete used during that pay period; a separate summary is required for the Quantity of High Early Strength Concrete and includes the ticket number, date and address where it was poured.

<u>PAY ITEMS</u>	PAY UNIT
24-Hour High Early Strength Concrete	CY
Concrete Class D (Colored)	CY
Geo-Tech Material Testing Concrete	EA
(") Concrete Pavement	SY

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints and sealant will not be paid for separately but shall be included in the related concrete work.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-40 July 2016

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

When the contract does not include pay items for Portland Cement Concrete Pavement, these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 412



TS-41 July 2016

WCPM Standard Concrete Construction Details & Technical Specifications

SECTION 413 CONCRETE PATCHING AND CURB HEAD REPLACEMENT

DESCRIPTION

413.1 This work consists of patching and curb head replacement on existing concrete pavement.

MATERIALS

413.2 Concrete patching material must be a one component system that requires an exact addition of water. They must meet the following performance requirements at maximum water.

A.	Bond Strength:	1 Day	1500 psi.
	ASTM C-882	7 Days	2500 psi.
В.	Length Change:	28 Days Dry	-0.05%
	ASTM C-157	28 Days Wet	+0.05%
C.	Compressive Strength: ASTM C-109	2 Hours 1 Day 7 Days	2500 psi. 5000 psi. 7000 psi.

Aggregate shall consist of 3/8" clean, washed and dried gravel or crushed stone of reasonably uniform quality throughout.

Fushion-Crete®, Transpo T-17 Methyl Methacrylate Polymer Concrete Patching Material, Five Star® Highway Patch, U.S. Grout Corporation® Cementitious Grout, Catch Pavemend®, HD-50 Horizontal Repair Mortar by Dayton® Superior® Corporation are all approved concrete patching material. Concrete patching material brand and technical specifications shall be submitted for approval.

CONSTRUCTION REQUIREMENTS

413.3 Preparation of Concrete Surface:

Remove all grease, oil, dirt, curing compounds, laitance and other deleterious materials from the concrete. Roughen the surfaces by sand blasting and provide a near vertical face on the edges of existing concrete to ensure bond. Loose or broken concrete shall be removed. If any existing rebar reinforcing is exposed, it shall be sandblasted. All surfaces shall be thoroughly saturated, and free standing excess water shall be removed with clean compressed air before applying the structural repair material. Minimum depth of patching is 1/2 inches.

413.4 Placing Concrete Patch Material:

Carefully read and understand the manufacturer's instructions as printed on the container. The mixing operation should be close to the repair area. A mortar mixer is recommended. For small quantities, an electric drill and paddle mixer is recommended. The mixing order for

WCPM Standard Concrete Construction Details & Technical Specifications



TS-42 July 2016

mortar type mixer shall be as follows:

- 1. Clean water shall be placed in the mixer at the rate specified on the container instructions. Water content is critical; do not deviate from the amount specified.
- 2. When temperatures exceed 90 [F], a prepackaged set retarder shall be used as recommended by the manufacturer. Add retarder to mixing water, maximizing dispersion in the mix.
- 3. For pours with greatest depth exceeding 3", 3/8 inch clean washed pea gravel shall be added to the mix at a rate not to exceed 25 lbs. per 50 lb. pail.
- 4. Add the repair material. This sequence is important in order to produce a consistent mix and to reduce mixing time. Allow approximately 3 minutes mixing time.
- 5. When pouring large volumes of material, special consideration should be given to maintaining a continuous flow of material producing a wet leading edge. More than one mixer may be necessary to deliver enough material to insure no cold joints.

Place the mixed material into the prepared area, starting from one side of the repair and working to the other side. Do not place the repair material in lifts. Work the material firmly into the bottom and sides of the repair. Screed the material to the desired level. Close up edges of the repair with a trowel. Finish the material to the desired texture. Do not re-temper the material. Clean the mixer and tools periodically with water to prevent build-up, especially in hot temperatures. As soon as the material sets, all exposed surfaces must be thoroughly saturated for 30 minutes.

- 413.5 Concrete Curb Head Replacement. Concrete curb head that was paved with the concrete pavement shall be constructed as follows:
 - 1. Remove broken curb head and concrete pieces from sound concrete.
 - 2. Place no. 4 deformed vertical bars, 18" O.C. by drilling. Place no. 4 horizontal bars across vertical bars.
 - 3. Prior to pouring new curb head, sand blast existing concrete pavement at curb head location or use other cleaning method as approved by the Project Manager.
 - 4. Saturate sand blasted area and remove standing water immediately prior to replacing concrete.
 - 5. Consolidate concrete by use of high frequency internal vibrators.
 - 6. Provide 1/8" open joint in curb head at existing contraction joints in concrete pavement.

METHOD OF MEASUREMENT

413.6 All type of Concrete Patching(Structural "-") shall include removal and hauling of the material to be removed and also includes surface preparation and removal of loose material

WCPM Standard Concrete Construction Details & Technical Specifications



TS-43 July 2016

and cleaning of the existing concrete surface as per material supplier's recommendations according to the material product data sheets included in the submittal for any and all materials used for Concrete Patching (Structural "-"). Concrete surface patch shall be measured by the average of depth measured in inches patching multiplied by the square foot or as required by the Project Manager. All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

BASIS OF PAYMENT

413.7 The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

<u>PAY ITEMS</u>	<u>PAY UNIT</u>
Concrete Patching (Structural surface repair)	SF-IN
Concrete Patching (Structural Curbhead)	LF

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints and sealant will not be paid for separately but shall be included in the related concrete work.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

All work necessary and incidental to the concrete patching and curb head replacement will not be measured and paid for separately but shall be included in the work.

END OF SECTION 413

WCPM Standard Concrete Construction Details & Technical Specifications



TS-44 July 2016

REVISION OF SECTION 601 STRUCTURAL CONCRETE

Section 601 of the Standard Specifications is hereby revised as follows:

Subsection 601.06, Item 7, is modified as follows:

(7) Supplier's Mix I.D. number

Subsection 601.07, (d) is deleted. Self-contained mobile mixers will not be allowed.

METHOD OF MEASUREMENT

601.19 Shall be revised as follows:

Pavestone® or equivalent product acceptable to the adjacent property owner as needed to repair or reconstruct existing stacked concrete block wall will be measured by the square foot of vertical face. Re-enforced Variable Height Concrete Retaining Wall will be constructed 8" thick between 9"-12" with Fibermesh® or approved equivalent only and 8" wall thickness from 12"-30" including #4 rebar placed 12" on center each way (minimum) with vertical to horizontal "L" rebar integrated into monolithically poured adjacent 8" thickened concrete flatwork thickened to 8" for a minimum of 24" from the vertical face be used as directed by the Project Inspector/Manager for Re- enforced Variable Height Concrete Retaining Walls greater than 9" to be measured by the square foot of the vertical face and SF area of 24" wide thickened horizontal adjacent concrete flatwork as directed by the Project Inspector/Manager. All type of Concrete Patching (Structural "-") shall include removal and hauling of the material to be removed and also includes surface preparation and removal of loose material and cleaning of the existing concrete surface as per material supplier's recommendations according to the material product data sheets included in the submittal for any and all materials used for Concrete Patching (Structural "-"). Curb head repair or replacement will be measured by the lineal foot along the front of the curb head. All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

BASIS OF PAYMENT

601.20 The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

PAY ITEMSPAY UNITPavestone® Stacked Pre-cast Wall BlocksSFReinforced Variable Height Concrete Retaining WallSFWCPM Standard Concrete Construction Details & Technical Specifications



TS-45 July 2016

Payment shall be full compensation for labor, equipment and materials including, but not limited to, grade 60 reinforcing #4 rebar, soil reconditioning, grading, backfill and soil including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 601

WCPM Standard Concrete Construction Details & Technical Specifications



REVISION OF SECTION 603 CULVERTS AND SEWERS

Section 603 of the Standard Specifications is hereby revised as follows:

MATERIALS

Subsection 603.02 shall be replaced with:

Materials shall meet the requirements described in the current version of the City and County of Denver Wastewater Capital Projects Management Standard Construction Specifications Chapter 10.1 (Precast Concrete Pipe).

CONSTRUCTUION REQUIREMENTS

Subsection 603.03 through 603.10 shall be replaced with:

Reinforced Concrete Pipe shall be constructed in accordance with the Wastewater Capital Projects Management Standard Construction Specifications as well as the current version of the Department of Public Works City and County of Denver Wastewater Management Division Standard Details.

METHOD OF MEASUREMENT

Subsection 603.11 shall be replaced with:

The unit price bid per linear foot for the construction of each section of pipeline shall include all of the Contractor's costs of whatsoever nature for the complete construction of the pipeline, exclusive of manholes, appurtenances, or items otherwise provided for in the Contract Documents. The bid item shall include: trench sloping, benching, bracing, shoring and/or sheeting for pipe and associated appurtenances to assure safe working conditions; design of shoring, stamping and approval by an Engineer licensed in the State of Colorado, submittal as required; furnishing, transporting and installing all pipe and materials; tapping and/or connecting to mainline pipes, structures, stub outs or block outs; concrete coring; plugging of all abandoned lines crossed during construction; furnishing and installing special fittings, including: trash racks, concrete pipe plugs as required, transitional pipe sections required to properly connect different classes of pipe without a manhole or structure and any other special fittings not provided for elsewhere in the Contract Documents; joints and jointing materials, including: grout ,mortar, fiberglass resin, gaskets, seals, bolts, concrete collars, connecting bands, and other miscellaneous items as required to construct the specific pipe joint per manufacturer and City standards; saw cutting and/or roto-milling within mainline (Bf extents) and lateral trench extents prior to excavation; removal and disposal of pavement, roadway surface materials, concrete flatwork, sod, landscaping, stumps, brush, unsuitable material within the trench width and any other materials encountered prior to excavation; excavation, including exploratory excavation, as required by the Construction Project Manager; over- excavation to remove unsuitable foundation material and replacement with granular

WCPM Standard Concrete Construction Details & Technical Specifications



TS-47 July 2016

or other approved select materials; constructing the specified bedding including the furnishing, placing, and compaction of sand, gravel and rock as required for class B bedding or approved substitution; supply and installation of protective coatings or wrappings; backfilling to include furnishing, transporting, and placement of any additional suitable backfill material required (except for those classified backfill materials provided for elsewhere in the Contract Documents); compaction and backfilling as specified, no additional or separate payment will be made for excess excavated material used as backfill or select material elsewhere on the project; restoration of ground surface to its original condition; grading and leveling; care and diversion of drainage courses; pumping and provision of facilities for diversion of flows; trench dewatering; protection and adjustment of aboveground and underground utilities and service connections or laterals, including water service reconnections and adjustments; sanitary sewer encasement; adjustment and reconnection of sanitary sewer services from mainline sewer to a point where proper connection and drainage can be achieved, unless provided for elsewhere in the Contract Documents; removal and replacement of hydrant laterals and assemblies damaged or relocated during crossing; coordination of gas service and electric relocates; crossing of existing and abandoned utilities; cutting and/or plugging of abandoned or crossed lines where indicated in the Contract Documents, or as directed by the Construction Project Manager; hauling and disposal of construction debris, excess excavated material, damaged materials, unsuitable materials and manifested contaminated materials at the Denver Arapahoe Disposal Site (DADS), recycle and salvage of materials as necessary; removal and replacement and/or relocation of signs, and pipe bollards; providing for additional traffic control, to include barricades, detours and flagmen unless provided for elsewhere in the Contract Documents; removal and replacement of all traffic signal and/or activated loops; QC testing for all associated work components; and all other related and necessary materials, labor and equipment required to construct a complete operable pipeline in accordance with the Contract Documents.

BASIS OF PAYMENT

Subsection 603.12 shall include the following:

The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

PAY ITEMS	<u>PAY UNIT</u>
15" Reinforced Concrete Pipe (RCP)	LF
18" Reinforced Concrete Pipe (RCP)	LF

Payment shall be full compensation for labor, equipment and materials including, but not limited to, grade 60 reinforcing #4 rebar, soil reconditioning, grading, backfill and soil including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT WCPM Standard Concrete Construction Details & Technical Specifications



TS-48 July 2016

reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 603

WCPM Standard Concrete Construction Details & Technical Specifications



TS-49 July 2016

REVISION OF SECTION 604 MANHOLES, INLETS AND METER VAULTS

Section 603 of the Standard Specifications is hereby revised as follows:

CONSTRUCTUION REQUIREMENTS

Subsection 604.04 (c) shall include the following:

Inlets shall be constructed in accordance with the most current version of the Department of Public Works City and County of Denver Wastewater Management Division Standard Details.

Single #16 Inlets are shown on sheet S-616.1

#14 Inlet (L=6') are shown on sheet S-620.1 and S-620.2

METHOD OF MEASUREMENT

Subsection 604.06 shall be replaced with the following:

The unit price bid per inlet structure shall include all of the Contractor's costs of whatsoever nature. The price bid shall include: furnishing, transporting, and installing all materials; excavation, including over-excavation to remove unsuitable foundation materials; hauling and disposal of excess material, concrete, pipe collars, reinforcement steel, mortar and grout; manhole lids, rings, covers, grates, frames and curb boxes; open throat construction; galvanized steel rods; manhole steps; concrete ribbed deflectors; backfilling and compaction; removal and replacement of pavement, base coarse, sub-base materials, sod, decorative landscaping and any other surfacing materials; constructing and shaping of the base and invert; replacement of curb, gutter and sidewalk between the transitions as stipulated on the Details; and all other related and necessary materials, work, and equipment required to construct the storm inlet.

BASIS OF PAYMENT

Subsection 604.07 shall include the following:

The accepted quantities will be paid for at the contract unit price for each of the pay items listed below that appear in the bid schedule.

Payment will be made under:

PAY ITEMS	<u>PAY UNIT</u>
Number 14 Inlet	EA
Single Number 16 Inlet	EA

Payment shall be full compensation for labor, equipment and materials including, but not limited to, grade 60 reinforcing #4 rebar, soil reconditioning, grading, backfill and soil including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and

WCPM Standard Concrete Construction Details & Technical Specifications



TS-50 July 2016

expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control joints or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 604

WCPM Standard Concrete Construction Details & Technical Specifications



TS-51 July 2016

REVISION OF SECTION 608 SIDEWALKS AND BIKEWAYS

Section 608 of the Standard Specifications is hereby revised as follows:

As a condition acceptance and of payment the Contractor must certify and shall be responsible to ensure that All Concrete Sidewalk and all Concrete Curb ramps shall be constructed by and additionally meet the requirements of the City of Denver Public Works Transportation Standards and Details for the Engineering Division. It shall be the Contractor's responsibility to assess the existing conditions and notify the Project Manager in advance of the work of any existing field conditions, obstacles or conflicts that might inhibit any section of sidewalk or curb ramp from meeting the design criteria outlined in the City of Denver Public Works Transportation Standards and Details for the Engineering Division. All concrete used for Sidewalks, Curb Ramps and Bikeways shall be Class P and shall be reinforced with polypropylene fibers. Polypropylene fibers shall be FIBERMESH® or APPROVED EQUIVALENT. Length of fibers shall be as recommended by the manufacturer. Add 1.5 pounds FIBERMESH® or APPROVED EQUIVALENT per cubic yard of concrete.

Subsection 608.02 shall be deleted in its entirety and replaced with the following:

Materials shall meet the requirements specified in subsection 705.11 Joint Fillers. Concrete for sidewalks, curb ramps and bikeways shall be Class "P", as specified in subsections 601.02 and 601.03, except that No. 67 coarse aggregate shall be used. The concrete curb ramp shall include the cost of an approved truncated dome material and its installations. A sample of the truncated dome material shall be submitted to the Project Manager for approval prior to construction. Only cast iron ADA dome panels will be paid separately and will cover only the cost of the ADA cast iron dome panel material. The use of calcium chloride, as permitted under Revision of Section 412, subsection 412.04, is prohibited in colored concrete. It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Pre-construction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work. Quality Control material testing, reports and submittals and unless provided for separately in this Contract will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum the QCP shall include the following:

- 1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
- 2. The company name, personnel names and duties, telephone number(s), of all quality WCPM Standard Concrete Construction Details & Technical Specifications



TS-52 July 2016

- control personnel to be utilized from a certified lab including current copies of their certification letter.
- Sub-grade compaction and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance. High Early Strength Concrete is used.
- 4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 608.03(a) shall be revised as follows:

Delete the third sentence and add:

Where excavation or fill to the finished grade elevation results in subgrade of unsuitable soil, the Project Manager or Project Inspector may designate the unsuitable material to be removed and replaced with approved material. Removal or reconditioning of unsuitable material, excavation and backfill with Class 6 Aggregate Base Course, in accordance with Revision of Section 203.05(c), or other material approved by the Project Manager shall not be paid separately but is included in the cost of the related concrete bid item. Excavation to proposed subgrade elevation will not be paid for separately but shall be included in the work associated with Section 201, Clearing and Grubbing or Section 202, Removal of Structures and Obstructions. Any forming and curb work to match existing surrounding landscaped or paved areas is included in the cost of the curb ramp and measured by the square yard of finished area.

Subsection 608.03(d) shall be revised to include the following:

Finishing shall occur only after the disappearance of bleed water. The addition of superficial water to the surface of the concrete to assist in finishing operations will not be permitted. Sprinkling of water or Con-film onto the freshly poured surface will not be permitted.

Subsection 608.03(e) shall be revised to include the following:

For Bikeways, control joints shall be zip-strip or saw cut to a minimum depth of ¼ of the total slab thickness and no greater than ¼ inch wide. Control joints shall be spaced at 10 feet on center or as noted on the plans. Any damage to the concrete such as spalling, dislodging of aggregate particles, or cracking will be repaired by the Contractor at no additional cost to the Project. If said damage cannot be adequately repaired to the satisfaction of the Project Manager, the Contractor shall remove and replace the damaged concrete at no additional cost to the Project.

Subsection 608.03(f) shall be revised to include the following:

The Contractor shall insure that new concrete items built under this contract drain properly and, as such, there are no areas of standing water on new concrete items.

The Contractor shall protect all new concrete items built under this Contract against defacement, or other injury, from any cause. If said damage cannot be adequately repaired to the satisfaction of the Project Manager, the Contractor shall remove and replace the unacceptable items at Contractor's expense.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-53 July 2016

Subsection 608.05 shall be revised to include the following:

Only Concrete Curb Ramp areas poured 6" thick that may include variable height curb as directed by the Project Inspector and are placed at a slope that meets minimum and maximum slope requirements as per the latest revision of the City of Denver Transportation Standards and Details for the Engineering Division with respect to ADA accessibility standards shall be measured as Concrete Curb Ramp. Any variable height curb poured monolithically with the Concrete Curb Ramp will not be paid separately but shall be measured by the exposed square yard surface area and paid as Concrete Curb Ramp. The accepted quantities for "Concrete Sidewalk/Curb Ramp will be paid for at the contract unit price for each of the pay items listed below that appear in the Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

When authorized for use by the Project Manager/Inspector the accepted quantities for "High Early Strength Concrete" will be compensation only for the difference in concrete cost per cubic yard and extra labor per yard for all work performed using High Early Strength Concrete and will be measured by the cubic yard based on copies of the approved supplier's concrete load tickets provided with a summary in tabular form with each Application for Payment.

Copies of all concrete tickets are required for concrete used during that pay period; a separate summary is required for the Quantity of High Early Strength Concrete and includes the ticket number, date and address where it was poured.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

<u>PAY ITEM</u>	PAY UNIT
Concrete Sidewalk	SY
Concrete Curb Ramp	SY
Truncated Domes (Special Cast Iron) Material Only	SF

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required WCPM Standard Concrete Construction Details & Technical Specifications



.

TS-54 July 2016

to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints, zip-strip and sealant will not be paid for separately but shall be included in the related concrete work.

END OF REVISION OF SECTION 608



TS-55 July 2016

WCPM Standard Concrete Construction Details & Technical Specifications

REVISION OF SECTION 609 CURB AND GUTTER

Section 609 of the Standard Specifications is hereby revised as follows:

All Concrete Gutter Overlay, Variable Height Curb Head with reinforcement, Curb and Gutter and Combination Curb, Gutter and Sidewalk shall additionally meet the requirements of the City of Denver Public Works Transportation Standards and Details for the Engineering Division. All concrete used shall be Class P and shall be reinforced with polypropylene fibers. Polypropylene fibers shall be FIBERMESH® or APPROVED EQUIVALENT. Length of fibers shall be as recommended by the manufacturer. Add 1.5 pounds FIBERMESH® or APPROVED EQUIVALENT per cubic yard of concrete.

Subsection 609.01 shall be revised to include the following:

Concrete Gutter Overlay Variable Height Curb with Reinforcement Curb and Gutter Combination Curb, Gutter and Sidewalk

Subsection 609.02 shall be revised as follows:

Reference to Section 703.07, Bed Course Material, shall be deleted.

Additionally Joint Filler must be approved by the Project Manager.

Reference to Class B concrete shall be deleted and replaced with the following: Concrete shall conform to the requirements for Class "P" concrete as specified in subsections 601.02 and 601.03. When curb machines are used, the Contractor will be permitted to use AASHTO M 43 Size 57 or 67 aggregate in lieu of the coarse aggregate specified in Table 601-1, and a lesser slump will be permitted.

It is the Contractor's responsibility to provide Quality Control for material density and strength testing and provide test results in a testing frequency, method and report as per Preconstruction submittal Quality Control Plan (QCP) that must be approved by the City Project Manager prior to starting work. Quality Control material testing, reports and submittals will not be paid for separately but shall be included in the work.

The Quality Control Plan (QCP) is a required submittal that is Contract Specific and states how the process controls of materials, material testing, equipment, personnel and operations shall be maintained. As a minimum the QCP shall include the following:

- 1. Project Contract Control Number and Name. Date of the NTP and subsequent close out date with respect to allotted calendar days.
- 2. The company name, personnel names and duties, telephone number(s), of all quality control personnel to be utilized from a certified lab including current copies of their certification letter.
- 3. Sub-grade compaction and concrete tests will be once weekly or additionally as needed for Quality Control in critical conditions. Additional concrete tests are required for each instance. High Early Strength Concrete is used.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-56 July 2016

4. Written test reports including all pertinent information in a form acceptable to the Project Manager. Test reports must be submitted in a timely fashion, as a minimum test reports must be submitted within 30 days of the test and acceptance of the related materials or product is contingent upon receipt of acceptable reports.

Subsection 609.03(a) shall be revised as follows:

Where excavation or fill to the finished grade elevation results in subgrade of unsuitable soil, the Project Manager or Project Inspector may designate the unsuitable material to be removed and replaced with approved material. Removal or reconditioning of unsuitable material, excavation and backfill with Class 6 Aggregate Base Course, in accordance with Revision of Section 203.05(c), or other material approved by the Project Manager shall not be paid separately but is included in the cost of the related concrete bid item.

Subsection 609.03(c) shall be revised to include the following:

The Contractor shall protect all new concrete items built under this Contract against defacement, or other injury, from any cause. If said damage cannot be adequately repaired to the satisfaction of the Project Manager, the Contractor shall remove and replace the unacceptable items at Contractor's expense.

Subsection 609.03(d) shall be revised to include the following:

For construction of curb and gutter adjacent to existing concrete pavement, the joint pattern shall match that of the concrete pavement. The joint pattern shall be approved by the Project Manager prior to construction.

Subsection 609.03(i) shall be revised to include the following:

The Contractor shall insure that new concrete items built under this contract drain properly and, as a condition of acceptance for payment, there shall be no areas of standing water on new concrete items.

Subsection 609.04 shall be revised to include the following:

Variable Height Curb with Reinforcement shall be used only at the request of the Project Manager and shall reference City of Denver Public Works Transportation Standards and Details STD. DWG. NO. 10.4 For Alley Curb Head.

Subsection 609.06 shall be revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

Subsection 609.07 shall be revised to include the following:

The accepted quantities for Concrete Gutter Overlay, Curb & Gutter Type (), Section ('") and Combination Curb, Gutter and Sidewalk ('"), Median Cover (6" Patterned Colored Concrete) will be paid for at the contract unit price for each of the pay items listed below that appear in the

WCPM Standard Concrete Construction Details & Technical Specifications



TS-57 July 2016

Contract bid schedule. Payment shall be full compensation for all labor, equipment, time and materials for each unit bid item complete in place including saw cutting, scraping, sandblasting, removal, hauling and disposal of such items, excavation of subgrade material reconditioning or installation of aggregate base course and subsequent backfill, grading and compaction (with moisture/density control per the Revision of Subsection 203.07) to proposed subgrade elevation. The price shall also include salvageable materials removed, their custody, preservation, storage, hauling and disposal as provided herein.

When authorized for use by the Project Manager/Inspector the accepted quantities for "High Early Strength Concrete" will be compensation only for the difference in concrete cost per cubic yard and labor per yard for all work performed using High Early Strength Concrete and will be measured by the cubic yard based on copies of the approved supplier's concrete load tickets provided with a summary in tabular form with each Application for Payment.

Copies of all concrete tickets are required for concrete used during that pay period; a separate summary is required for the Quantity of High Early Strength Concrete and includes the ticket number, date and address where it was poured.

<u>PAY ITEM</u>	PAY UNIT
Concrete Gutter Overlay	LF
Curb & Gutter, Type (), (Section ' ")	LF
Combination Curb, Gutter and Sidewalk ('")	LF
Median Cover Material (6" Patterned Colored Concrete)	SY

Payment shall be full compensation for labor and materials including, but not limited to, reconditioning, grading, backfill including topsoil and soil amendments, compaction, quality control material testing, curing compound, control and expansion joint and sealant as required to complete these Pay Items.

When the contract does not include pay items for FIBERMESH® or APPROVED EQUIVALENT reinforcement additive, cure-sealer, curing compound, saw cut for construction, control or expansion joints and sealant will not be paid for separately but shall be included in the related concrete work.

Saw-cut Expansion Joint only includes those areas where existing pavement must be cut for the sole purpose of installing an expansion joint. Payment shall be full compensation for "soft cutting" and tooling necessitated by City and County of Denver Noise Control Ordinance (D.R.M.C. Chapter 36), saw cutting hardened concrete, cleaning out the saw cut, expansion material and sealant.

Excavation to proposed sub-grade elevation will not be paid for separately but shall be included in the related curb & gutter.

END OF REVISION OF SECTION 609

WCPM Standard Concrete Construction Details & Technical Specifications



TS-58 July 2016

REVISION OF SECTION 613 LIGHTING

Subsection 613.12 is revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

PAY ITEM PAY UNIT

Loop Detector Wire

LF

When the contract does not include pay items for Lighting, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 613



TS-59 July 2016

REVISION OF SECTION 614 TRAFFIC CONTROL DEVICES

Subsection 613.12 is revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

PAY ITEM PAY UNIT

Reset Pull Box EA

When the contract does not include pay items for Traffic Control Devices, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 614



TS-60 July 2016

REVISION OF SECTION 623 IRRIGATION SYSTEM

Section 623 of the Standard Specifications is revised as follows: Subsection

623.01 is revised to include the following:

Irrigation systems within twelve inches (12") of the reconstruction areas which are damaged as a result of the reconstruction activity will be repaired and paid for. Irrigation systems beyond this limit which are damaged by the Contractor will be repaired by the Contractor at no expense to the City.

Subsection 623.02 is revised to include the following:

Materials required to be replaced shall be of like kind to those removed. If like kind materials are unavailable, the Contractor may substitute comparable materials of comparable quality, if approved by the Project Manager.

Materials used in areas under the jurisdiction of the City and County of Denver Parks and Recreation Department shall comply with the current specifications of that department.

Subsection 623.28 is revised to include the following:

Pipes and fittings will be measured by the lineal foot, regardless of type, size or manufacturer and shall be paid under "Sprinkler System - Irrigation Reconstruction."

New Sprinkler heads will be measured per each, regardless of type, size or manufacturer, and shall be paid under "Sprinkler System - Sprinkler Head."

Sprinkler heads to be adjusted will be measured per each regardless of type, size or manufacturer, and shall be paid under "Sprinkler System - Adjust Sprinkler Head."

PVC sleeves are required to be placed under new concrete as needed for current or future use and will be measured by the lineal foot, regardless of type, size or manufacturer and shall be paid under "Sprinkler System – Irrigation Reconstruction."

Subsection 623.32 is revised to include the following:

All quantities to be submitted for payment must be measured in person by the Contractor with the Project Inspector and recorded by location in tabular form and summarized utilizing the Field Measurement Report (FMR), see FMR sample in APPENDICES at the end of the Technical Specifications, in manner acceptable to the Project Manager and be submitted for review and acceptance in advance of each pay application.

<u>PAY ITEM</u>	<u>PAY UNIT</u>		
Sprinkler System – New Sprinkler Head	EA		
Sprinkler System – Adjust Sprinkler Head	EA		
Sprinkler System – Irrigation Reconstruction	LF		

When the contract does not include pay items for Irrigation System, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 623

WCPM Standard Concrete Construction Details & Technical Specifications



TS-61 July 2016

REVISION OF SECTION 625 CONSTRUCTION SURVEYING

Section 625 of the Standard Specifications is hereby clarified with the following:

The Contractor shall furnish all equipment, materials and qualified personnel/labor as needed for construction staking and to establish lines and grades as necessary to complete the work and ensure drainage.

When the contract does not include pay items for Construction Surveying, this item will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 625



TS-62 July 2016

REVISION OF SECTION 626 MOBILIZATION

Section 626 of the Standard Specifications is revised as follows:

Section 626.01 shall be revised to including the following:

Prior to starting work the Contractor's staff including superintendents, foreman, lead workers, TCS, ECS and concrete lead-workers and sub-contractors must attend a 2 hour preconstruction meeting that will include ADA ramp construction training and forum to coordinate, identify and discuss operating procedures regarding sensitive contract issues. The list of work locations for this project is not included within this Contract document. A sample of the "Potential Work Locations Map" is included in the APPENDICES at the end of the Technical Specifications. The scope of work with the locations will be assigned utilizing the "Work Initiation Form" (a sample is included in the APPENDICES at the end of the Technical Specifications) by a location or groups of locations after the Notice to Proceed. Work assignments may be requested in these "Potential Work Locations" or other requested locations where spot repairs are needed utilizing the Work Initiation Form by the Project Manager. Concrete repair locations are generated through complaints and generally follow the City of Denver's current and projected Annual Street Paving Program with the focus on building curb ramps. There is no guarantee that all the locations assigned will be done under the Contract or that the locations will be done in any priority order. The Contractor shall consider that mobilization costs are not paid separately when scheduling this work and are included in the related concrete repair work. Locations are Citywide and are a combination of ramp requests, individual spot repairs or could include several City blocks in a neighborhood. The Project Manager may revise, add or delete locations for which the Contractor will arrange Blue Stake locates; City of Denver Right-of-Way and Denver Parks permits and coordinate notification with all affected municipal, utility and property owner and provide on a weekly basis a three week work schedule in advance to the Project Manager for approval prior to performing the work for each and all the assigned work locations. The Contractor shall normally not schedule work on Saturdays, Sundays, City of Denver observed Holidays or City of Denver furlough days. The Contractor must submit in writing requests to work longer than normal work hours (8 hours per day and 40 hours per week) or on Holidays or weekends the written request must be submitted to and approved by the Project Manager 48 hours in advance of the scheduled work.

Section 626.02 of the Standard Specifications is hereby revised as follows:

Mobilization and meeting attendance shall not be measured and paid for separately but shall be included in the price of the work.

END OF REVISION OF SECTION 626

WCPM Standard Concrete Construction Details & Technical Specifications

DENVER PUBLIC WORKS

TS-63 July 2016

REVISION OF SECTION 627 PAVEMENT MARKING

Section 627 of the Standard Specifications is revised as follows:

Subsection 627.01 is revised to include the following:

The Contractor is responsible for installation and removal of temporary pavement marking. The Contractor shall coordinate the work of the striping Contractor, including traffic control devices and flaggers.

Subsection 627.03 is revised to include the following:

The Contractor shall replace permanent pavement markings damaged or removed as a result of the work. Pavement marking material shall be new material of the same type which existed prior to the work commencing.

Subsection 627.11 is revised as follows:

Installation and removal of temporary pavement marking will not be measured and paid for separately, but shall be included in the cost of item 412.

Permanent paving marking will not be measured and paid for separately, but shall be included in the cost of the related asphalt or Concrete Street paving bid item.

END OF REVISION OF SECTION 627



WCPM Standard Concrete Construction Details & Technical Specifications

REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

Section 630 of the Standard Specifications is hereby revised as follows:

Subsection 630.01 shall be modified to read:

...as required by, these plans and special specifications, conform to the Manual on Uniform Traffic Control Devices for Streets and Highways.

Subsection 630.02 through 630.08 shall be as provided in the MUTCD, latest edition. In addition, the following shall apply:

Traffic Control. Traffic control through the construction area is the responsibility of the Contractor. Before starting construction the Contractor shall submit, in writing, the proposed Method of Handling Traffic (MHT) for the initial phase of construction. When a different MHT is required for a subsequent construction phase, it must be submitted two weeks prior to starting that phase. All proposed MHTs shall be approved, in writing, by the Project Manager. No phase of construction shall start until an acceptable MHT has been received and approved by the Project Manager. The proposed methods shall include, as a minimum, the following:

A detailed diagram that shows the location of all sign placements, including advance construction signs (if not previously approved) and speed limit signs; method, length and time duration for lane closures; and location of flag persons.

Certain traffic control devices may be used for more than one operation or phase.

Number of hours for uniformed traffic control shall be tabulated for submittal.

Approval of the proposed MHT is intended to indicate those devices for which payment is to be made. Such approval does not relieve the Contractor of liability specifically assigned to him under the contract. The Contractor shall erect and maintain warning lights, signs, barricades, and sufficient safeguards around all excavations, embankments, and obstructions.

Non-metallic drums may be substituted for vertical panel channelizing devices.

The Contractor shall, at the preconstruction conference, designate one of his employees, other than the Superintendent, to be responsible for traffic control management. This responsibility shall include management of the Contractor's signing and all other details covered by the Specifications which contribute to the convenience, safety, and orderly movement of traffic and to the comfort of the traveling public. The designated employee will have the Certification of the Traffic Control Supervisor as a Worksite Traffic Supervisor by the American Traffic Safety Services Association (ATSSA) in lieu of completion of the CDOT minimum training requirements.

WCPM Standard Concrete Construction Details & Technical Specifications



TS-65 July 2016

Traffic control management shall be maintained on a 24-hour per day basis. The Contractor shall make arrangements so that the Traffic Control Supervisor or his approved representative will be available on every working day, "on call" at all times and available upon the Project Manager's request at other than normal working hours. The Traffic Control Supervisor shall have an up-to-date copy of part VI of the MUTCD, pertaining to traffic controls for street and highway construction, as well as the City and County Traffic Barricade manual, available at all times.

The flagger's STOP/SLOW sign paddle shall be 18 inches with letters six inches high.

Subsections 630.09 through 630.14 of the Standard Specifications shall apply except as otherwise provided herein.

Subsection 630.09 (4) shall be revised to include the following:

Access to driveways shall be maintained at all times during construction. The Contractor shall coordinate driveway work with the property owner.

The amount paid per day shall not exceed one unit of Traffic Control for an Arterial, one unit of traffic control for Local/Collector and includes all materials, equipment, personnel and traffic controls plans to conform to all Rules & Regulations for any Street Occupancy Request required to complete the assigned work by the City of Denver, adjacent municipalities and CDOT.

Subsection 630.15 shall be revised to include the following:

When the contract bid schedule includes Traffic Control pay items as a lump sum per day:

The PAY UNIT: LS/DAY for Traffic Control Arterial/Collector and Traffic Control Local shall be defined for the purposes of this Contract only include a work day when the Contractor is on-site completing some phase of the assigned repair work from 12:00 midnight to 12:00 midnight, furthermore weekends, City Holidays, City furlough days and days the Contractor is not on-site completing work other than Traffic Control are not included in this Pay Item. Traffic Control devices will not be measured but will be paid for on a lump Sum basis. For a complete road closure in a residential street for a crosspan removal and repair the traffic control shall be paid as 1 LS/DAY of Traffic Control Arterial/Collector for that application for the entire duration at that location that shall include set-up, maintenance and take down for as many days needed to complete work at that location.

Payment for traffic control shall be as follows:

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Traffic Control Arterial/Collector*	LS/DAY
Traffic Control Local*	LS/DAY
Uniformed Traffic Control Officer	HOUR

^{* -} The designation of which roads are Arterial/Collector and which roads are Local and shall be determined by the City's Right of Way Permitting Department. Arterials and collector streets generally have center

WCPM Standard Concrete Construction Details & Technical Specifications



TS-66 July 2016

line striping.

When the contract bid schedule does not include pay items for Traffic Control; Payment for all Traffic Control shall be included in the work.

END OF REVISION OF SECTION 630

WCPM Standard Concrete Construction Details & Technical Specifications



TS-67 July 2016

REVISION OF SECTION 631 PUBLIC INFORMATION SERVICES

DESCRIPTION

631.1 The work consists of providing various public involvement activities for the project.

REQUIREMENTS

- 631.2 The Contractor shall provide the following public information services on an ongoing basis throughout the duration of the project:
 - (a) A contact person and phone number for the project shall be designated by the Contractor at the pre-construction meeting. This individual shall be primarily responsible for maintaining communications with the Project Manager and affected businesses and property owners.
 - (b) The Contractor will also distribute door hang tags to all property owners adjacent to construction and also all residences and businesses impacted by construction or road closures or detours no less than 48 hours (as per General Contract Conditions Section 703) prior to commencing removal operations, outlining the proposed work as well as the company name, phone number, and contact person familiar with the project. The hang tag shall be supplied by the City and it shall be the Contractor's responsibility to request and adequate number of hang tags one week in advance to properly notify all affected property owners/residents. Occasionally as needed supplemental written notices will be required to be delivered one week in advance at the direction of the Project Manager for issues such as construction conflicts related to business access, special landscape, and fence or tree removal. The cost of delivering the door hang tags and any other letter or notice to the public shall not be paid for separately, it is included in the related work.
 - (c) The Contractor shall maintain a written log detailing the time, date, name, contact information, location, nature of the call or complaint and resolution (if needed) regarding any and all contacts from constituents. The Contractor will revise and submit a current copy of this log with each Application for Payment.

METHOD OF MEASUREMENT

631.3 Public information services will not be measured and paid for separately, but shall be included in the work.

END OF SECTION 631

WCPM Standard Concrete Construction Details & Technical Specifications **DENVER**

TS-68 July 2016

REVISION OF SECTION 705 JOINT, WATERPROOFING AND BEARING MATERIALS

Section 705 of the Standard specifications is hereby revised for this project as follows:

Subsection 705.01(a) shall be revised to include the following:

Sealant shall be heated only for the time limit recommended by the manufacturer. Also, the sealant shall not be reheated more times than recommended by the manufacturer.

Subsection 705.01 shall be revised to include the following:

(c) Hot Joint Sealants, Concrete Pavement. Hot-poured joint sealer material for concrete slab joints shall conform to the requirements of ASTM D 1190 or ASTM D 3405 and to the following:

Mortar blocks for the bond test shall be as described in ASTM D 1191 Coal tar

base material is not acceptable.

The shipping containers shall be marked by the manufacturer with the name of the material, the name and brand of the manufacturer, the weight, the batch number and the safe heating temperature.

The materials shall be stored in accordance with manufacturer's recommendations, but they shall not be exposed to ambient temperatures in excess of 125 degrees F, or stored in direct sunlight.

The sealer material shall be melted in a heating kettle, or tank, constructed as a double boiler, with a space between the inner and outer shells filled with oil, asphalt, or other material for heat transfer and for positive temperature control.

The heating and melting unit shall be equipped so that the heat may be adjusted to provide control of the temperature of the heating medium used for melting the sealer material. The sealer material shall not be subjected to temperatures in excess of 450 degrees F at any stage or time during the melting operation.

When the contract bid schedule does not include pay items for Joint, Waterproofing and Bearing Materials; Payment for all Joint, Waterproofing and Bearing Materials shall be included in the work.

END OF REVISION OF SECTION 705



WCPM Standard Concrete Construction Details & Technical Specifications

TS-69 July 2016

REVISION OF SECTION 711 CONCRETE CURING MATERIALS AND ADMIXTURES

Section 711.01 Concrete Curing Materials shall be modified; Liquid Membrane-Forming Compounds for Curing Concrete AASHTO M148, TYPE curing compound is deleted and shall additionally require:

For all Portland Cement Concrete Pavement placed on this project a combination cure-sealer shall be used that meets or exceeds ASTM-1315 Type I, Class A (clear, non-yellowing). The compound must be an acrylic copolymer type, non-freezing solvent based, with a minimum of 25% solids content. Compound must be VOC compliant in accordance with EPA 40 CFR Part 59. The final gloss appearance will serve as proof of application.

The Contractor shall use the cure-sealer according to the manufacturers recommendations so that when applied it will not adversely affect the skid resistance of the pavement.

The Contract does not include separate pay items for Concrete Curing Materials; these items will not be paid for separately but shall be included in the work.

END OF REVISION OF SECTION 711



TS-70 July 2016

APPENDICES

- D. Work Initiation Form
- E. Field Measurement Report
- F. Potential Work Locations Map



TS-71 July 2016

WCPM Standard Concrete Construction Details & Technical Specifications

2016 On Call Concrete Repair Appendices



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

ork Order Request/Proposal

ENGINEERING DIVISION Wastewater Capital Projects Managemen 2000 West Third Avenue Denver, CO 80223

Requested Start Date		Work Order Requests	r Name:	Fund:	Billing		1147
quested Completion Date:				Org:	Funding		
		Requestor Phone	(***) ***-****	Account	Funding		
questing Agency		Alt. Phone	(###) ###-####		Funding		
ork Order Project Manageme	nt: Managing Agency:	Water in Year Street	WO PM Name:		Phone: (###) ###-####	Alt Phone: (###) ### ####	
ope of Work:	managing Agency:	1	WO PM Name:		Prione: (sas) sas-sass	All Phone: (see) see - sees	
ovide detailed scope of work.							
			uired to intiate a work order to perform includes the following active layers: Aeria				
dditional Comments - additi	onal work required to obtain a bette	er estimate of costs for the prop	osed scope of work.				-10
CAD Files/Plans Rec	uired No	Utility Locates V	Vork Order Required No		Other Additional	re-work No	
om Number	Description	Bid Item Clarification	Proposed Estimate of C	osts	Units Estimat	ed Quantity Unit Price	Estimate
			The state of the s		31 730	31 11 11 11	\$
		273			. 20		\$ \$
		1 2 3 4 7 7		ST Prijan		112.	s
				2 012 2			5 6
		TOTAL		The little	11 11	1000	5
		2.0	The State of			2	5
		4 1			- N. T		5
							1
				- A 16 T		0	
		11.2	- 5 T T T 125 T		11 1,000	TO VA	1
		72	TO WELL				5
		THE RIVE		1000		1 1 2	\$
		100	- P		201		s
		1.07 41 18		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		V	S
		274.57	4 444 4			>	s
		Marie Land	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		W V		5
		11 11 144		1 1 1 1 1 1		31	\$
		1. 15 1.		- 0			s
		13.73		A P			s
				1	,		5
-		4 - 11 -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	U,	24 2		s
		1					5
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				F1 (F)	s
					11 1400	7	\$
			19				s
		17 5 5	0	17.37.40.0		Tyrii	s
		- 1111					\$
		000					s
						1	s
	_						s
						1 + 1	5
		1					s
			45-71		The little	1 (1)	s
	0.1						s
		7			P H		s
	4 1 1	1					s
				- 11-12-11		11 13	s
		11.2				1	s
			1 18118 115				s
			This is the amount which will CCN you reque	be encumbered against ested for this work order	the Al Fresco Tota	Work Order Encumbrance Amount	s
			These are the funds required		D 115, DADS Disposal Co	per EXO 115-3% Funds for PO 2671 -	l
			they are not encumbered in	the above referenced co	ntract this is perfor	med by WCPM as a service to you	s
			This amount is from above in the	ne funding boxes. It sho e is a discrepancy, adjus	uld be the same as the an	ount below, next to the blue box. If ordingly.	
							s
				Total Fu	unds Required to init	are lura Motk Older	3
wlewed and Accepted by Agenc	y Representative: X						



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

FIELD MEASUREMENT REPORT AND PAY APPLICATION

ENGINEERING DIVISION

Wastewater Capital Projects Management 2000 West Third Avenue Denver, CO 80223

http://www.denvergov.org

Progress Payment No.: 1 Contract Number Project Name: Date of Meeting Location Name Title Company Signature* Wastewater Capital Projects Management Superintendent Signatures certify that all of the information contained in this report has been reviewed and found to be acceptable. Furthermore, it shall represent the attendee's concurrence with the quantities or agreements outlined below. Measured Quantity Item Description Item Number Units **Unit Cost** Item Cost per Quantity \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ (\$ -\$ \$

TOTAL \$ NOTES/DISCUSSION POINTS Attach Additional Sheets As Necessary. Prepared by Name Project Inspector Title Printed Name Signature Feb-16

