CITY AND COUNTY OF DENVER STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

Contract Documents

Contract Number: 201845744

Park Avenue Rehabilitation

November 8, 2018



NOTICE OF APPARENT LOW BIDDER

SEMA Construction, Inc. 7353 S. Eagle St. Centennial, CO 80112

The EXECUTIVE DIRECTOR OF PUBLIC WORKS has considered the Bids submitted on **December 6**, **2018**, for work to be done and materials to be furnished in and for:

CONTRACT NO: 201845744 Park Ave. Rehabilitation

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 through 700-70589 (Twenty [20]) total bid items plus Six (6) Force Accounts and Two (2) Allowances, the total estimated cost thereof being: One Million One Hundred Fifteen Thousand Seventy-Three Dollars and Zero Cents (\$1,115,073.00).

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;
- b. 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 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).

Denver Public Works/Office of the Executive Director 201 West Colfax Avenue, Dept 608 | Denver, CO 80202 www.denvergov.org/dpw p. 720.865.8630 | f. 720.865.8795



NOTICE OF APPARENT LOW BIDDER

CONTRACT NO. 201845744 Page 2

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.

Dated at Denver, Colorado this 2045 day of December 2018.

CITY AND COUNTY OF DENVER

By

Eulois Cleckley

Executive Director of Public Works

cc: Kristen Moore (CAO), Treasury (taxauditadmin@denvergov.org), DSBO Inbox (dsbo@denvergov.org), Imogene Manuelito, Kayla Lorentz, Prevailing Wage (prevailingwage@denvergov.org), File.

CITY AND COUNTY OF DENVER STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

Bid Form Package

Contract Number: 201845744

Park Avenue Rehabilitation

November 8, 2018

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

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This Checklist is provided solely for the assistance of the bidders, and need <u>not</u> 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/	COMMENTS	COMPLETE
PAGE NO.		
BF-4 – BF-5	 a.) Legal name, address, Acknowledgment signature and attestation (if required.) 	
BF-6+	a.) Fill in individual bid item dollars and totals in Numerical	
	figures only	
	b.) Complete all blanks	
	c.) Legal name required	
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 the 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 blanks	
	b.) 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	
	(Submit 10 days prior to Bid Opening date)	
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 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 ("Textura")

Bidder recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System ("Textura") for this Project to request payment from the City and to pay subcontractors. All certified subcontractors or suppliers who are listed for participation towards any assigned program goal must be paid via Textura. All fees associated with Textura are to be paid by the bidder for billings for work performed. Bidders are required, when preparing a bid, to enter the price of Textura on the line provided for the service. The fee is all inclusive of all subcontractor, project and subscription fees associated with Textura. The bidder will calculate the fee based on their total bid and the table below, and then 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, and/or utilizing Textura other than the Textura Construction Payment Management System Fee are overhead and shall not be reimbursed by the City. Bidder will be responsible for any tax on the Textura fee. As with other taxes, the City will not reimburse bidder for this cost and therefore this cost should be included in bidder's bid. Textura will invoice the awarded bidder directly.

Project Value	Project Fee (GC + Sub Usage)
\$250,000 - \$499,999.99	\$1,625
\$500,000 - \$999,999.99	\$3,250
\$1,000,000 - \$2,999,999.99	\$5,850
\$3,000,000 - \$4,999,999.99	\$9,100
\$5,000,000 - \$9,999,999.99	\$12,220
\$10,000,000 - \$19,999,999.99	\$20,345
\$20,000,000 - \$49,999,999.99	\$32,500
\$50,000,000 - \$99,999,999.99	\$48,750
\$100,000,000 - \$199,999,999.99	\$69,095
\$200,000,000 - \$299,999,999.99	\$85,345
\$300,000,000 - \$399,999,999.99	\$109,720
\$400,000,000 - \$499,999,999.99	\$142,220
\$500,000,000 - \$999,999,999.99	\$162,500
\$1,000,000,000 - \$1,999,999,999	\$345,345
\$2,000,000,000 - \$4,999,999,999	\$650,000
\$5,000,000,000 - \$9,999,999,999	\$1,015,625
\$10,000,000,000 or greater	\$1,503,125

For more information:

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

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

BID FORM AND SUBMITTAL PACKAGE ACKNOWLEDGMENT

CONTRACT NO. 201845744

PARK AVENUE REHABILITATION

BIDDER:	SEMA Construction, Inc. (Legal Name per Colorado Secretary of State)	_
ADDRESS:	7353 S. Eagle Street	
	Centennial, CO 80112	_
		_

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. 201845744, Park Avenue Rehabilitation, made available to the undersigned bidder pursuant to Notice of Invitation for Bids dated November 8, 2018.

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 Owned Business Enterprise Participation
Minority/Woman Owned Business Enterprise(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:

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

Notice of Invitation for Bids

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:

Name: T. Brett Ames

Bv:

Title: Vice President

ATTEST:

By: Steven Hathaway, Corporate Secretary

[SEAL]

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

BID FORM

CONTRACT NO. 201845744 PARK AVENUE REHABILITATION

BIDDER SEMA Construction, Inc.

(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 November 8, 2018, to furnish all required materials, tools, appliances, equipment and plant; to perform all necessary labor and to undertake and complete: CONTRACT NO. 201845744, PARK AVENUE REHABILITATION, 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, Divisions 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

Certificate of Insurance

Item No.	Description and Price	Estimated Quantity	Estimated Cost
202	Removal of Bearing Device at the unit price of \$1,400.00 per EACH.	43 EA	\$ 60,200.00
204	Bridge Jacking and Shoring at the unit price of \$\frac{2}{4}100.00 per EACH.	43 EA	\$ 90,300.00
208-00002	Erosion Log Type I (12 inch) at the unit price of \$\frac{\Omega}{\Omega} \cdot \SO \text{per LINEAR} FOOT.	1,162 LF	\$ <u>9,877.00</u>
208-00045	Concrete Washout Structure at the unit price of \$520.00 per EACH.	1 EA	\$ <u>620</u> .00
208-00070	Vehicle Tracking Pad at the unit price of \$\frac{1}{2}\cdot \text{\$00.00} per EACH.	1 EA	\$ <u>1,600.00</u>
208-00207	Erosion Control Management at the unit price of \$525.00 per DAY.	15 DAYS	\$ _1,815.00
211-02275	Cement Grout at the unit price of \$\frac{\blue{0.00}}{40.50.00} \text{per CUBIC} YARD.	11 CY	\$ <u>66,550.00</u>
512-00102	Bearing Device (Type II) at the unit price of \$4,150.00 per EACH.	43 EA	\$ <u>179,450.00</u>
519-01000	Epoxy Resin (Injection) at the unit price of \$ 140.00 per LINEAR FOOT.	84 LF	\$ <u>11,760.00</u>
601-03040	Concrete Class D (Bridge) at the unit price of \$5,300.00 per CUBIC YARD.	22 CY	\$ 116,600.00
601-51005	Galvanic Anodes at the unit price of \$42.00 per EACH.	396 EA	\$ 16,632.00
602-00020	Reinforcing Steel (Epoxy Coated) at the unit price of per POUND.	8,104 LB	\$ <u>58,754.00</u>

Item No.	Description and Price	Estimated Quantity	Estimated Cost
620-00020	Sanitary Facility at the unit price of \$ 910.00 per EACH.	1 EA	\$ <u>910.00</u>
626-00000	Mobilization at the unit price of \$_\frac{111_500.00}{} per LUMP SUM.	1 LS	\$ [11, 500.00
626-01103	Public Information Services (Tier III) at the unit price of \$_\frac{17,250.00}{250.00} per LUMP SUM.	1 LS	\$ 17,250.00
630-00007	Traffic Control Inspection at the unit price of \$145.00 per DAY.	18 DAYS	\$ <u>2,970.00</u>
630-00012	Traffic Control Management at the unit price of \$\(\begin{array}{c} \begi	36 DAYS	\$ 23,400.00
630-00018	Traffic Control (Special) LS at the unit price of \$110,575.00 per LUMP SUM.	1 LS	\$_110,575.00
631	Railroad Coordination at the unit price of \$200.00 per HOUR.	20 HR	\$ 4,000.00
632	RTD Coordination at the unit price of \$\frac{100.00}{} per HOUR.	40 HR	\$_\text{\text{\text{000.00}}}
20 bid items			
Force Account	<u>ts</u> :		
700	F/A Railroad Coordination Fees	1 LS	\$15,000
700	F/A Railroad Contractor Orientation Course	1 LS	\$3,000
700	F/A Railroad Inspector Coordinator	1 LS	\$32,500

Item No.	Description and Price	Estimated Quantity	Estimated Cost
700-70042	F/A Railroad Flagging		
		1 LS	\$80,000
700	F/A RTD/DTO Training	1 LS	\$6,000
700	F/A RTD/DTO Rail Shutdowns	1 LS	\$50,000
Allowances:		. 20	<u> </u>
700-70380	A/A Erosion Control	1 LS	\$10,000
700-70589	A/A Environmental Health and Safety Management	1 LS	\$15,000

Bid Items Total Amount (202 through 700-70589 (Twenty [20]) total bid items plus 6 Force Accounts and 2 Allowances) Textura ® Fee from table on Page BF-3 (based on Bid Items Total Amount)	\$ <u>1109223.00</u> \$ <u>5,850.00</u>
Bid Items Total Amount plus Textura® Fee equals Total Bid	\$ 1115,073.00

Tota	al Bid Amount: William one hundred fifteen thousand seventy-three dollars and zero cents
	Dollars (\$ 1, 115, 073.00
the U date and (e Manager mails a written Notice of Apparent Low Bidder, addressed to the Bidder's business address stated on this Bid Form Undersigned Bidder shall, in accordance with the Contract Documents, be ready to, and shall, within five (5) days after the of the Notice: (i) execute the attached form of Contract in conformity with this bid; (ii) furnish the required proofs of insurance (iii) furnish the required bond or bonds in the sum of the full amount of this bid, executed by a surety company acceptable to Manager.
	Fidelity and Denosit Company of Maryland

The Fidelity and Deposit Company of Maryland, a corporation of the State of Maryland, is hereby offered as Surety on said bond. If such surety is not approved by the Manager, another and satisfactory surety company shall be furnished.

Enclosed with this bid is a bid guarantee, as defined in the attached Instructions to Bidders, in the amount of 5% of the total bid amount. The Undersigned Bidder agrees that the entire amount of this bid guarantee is to be paid to and become the property of the City as liquidated damages, and not as a penalty, if: (i) the bid is considered to be the best by the City; (ii) the City notifies the Undersigned Bidder that it is the Apparent Low Bidder; and (iii) the Undersigned Bidder fails to execute the Contract in the form prescribed or to furnish the required bond and proofs of insurance, within five (5) days after the date of such notification.

The following persons, firms or corporations are interested with the Undersigned Bidder in this bid:

Name: N/A	_Name:_ N/A
Address:	_Address:

If there are no such persons, firms, or corporations, please so state in the following space: None

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
Traffic Control	Work 9.64	Legacy Traffic Management, LLC
Puldic Information Senices	145	2020 Group, LLC
Landscapinas Erosion Commil Semices	1.55	2590 N. Washington St. #101, Denver, Co 80205 Environmental Mentt 682 Vermilion Peak Dr., Windsor, Co 80550
Rebar Installation	1.43	Rocky Mountain Rebar, Inc.
		6801 S. Emporia St. #202, Greenwood Village, Co 90112

(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
Compilance Unit
201 W. Colfax Ave. Dept. 907
Denver, CO 80202
Phone: 720-913-1999
D3BO@danverpov.org

City & County of Derwer Contract No.: 201845744				
The undersigned Bidder proposes to utilize all listed firms. The following MWBE(s) firms listed 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 attach this page to list additional MWBE.				
	Prime B	idder		
Business Name: SEMA Construc				
Address: 7353 S. Eagle Street, C	Centennial, CO 80112	Contact Person: Nancy Guerrer	°o	
Type of Service: Earthwork, Drainag	ge, Structures, Utilities	Dollar Amount: \$:	Percent of Project:	
	Certified MWBE	Prime Bidder		
Business Name:				
Address:		Contact Person:		
Type of Service:		Dollar Amount: \$:	Percent of Project:	
Subcontractor	s, Suppliers Manufa	cturers or Brokers (check one by	(x)	
✓ Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)	
Business Name: Legacy TV	affic Manageme	nt, LLC		
Address: 1390 S. Cherokee	St. Denver, CO	Type of Service: Traffic (0	introl	
Contact Person: Jesse Leonard		Dollar Amount: \$: 17,600.00	Percent of 9.64 Project	
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (√)	
Business Name: 2070 Group, LLC				
Address: 2590 N. Washington #101, Denver, Co Type of Service: Public Info. Services				
Contact Person: Heidi Row		Dollar Amount: \$: 16, 200 . 00	Percent of 1.45 Project	
✓ Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)	
Business Name: Environmental Meritt Erosion Control Septices				
Address: 602 Vermition Peak Dr. Windsor, CO Type of Service: Landscaping The				
Contact Person: BobiJo Men		Dollar Amount: \$: 17, 315.00	Percent of 155 Project	

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	Subcontractors	Suppliers Manufac	cture	rs or Brokers (check one b	ox)		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busir	ess Name: ROUM MOM	ntain Rebar, 11	nc.				
	ess: 68019. Emporia St		_ I				
Cont	act Person: Bobby Gar	da	Dolla	ar Amount: \$: 6,000.00	Percent of Project: 1.43		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busir	ess Name:						
Addn	255:		Туре	e of Service:			
Cont	act Person:	•	Dolla	ar Amount: \$:	Percent of Project:		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busir	ess Name:						
Addn	255:		Туре	e of Service:			
Cont	act Person:	•	Dollar Amount: \$:		Percent of Project:		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busir	ness Name:						
Addr	25S:		Type of Service:				
Cont	act Person:	•	Dollar Amount: \$:		Percent of Project		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busir	ness Name:						
Addr	255:		Type of Service:				
Cont	act Person:		Dolla	ar Amount: \$:	Percent of Project		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busi	ness Name:						
Address:			Type of Service:				
Cont	act Person:		Dolla	ar Amount: \$:	Percent of Project		
	Subcontractor (√)	Supplier (√)		Manufacturer (√)	Broker (√)		
Busi	ness Name:						
Addr	25S:		Type of Service:				
Cont	act Person:		Dolla	ar Amount: \$:	Percent of Project		

Rev 031816JE

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 readvertise this Project for bids.

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

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:		7353 S. Eagle S	Street		
City, State, Zip Co	ode:	Centennial, CO	80112		
Telephone Number	er of Bidder:	(303) 627-260	0	Fax No. (303) 627-2626	
Social Security or	Federal Employer	ID Number of B	idder:	84-1163868	
	n of the last work o Road Viaduct, Nor			n which the Bidder was engaged:	
For information re	elative thereto, plea	se refer to:			
Name:	Gary Thayer				
Title:	District Engineer	r			
Address:	1500 Hwy 2, Line	coln, NE 68502			
The undersigned a	acknowledges rece	ipt, understandin	g, and full considera	ation of the following addenda to the Contract Do	cuments:
	Adden	da Number	Date _	11/21/18	
	Adden	da Number	Date _	11/29/18	
	Adden	da Number	Date _		
Dated this 6th	day of	December	, 20 <u>18</u> .		

Business Address of Bidder:

If a Partnership: SEMA Construction, Inc.	Signature of Bidder:			
If a Partnership: by:	If an Individual:			doing business
SEMA Construction, Inc. SEMA Construction, Inc.		as		
If a Corporation: Attest:	If a Partnership:			
Attest: Secretary Steven Hathaway (Corporate Seal) If a Joint Venture, signature of all Joint Venture participants. Firm: Corporation(), Partnership() or () Limited Liability Company By: Title: Corporation(), Partnership() or () Limited Liability Company By: Corporation(), Partnership() or () Limited Liability Company Title: Corporation(), Partnership() or () Limited Liability Company By: Corporation(), Partnership() or () Limited Liability Company By: Corporation(), Partnership() or () Limited Liability Company By: Corporation(), Partnership() or () Limited Liability Company Firm: Corporation(), Partnership() or () Limited Liability Company Firm: Corporation(), Partnership() or () Limited Liability Company By: Corporation(), Partnership() or () Limited Liability Company		by:	<u>.</u>	General Partner.
Attest: Secretary Steven Hathaway (Corporate Seal) If a Joint Venture, signature of all Joint Venture participants. Firm: Corporation (), Partnership () or () Limited Liability Company By: Title: Secretary (Corporate Seal) Firm: Corporation (), Partnership () or () Limited Liability Company By: Title: Secretary (Corporate Seal) Firm: Corporation (), Partnership () or () Limited Liability Company By: Title: Secretary (Corporate Seal) Firm: Corporation (), Partnership () or () Limited Liability Company By: (If a Corporation) Attest: Secretary (Corporate Seal) Firm: Corporation (), Partnership () or () Limited Liability Company By: Title: Title: Title: Secretary (Corporation) Attest:	If a Corporation:	SEMA Construc	tion, Inc.	
Attest: Secretary Steven Hathaway (Corporate Seal) If a Joint Venture, signature of all Joint Venture participants. Firm: Corporation (), Partnership () or () Limited Liability Company By: Title: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Title: Corporation (), Partnership () or () Limited Liability Company By: Title: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company By: Corporation (), Partnership () or () Limited Liability Company		a Colorado "S"		Corporation,
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By: (If a Corporation) Attest: Title: Secretary (Corporate Seal) Firm: (If a Corporation) By: (If a Corporation) Attest: Title: (Corporate Seal) Firm: (Corporate Seal) Firm: (Corporate Seal) Firm: (If a Corporation) Attest: (If a Corporation) Attest: (If a Corporation) Attest: (If a Corporation)	Firm:			
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Corporation (), Partnership () or () Limited Liability Company By:			Secretary	(Corporate Seat)
By: (If a Corporation) Attest: Title: Secretary (Corporate Seal) Firm: (Corporate Seal) Sometimes are corporation (), Partnership () or () Limited Liability Company By: (If a Corporation) Attest: Title: (If a Corporation)	-			
Title: Attest: Secretary (Corporate Seal)	Corporation (), Partnership () or () Limited Liability Co	ompany	
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Firm: Corporation (), Partnership () or () Limited Liability Company By: Title: (If a Corporation) Attest:	Title:			(Cormorata Saal)
Corporation (), Partnership () or () Limited Liability Company By: (If a Corporation) Attest: Title:			Secretary	(Corporate Sear)
By: (If a Corporation) Attest:	Firm:			
Attest: Title:	Corporation (), Partnership () or () Limited Liability Co	ompany	
	-			
	Title:		Secretary	(Corporate Seal)



Office of Economic Development Division of Small Business Opportunity Compliance Unit

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

COMMITMENT TO MWBE PARTICIPATION

The undersigned has satisfied the MWBE participant requirements in the following manner (Please check the appropriate box): \mathbf{W} The Bidder/Proposer is committed to the minimum 14.0 % **MWBE** utilization on the project, and will submit Letters of Intent (LOI) for each subcontractor/subconsultant listed in the Bid Forms as follows: Hard Bids: Three (3) business days after the bid opening. Request for Proposals/Qualifications: With the proposal when due. Compliance Plans: With each task/work order __% MWBE, but is committed to a ☐ The Bidder/Proposer is unable to meet the project goal of ____ . % MWBE utilization on the project. The Bidder/Proposer understands that they must submit a detailed statement of their good faith effort under sealed bid procedures, as a matter of responsiveness, or with initial proposals, under contract negotiation procedures; or no later than three (3) days after bid opening as a matter of responsibility as in accordance with DRMC Section 28-62 and 28-67 of Ordinance 85 to the Division of Small Business Opportunity. ☐ 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): SEMA Construction, Inc. Firm's Representative (Please print): T. Brett Ames Signature (Firm's Representative): Title: Vice President 7353 S. Eagle Street Address: Zip: 80112 Centennial CO City: State: Phone: (303) 627-2600 Fax: (303) 627-2626 Email: estimating.co@semaconstruction.com

A copy of the MWBE Certification letter must be attached to each Letter of Intent (LOI).



Office of Economic Development Division of Small Business Opportunity Compliance Unit 201 West Colfax Ave., Dept. 907 Denver, CO 80202 Phone: 720-913-1999

- All lines must be completed or marked N/A for Not Applicable
- Certification Letter must be submitted with LOI
- Submit the attached completed checklist with this letter
- Email to <u>dsbo@denvergov.orq</u> ,
- FOR RFPs and RFQs: LOIs should be included with Submittal

Contract No.: 201845744	Project Na	me: P	ark Avenu	ıe Rehab	ilitatio	n		
A. The Follow This Letter of Intent Mus							BE or DBE	
Name of Bidder/Consultant: SEMA	Construction		V Ye	Performing es □ No		Phone: (3	303) 627-26	500
Contact Person: Nancy Guerrero		En	nail: estimating.c	o@semaconstrue	ction.com	Fax: (303) 627-20	626
Address: 7353 S. Eagle Street			y: Centeni			State: CO	Zip: 801	12
B. The Following Section This Letter of Intent Mu								t
Name of Certified Firm: Environme	ntal Meritt, L	LC				Phone: (3	03) 472-02	10
Contact Person: xBobiJo Meritt		Email:2	xmeritt@envi	ronmentalme	eritt.com	Fax: N/A		
Address: 682 Vermilion Peak Driv	e	City:	Windsor			State: CO	Zip: 8055	0
Please check the designation which applies to the certified firm.	M/WBE (√)	V	SBE (√)		EBE (√)		DBE (√)	
Indirect Utilization: If this M/WBE, broker to the Bidder/ Consultant, plea utilizing the participation of this firm:								
A Copy of the M/WB	E, SBE, EBE	or DB	E Letter of	f Certifica	ation r	nust be At	tached	
Identify the scope of the work to be perice bids only, identify which bid I 561730: Erosion Control Services								
209-00207 - Erosion Control Mana								
208-00002 - Erosion Log Type I (12 Inch)							
Subcontractor/Subconsultant	t (√)	Supp	olier (√)			Br	oker (√)	
Bidder intends to utilize the aforement of the work and percentage of the total							ed above.	The cost
\$ 16,796.00						1	.50	%
Consultant intends to utilize the afore the Work/Supply described above. The consultant M/WBE, SBE, EBE or DBE of the fee amount of the work to be perfectly the state of the state of the state.	ne percentage will perform i	of the w s: uested, t	ork of the to	otal sub	\$	0.00	0	%
Bidder/Consultant's Signature:	White	ou=Vice Pre email=ngue	rett Ames, o=SEMA Constructio sident, errero@semaconstruction.com, (2.10 15:51:45 -05'00'		Date:	12/10/1	.8	
Title: T. Brett Ames, Vice Presid	lent							
M/WBE, SBE, EBE or DBE or Self-Pe Firm's Signature:	rforming xBo	biJo Mer	Digitally signed by siboblo Marite ON CHISE, Frumerite/genvironmentalmen On Chise, Frumerite/genvironmentalmen On Chise Window, CO. Relacon: Jam approving this document Contact Plan 205-217-2051 Date: 2093-12.10 11.16/04-07007	III.com, dest, CNV-sBobilo Meriti	Date:	12/10/	18	
President Title: If the above named Bidder/Consultant is not de	termined to be th	e successf	ul Bidder/Cons	sultant, this <u>L</u>	etter of I	ntent shall be	null and void.	



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

Denver, CO 80202 Phone: 720-913-1999

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

27								
Contract No.: 201845744	Project Na	me:	Park	Avenue	Rehab	ilitation		
This Letter of Intent Mus	A. The Following Section Is To Be Completed by the Bidder/Consultant This Letter of Intent Must be Signed by the Bidder/Consultant and M/WBE, SBE, EBE or DBE							
Name of Ridder/Consultant:	Construction,	100000000000000000000000000000000000000	Self-	Performing	g:		<mark>303</mark>) 627-2	2600
Contact Person: Nancy Guerrero		Em	ail:	@semaconstr	uction com	Fax: (303	3) 627-262	26
Address: 7353 S. Eagle Street		City			detron.com	State: CO		112
B. The Following Section This Letter of Intent Mo							Control of the Contro	
Name of Certified Firm: Legacy Tra							<mark>0.7</mark> 08.633	-
Contact Person: Jesse Leonard	11	Email:	esse@le	gacytraff	ic.net	Fax:		
Address:1390 S Cherokee St		City: De				State: CO	Zip: 8022	23
Please check the designation which applies to the certified firm.	ch M/WBE (√)	×	SBE (√)	×	EBE	X	DBE (√)	×
Indirect Utilization: If this M/WBE, broker to the Bidder/ Consultant, plea utilizing the participation of this firm:	SBE, EBE or D se indicate the N/A	DBE is no name o	t a direct fi	rst tier sub ntractor/su	contract	or/subcons tant, suppli	ultant, supp er or broke	olier or r which is
A Copy of the M/WB	E, SBE, EBE	or DBI	Letter o	f Certific	ation m	ust be Att	tached	
Identify the scope of the work to be perice bids only, identify which bid I 630-00007 - Traffic Control Inspection	erformed or su	pply item	that will be	e provided	by the N	Л/WBE/SBE	DBE. On	unit oonds to.
630-00012 - Traffic Control Managemen	nt 561	1990: Flag	gging (I.E., 7	Fraffic Con	trol) Serv	rices		
630-00018 - Traffic Control (Special) LS								
Subcontractor/Subconsultant	t (√)	Supp	lier (√)			Bro	oker (√)	
Bidder intends to utilize the aforemer of the work and percentage of the total	ntioned M/WBE	E, SBE, E	BE or DBE	for the W	ork/Sup	ply describe	ed above.	The cost
\$ 107,600.00		To Haz I	Version of the state of	eribiliti			9.64	%
Consultant intends to utilize the afore the Work/Supply described above. The consultant M/WBE, SBE, EBE or DBE	ne percentage will perform is	of the wo	ork of the to	otal sub			0	%
If the fee amount of the work to be pe	rformed is requ	uested, tl	ne fee amo	unt, is:	\$	0.00		
Bidder/Consultant's Signature:		7 / 1			Date:	12/10/18		
Title: T. Brett Ames, Vice President						,		
M/WBE, SBE, EBE or DBE or Self-Pe Firm's Signature:	rforming)esse	Leona	rd	Date:	12	2/03/2018	
Title: Owner If the above named Bidder/Consultant is not de	termined to be the	ellococet.	l Bidder/Cons	ultant this!	offer of la	tant ab = 0 b	ull and self	



Office of Economic Development Division of Small Business Opportunity Compliance Unit 201 West Colfax Ave., Dept. 907 Denver, CO 80202 Phone: 720-913-1999

- All lines must be completed or marked N/A for Not Applicable
- Certification Letter must be submitted with LOI
- Submit the attached completed checklist with this letter
- Email to <u>dsbo@denvergov.orq</u> ,
- FOR RFPs and RFQs: LOIs should be included with Submittal

Contract No.: 201845744	Project Name: Park Avenue Rehabilitation							
A. The Follow This Letter of Intent Mus							E or DBE	
Name of Bidder/Consultant: SEMA (Construction,	Inc.		Performing	j:	Phone: (303) 627-2	2600
Contact Person: Nancy Guerrero		En	ail: estimating.	co@semaconstru	iction.com	Fax: (303	3) 627-262	6
Address: 7353 S. Eagle Street		Cit	y: Centenr	nial		State:CO	Zip: 801	112
B. The Following Section This Letter of Intent Mu								ıt
Name of Certified Firm: Rocky Mou	ıntain Rebar,	Inc.				Phone: (3	03)799-40	14
Contact Person: Karina Garcia		Email:	kgarciarm	r@aol.coi	n	Fax: (72	20) 328-83	39
Address: 6801 S. Emporia St., #20	2	City:	Greenwoo	d Village		State: CO	Zip: 80	112
Please check the designation which applies to the certified firm.	M/WBE (√)	V	SBE (√)		EBE (√)		DBE (√)	
Indirect Utilization: If this M/WBE, broker to the Bidder/ Consultant, plea utilizing the participation of this firm:								
A Copy of the M/WB	E, SBE, EBE	or DB	E Letter o	f Certific	ation r	nust be At	tached	
Identify the scope of the work to be perice bids only, identify which bid I 238120: Steel Reinforcing Contra	ine items the	M/WBE	/SBE/EBE/					
602-00020 - Reinforcing Steel (E	poxy Coated)							
Subcontractor/Subconsultant	t (√)	Supp	olier (√)			Br	oker (√)	
Bidder intends to utilize the aforement of the work and percentage of the total							ed above.	The cost
\$ 16,000.00							1.43	%
Consultant intends to utilize the aforementioned M/WBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total sub consultant M/WBE, SBE, EBE or DBE will perform is: O If the fee amount of the work to be performed is requested, the fee amount, is: \$ 0.00					%			
Bidder/Consultant's Signature: Date: 12/10/18								
Title: T. Brett Ames, Vice President								
MWBE, SBE, EBE or DBE or Self-Pe Firm's Signature: Assura Ga	erforming NCM				Date:	12/10/201	8	
Title: President	- Care					12/10/201	<u> </u>	
If the above named Bidder/Consultant is not de	termined to be th	e successf	ul Bidder/Con	sultant, this L	etter of I	ntent shall be	null and void.	



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

Denver, CO 80202 Phone: 720-913-1999

- All lines must be completed or marked N/A for Not Applicable
- Certification Letter must be submitted with LOI
- · Submit the attached completed checklist with this letter
- Email to dabo@denvergov.org ,
- . FOR RFPs and RFQs: LOIs should be included with Submittal

Contract No.: 201845744	Project Nar	ne: Park Avenue Rehab	ilitation			
This Letter of Intent Mus		s To Be Completed by the E y the Bidder/Consultant an			E or DBE	
Name of Bidder/Consultant: SEMA	Construction,	Inc. Self-Performing Yes □ No	- 1	Phone: ((303) 627-260	00
Contact Person: Nancy Guerrero		Email: estimating.co@semaconstr	uction.com	Fax: (303) 627-262	26
Address: 7353 S. Eagle Street		City: Centennial	ļ	State; CO	Zip: 80112	
		ompleted by the M/WBE, SB by the M/WBE, SBE, EBE o				
Name of Certified Firm: ZoZo Group,	LLC			Phone: (7	20) 949-2020)
Contact Person: Heidi Row		Email: hrow@zozogroup.c	om	Fax: (7	720) 949-202	1
Address: 2590 N. Washington Street	et	City: Denver		State: CO	Zip: 80205	
Please check the designation whic applies to the certified firm.	h M/WBE (*)	✓ SBE	EBE (1)		DBE (v)	
Indirect Utilization: If this M/WBE, S broker to the Bidder/ Consultant, pleas utilizing the participation of this firm:						
A Copy of the M/WBF	SBE, EBE	or DBE Letter of Certific	ation m	ust be At	tached	
Identify the scope of the work to be per price bids only, identify which bid line 541910: Marketing Research and F	ne items the l	M/WBE/SBE/EBE/DBEs sco				
626-01103 - Public Information Ser						
			100000000000000	rice avec some con-		
Subcontractor/Subconsultant	**************************************	Supplier (v)		15000000000000	oker (v)	
Bidder intends to utilize the aforement of the work and percentage of the total					ed above. The	cost
\$ 16,200.00					1.45	8. ₆
Consultant intends to utilize the aforer the Work/Supply described above. The consultant M/WBE, SBE, EBE or DBE	e percentage o	of the work of the total sub			0	%
If the fee amount of the work to be perf	ormed is requ	ested, the fee amount, is:	S	0.00		
Bidder/Consultant's Signature:	Left -	_	Date:	12/10/18		
Title: T. Brett Ames, Vice Presiden	ıt				4	
M/WBE, SBE, EBE or DBE or Self-Per Firm's Signature:	forming	a 	Date:	12/	10/18	
Title: MANAGING MEM. If the above named Bidder/Consultant is not dete				/ / 11 %		

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.

	Submit the attached completed checklist with this letter.
Completed ✓	
1	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
√ Z	Designation checked for MBE/WBE, SBE, EBE or DBE
4	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
Q'	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.
Q'	Fee amount if fee amount of work to be performed is requested.
4	Bidder/Consultant's Signature, Title & Date
√	M/WBE, SBE, EBE or DBE Firm's Signature, Title and Date

Select Qne ✓	SUBMITTED VIA For Construction Hard Bids ONLY, 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.)
lacksquare	Email to DSBO@denvergov.org

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.



Joint Venture Affidavit

Office of Economic Development Division of Small Business Opportunity Compliance Unit 201 W. Colfax Ave. Dept. 907 Denver, CO 80202 Phone: 720-913-1999 DSBO@denveruov.org

N/A

The <u>Undersigned</u> swears 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:			
*			
Print Name:		Title	
Signature:		Date:	
ognatic.	Notary Pu	ıblic	
	_		
County of	State of	My Commission Expires	
Subscribed and sworn before me this			
day of	, 20		
			Hotary Seal
Notary Signature:			
Notary Commission #:			
Address:			
Name of Firm:			
Print Name:		Title	
Signature:		Date:	
	Notary Pt	ıblic	
		1	
County of Subscribed and sworn before me this	State of	My Commission Expires	
1000000 BBB			
day of	, 20		
			Notary Seal
Notary Signature:			
Notary Commission #:		1	
Address:		l	



JOINT VENTURE ELIGIBILITY FORM

N/A

Office of Economic Development
Division of Small Business Opportunity
Compliance Unit
201 W. Colfax Ave. Dept. 907
Denver, CO 80202
Phone: 720-913-1999
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, EBEs, 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 Ir	nformation	MARKET ASE A COLOR SERVICE AND A
Name:		Contact i	Person:
Address:			
City:	State:	Zip:	Phone:
	Joint Venture P	articipants	
Name:		Contact F	Person:
Address:		<u>-</u>	
City:	State:	Zip:	Phone:
% Ownership: Certifying Entity:			Type Certification & Date: (S/E/M/W or DBE)
Type of Work for which Certification was grante	d:		,
Name:		Contact i	Person:
Address:		•	
City:	State:	Zip:	Phone:
% Ownership: Certifying Entity:			Type Certification & Date: (S/E/M/W or DBE)
Type of Work for which Certification was grante	d:		
	General Info	rmation	
SBE/EBE/MBE/WBE/DBE Initial Capital Contrib	utions: \$		%
Future capital contributions (explain requiremen	its) (attach addition	nal sheets if necessary):
Source of Funds for the SBE/EBE/MBE/WBE/D	BE Capital Contrib	outions:	
Describe the portion of the work or elements of sheets if necessary)	the business contr	rolled by the SBE/EBE	MBE/WBE or DBE: (attach additional

Describe the portion of the work or elements of the business controlled by non-SBE/EBE/MBE/WBE or DBE: (attach additional sheets if necessary)
JOINT VENTURE ELIGIBILITY FORM
General information
Describe the SBE/EBE/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/EBE/MBE/WBE or DBE's share in the profits of the joint venture:
Describe the CONTROLANDE or DOC's show in the disks of the laint weathers
Describe the SBE/EBE/MBE/WBE or DBE's share in the risks of the joint venture:
Describe there roles and responsibilities of each joint venture participant with respect to managing the joint venture (use additional sheets if necessary):
a. SBE/EBE/MBE/WBE or DBE joint venture participant:
b. Non- SBE/EBE/MBE/WBE or DBE joint venture participant:
Describe the roles and responsibilities of each joint venture participant with respect to operation of the joint venture (use additional sheets if necessary):
a. SBE/EBE/MBE/WBE or DBE joint venture participant:
b. Non- SBE/EBE/MBE/WBE or DBE joint venture participant:

Which firm will be responsible for accounting functions relative to the joint venture's business?				
		y will have to commit or obligate to ctors, and/or other parties?	he other to insurance and bonding	g companies, financing
management emple	oyees that wil	ng to the approximate <u>number</u> of I be required to operate the busin E/OBE or joint venture:		
	Non	- SBE/EBE/M/WBE/DBE	SBE/EBE/M/WBE/DBE	Joint Venture
Management			77	
Administrative				
Support				
Hourly Employees				
		JOINT VENTURE	ELIGIBILITY FORM	
		General II	nformation	
Please provide the	name of the p	person who will be responsible for	hiring employees for the joint ve	nture.
Who will they be en	nployed by?			
Are any of the prop partners?	osed joint ver	nture employees currently employ	ees of any of the joint venture	Yes No
If yes, please list the necessary)	e number and	d positions and indicate which firm	currently employs the individual	(s), (use additional sheets if
Number of employees		Position	Employed By	
				<u> </u>
Attach a copy of the proposed joint venture agreement, promissory note or loan agreement (if applicable), and any and all written agreements between the joint venture partners.				
List all other business relationships between the joint venture participants, including other joint venture agreements in which the parties are jointly involved.				
If there are any sign of Small Business		es in or pertaining to this submitta	al, the joint venture members mus	st immediately notify the Division

COMP-FRM-015

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

BID BOND

KNOW ALL MEN BY THESE PRESENTS:	
THAT SEMA Construction, Inc.	, as Principal, and
Fidelity and Deposit Company of Maryland	, a corporation organized and existing under and
held and firmly bound unto the City and County of I Total Amount Bid	, and authorized to do business within the State of Colorado, as Surety, are Denver, Colorado, as Obligee, in full and just sum of <u>Five Percent of the</u>
assigns, jointly and severally, firmly by these presen	
Documents for the City and County of Denver, Colo the Principal deposit specified bid security in the am to work to be performed for the City, conditioned construction and furnish required Performance and F to the Obligee as liquidated damages, and not as a positive condition of this obligation is such that prescribed form presented to him for signature, enter and give Performance and Payment Bond with good the faithful performance and the proper fulfillment specified, or upon the payment to the Obligee of the	ARK AVENUE REHABILITATION, as set forth in detail in the Contract brado, and said Obligee has required as a condition for receiving said bid that brount of not less than five percent (5%) of the amount of said bid, as it relates I that in event of failure of the Principal to execute the Contract, for such Payment Bond if the contract is offered him that said sum be paid immediately enalty, for the Principal's failure to perform. It if the aforesaid Principal shall, within the period specified therefore, on the into a written contract with the Obligee in accordance with his bid as accepted and sufficient surety or sureties, upon the form prescribed by the Obligee, for of said Contract, or in the event of withdrawal of said bid within the time sum determined upon herein, as liquidated damages and not as penalty, in the nd give such Performance and Payment Bond within the time specified, then
Signed, sealed and delivered this 6th	day ofDecember, 20_18.
ATTEST Howher	SEMA Construction, Inc. Principal By
Secretary	Title Vice President Fidelity and Deposit Company of Maryland
Seal if Bidder is Corporation	Surety By Angela M. Findol, Attorney-in-Fact
(Au 1 D CAu)	[SEAL]
anning,	
(Attach Power-of-Attorney)	

Contract No. 201845744 Park Ave Rehab BF - 20

November 8, 2018

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by DAVID MCVICKER, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Mona D. WEAVER, Anuj JAIN, Sheila J. MONTOYA, Charles M. MCDANIEL, Angela M. TINDOL, Janet M. ELWELL, Justin TOMLIN, Thomas F. MCCOY JR. and John BROWNING, all of Denver, Colorado, EACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 3rd day of October, A.D. 2018.

ATTEST:

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND







Bv:

Assistant Secretary Joshua Lecker

Vice President
David McVicker

minne

State of Maryland

County of Baltimore

On this 3rd day of October, A.D. 2018, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **DAVID**MCVICKER, Vice President, and JOSHUA LECKER, Assistant Secretary, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Condand a Dunn

Constance A. Dunn, Notary Public My Commission Expires: July 9, 2019



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: estimat	ing.co@semaconstruction.com				
Please include the Email address of City and County of Denverpw.pro		ting this solicitation for the			
Agency Name:Arts and VenueAuditor OfficeCommunity PlanningDenver International AirportEnvironmental HealthFire Department	Purchasing DivisionHuman ServicesEconomic DevelopmentParks and RecreationPolice Department Public Works				
Project Name: Park Avenue Reha	bilitation				
BID / RFP No.: 201845744 / ebid #6008942					
Name of Contractor/Consultant: SEMA Construction, Inc.					
What industry is your business? H	lighway, Street, and Bridge Co	nstruction			
Address:					
7353 S. Eagle Street					
Centennial, CO 80112					
Business Phone No.: (303) 627-260	00				
Business Facsimile No.: (303) 627-	-2626				

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 450 Part-Time 0			
2. Do you have a Diversity and Inclusiveness Program? Yes			
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			
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.			
Please see attached Affirmative Action Program.			
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			

		i do not have a diversity and have to adopt such a progra		/ènėss program	, describe any
i i	N/A				
6. H	low often do you provide	training in diversity and inc	dusivene	ess principles?	
	Monthly Quarterly	Annually Not Applicable		Other	
6.1	What percentage of the	total number of employees	general	ly participate?	
	0 - 25% 26 - 50%	51 - 75% 76 - 100%		Not Applicable	
ti	his may include, for examiners ity or inclusiveness the amount and description upplier diversity and inclusion in Supplier diversity and i	versity and inclusiveness in mple, narratives of training partnership programs, mer ion of budget spent on an alusiveness. Poly and Procurement starts during the tact all the local MWBE contractors and Women-Owned businesses are eam available to answer questions are the bid package so all contractors.	program ntoring a nnual ba	nent phase of bidding and/or fax with a form d to reply to our solic our approach to a project.	work. nal bitations. ect.
	o you have a diversity a	nd inclusiveness committee	? 🗆	Yes 🗹	No
	Monthly Quarterly	Annually Other		No Committee	
	-	ou do not have a diversity ar may have to establish such			ttee, describe
lim be	ited amount of Senior Manager	establish a formal diversity and incluses. We feel that this is part of our rout to provide successful opportunities to y.	tine. It has	been and continues to	

9. Do you have	a budget for dive	rsity and inclusiven	ess efforts?	Yes	₩ No
		e diversity and inclu formance evaluation		en¢ies Yes	₩ No
-	like information o	letailing how to imp	lement a Dive	ersity and Incl	usiveness
program?	Yes	No			
lf yes, please e	mail <u>X0101@den</u>	vergov.org.			
I attest that the my knowledge.	information repr	esented herein is tr	ue, correct ar	nd complete,	to the best o
1	The last		12/6/18	3	
Signature of Pe	rson Completing	Form	Date		
T. Brett Ames, V	/ice President				
Printed Name (of Person Comple	ting 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

DEPARTMENT OF PUBLIC WORKS

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Prevailing Wage Rate Schedule	6 pages
Technical Specifications	61 pages
Contract Drawings	27 pages

STATEMENT OF QUANTITIES

Item No.	Description	Estimated	Quantity
202	Removal of Bearing Device	43	EA
204	Bridge Jacking and Shoring	43	EA
208-00002	Erosion Log Type I (12 inch)	1,162	LF
208-00045	Concrete Washout Structure	1	EA
208-00070	Vehicle Tracking Pad	1	EA
208-00207	Erosion Control Management	15	DAY
211-02275	Cement Grout	11	CY
512-00102	Bearing Device (Type II)	43	EA
519-01000	Epoxy Resin (Injection)	84	LF
601-03040	Concrete Class D (Bridge)	22	CY
601-51005	Galvanic Anodes	396	EA
602-00020	Reinforcing Steel (Epoxy Coated)	8,104	LB
620-00020	Sanitary Facility	1	EA
626-00000	Mobilization	1	LS
626-01103	Public Information Services (Tier III)	1	LS
630-00007	Traffic Control Inspection	18	DAY
630-00012	Traffic Control Management	36	DAY
630-00018	Traffic Control (Special) LS	1	LS
631	Railroad Coordination	20	HR

STATEMENT OF QUANTITIES

Item No.	Description	Estimated	Quantity
632	RTD Coordination	40	HR
Force Accounts:			
700	F/A Railroad Contractor Orientation Course	1	LS
700	F/A Railroad Inspector Coordinator	1	LS
700-70042	F/A Railroad Flagging	1	LS
700	F/A RTD/DTO Training	1	LS
700	F/A RTD/DTO Rail Shutdowns	1	LS
Allowances:			
700-70380	A/A Erosion Control	1	LS
700-70589	A/A Environmental Health and Safety Management	1	LS

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS

NOTICE FOR INVITATION FOR BIDS **FOR CONTRACT NO. 201845744**

PARK AVENUE REHABILITATION

BID SCHEDULE: 11:00 a.m., Local Time **December 6, 2018**

Sealed bids will be received in Room 6.G.7, 201 W. 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: Dani Abbott, Public Works Contract Administration, 201 W. Colfax Ave., Department 614, Denver, CO 80202.

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

GENERAL STATEMENT OF WORK:

Elevate Denver is a 10-year, \$937 million general obligation bond program approved by voters in 2017, that will enhance the City and County of Denver by providing critical improvements to the City's infrastructure—improving our roads, sidewalks, parks, recreation centers, libraries, cultural centers, public-owned buildings and safety facilities.

This project is for bridge rehabilitation of the Park Avenue Viaduct. Work includes bearing replacement and substructure repair. Erosion control and traffic control will be required.

ESTIMATED CONSTRUCTION COST:

The estimated cost of construction for this project is between \$1,200,000 and \$1,450,000.

TEXTURA CONSTRUCTION PAYMENT MANAGEMENT:

Bidders are required, when preparing a bid, to agree it shall use the Textura® Construction Payment Management System ("Textura") to request payment from the City and to pay subcontractors. All certified subcontractors or suppliers who are listed for participation towards any assigned program goal must be paid via Textura. All fees associated with Textura are to be paid by the awarded Contractor. Bidders shall 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 at 866-TEXTURA or www.texturacorp.com.

DOCUMENTS AND BID INFORMATION AVAILABLE:

Contract Documents complete with Technical Specifications and, if applicable, construction drawings will be available on the first day of publication at: www.work4denver.com. To download digital Contract Documents at a cost of \$15 per download, reference eBid Document Number #6008942. Contact QuestCDN at 952-233-1632 or info@questcdn.com for assistance.

PRE-BID CONFERENCE:

A pre-bid conference will be held for this Project at 2:00 p.m., local time, on November 15, 2018. This meeting will take place at: the Webb Building, Conference Room 4.I.5, 201 W. Colfax Ave., Denver, CO 80202.

DEADLINE TO SUBMIT QUESTIONS: November 21, 2018, 2:00 p.m., local time.

PREQUALIFICATION REQUIREMENTS:

Each bidder must be prequalified in category 1G1--Bridges <u>OR</u>_1G3—Bridge Demolition and Rehabilitation at the \$1,500,000 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 W. Colfax Ave., Department 614, Denver, CO 80202. To view the Rules and Regulations and to obtain a prequalification application, please visit our website at www.denvergov.org/prequalification 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:

14% 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 City and County of Denver reserves the right to reject any or all bids and to waive informalities in bids.

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.

Publication Dates: November 8, 9, 13, 2018
Published In: The Daily Journal

Contract No. 201845744 BDP - 3 November 8, 2018

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS

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.

For Bid Forms requiring unit price bids, the bidder shall write in the Bid Form spaces provided a unit price for each 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.

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.

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, interlineations, 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 that are unbalanced so that each item does 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 properly executed bid guarantee, on the form provided herein may, in the City's sole discretion, 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 SITE INSPECTION AND INVESTIGATIONS

Prior to submitting a bid, the bidder is invited to inspect the work site and its surroundings. Although the bidder 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 bidder has waived the right to later claim additional compensation or time extensions for conditions which would have been evident had the site been inspected.

Contract No. 201845744 BDP - 5 November 8, 2018

Drawings and Technical Specifications, defining the 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 Work to be done cannot totally be derived from either the Drawings or Technical Specifications or from the Manager or his representatives.

Since the bid information cannot be guaranteed, the Contractor shall have assumed the risks attendant to successful performance of the 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 bidder at the time of the bidding.

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

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 at 201 W. Colfax, 2nd Floor, Denver, CO 80202, in the Wellington E. Webb Municipal Office Building.

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.

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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. All low bidders' bids will be reviewed for responsiveness to the requirements of the Contract Documents and whether or not the bids contain irregularities which could give any bidder an unfair advantage.

Selection will be made on the basis of the lowest, total, responsive, qualified bid, which bid shall include the total base bid set forth on the Bid Form, plus the total of any alternates set forth on the Bid Form and selected by the City during evaluation. Alternates, if any are included in the bid, will be selected in the priority shown on the Bid Form, subject to the limits of available funds. 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

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 contracts 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

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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 a material 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 and a surety authorization letter (in form similar to the one attached), to the City in accordance with the instructions contained herein.

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.

PREVAILING WAGE REQUIREMENTS **IB-22**

Contractor shall comply with, and agrees to be bound by, all requirements, conditions and City determinations regarding the Payment of Prevailing Wages Ordinance, Sections 20-76 through 20-79, D.R.M.C. including, but not limited to, the requirement that every covered worker working on a City owned or leased building or on City-owned land shall be paid no less than the prevailing wages and fringe benefits in effect on the date the bid or request for proposal was advertised. In the event a request for bids, or a request for proposal, was not advertised, Contractor shall pay every covered worker no less than the prevailing wages and fringe benefits in effect on the date funds for the contract were encumbered.

Date bid or request for qualifications/proposals was advertised: November 8, 2018.

Prevailing wage and fringe rates will adjust on, and only on, the anniversary of the date the Contract was fully executed. Unless expressly provided for in this Agreement, Contractor will receive no additional compensation for increases in prevailing wages or fringe benefits.

Contractor shall provide the Auditor with a list of all subcontractors providing any services under the contract.

BDP - 8 Contract No. 201845744 November 8, 2018 Contractor shall provide the Auditor with electronically-certified payroll records for all covered workers employed under the contract.

Contractor shall prominently post at the work site the current prevailing wage and fringe benefit rates. The posting must inform workers that any complaints regarding the payment of prevailing wages or fringe benefits may be submitted to the Denver Auditor by calling 720-913-5000 or emailing auditor@denvergov.org.

If Contractor fails to pay workers as required by the Prevailing Wage Ordinance, Contractor will not be paid until documentation of payment satisfactory to the Auditor has been provided. The City may, by written notice, suspend or terminate work if Contractor fails to pay required wages and fringe benefits.

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 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 are 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

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(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 non-responsive 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 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. Any agreement between a bidder or proposer and an MBE or WBE in which the bidder or proposer requires that the MBE or WBE not provide subcontracting quotations to other bidders or proposers is prohibited and shall render a bidder's bid or proposer's proposal nonresponsive. D.R.M.C. 28-63(f)
- 4. 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.
- 5. 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 anytime 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.

- 6. 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:
 - a. 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.
 - b. In addition, DSBO will determine the exact commitment percentage for each listed M/WBE by 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.
 - d. As previously mentioned, compliance with the M/WBE goal will be determined on the base bid 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.
 - 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.

7. 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 selfperformed 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.
- 6. 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 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 Dani Abbott who can be reached via email at pw.procurement@denvergov.org.

IB-28 PAYMENT PROCEDURE REQUIREMENTS

Bidder recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System ("Textura") for this Project to request payment from the City and to pay subcontractors. All certified subcontractors or suppliers who are listed for participation towards any assigned program goal must be paid via Textura. All fees associated with Textura are to be paid by the bidder for billings for work performed. Bidders are required, when preparing a bid, to enter the price of Textura on the line provided for the service. The fee is all inclusive of all subcontractor, project and subscription fees associated with Textura. The bidder will calculate the fee based on their total bid and the table below, and then 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, and/or utilizing Textura other than the Textura Construction Payment Management System Fee are overhead and shall not be reimbursed by the City. Bidder will be responsible for any tax on the Textura fee. As with other taxes, the City will not reimburse bidder for this cost and therefore this cost should be included in bidder's bid. Textura will invoice the awarded bidder directly.

Project Value	Project Fee (GC + Sub Usage)
\$250,000 - \$499,999.99	\$1,625
\$500,000 - \$999,999.99	\$3,250
\$1,000,000 - \$2,999,999.99	\$5,850
\$3,000,000 - \$4,999,999.99	\$9,100
\$5,000,000 - \$9,999,999.99	\$12,220
\$10,000,000 - \$19,999,999.99	\$20,345
\$20,000,000 - \$49,999,999.99	\$32,500
\$50,000,000 - \$99,999,999.99	\$48,750
\$100,000,000 - \$199,999,999.99	\$69,095
\$200,000,000 - \$299,999,999.99	\$85,345
\$300,000,000 - \$399,999,999.99	\$109,720
\$400,000,000 - \$499,999,999.99	\$142,220
\$500,000,000 - \$999,999,999.99	\$162,500
\$1,000,000,000 - \$1,999,999,999.99	\$345,345
\$2,000,000,000 - \$4,999,999,999.99	\$650,000
\$5,000,000,000 - \$9,999,999,999.99	\$1,015,625
\$10,000,000,000 or greater	\$1,503,125

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.

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Park Ave Rehab

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 prebid and pre-construction 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.

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.

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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.

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.

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CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS 201845744

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

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compliance. The Contractor further agrees to refrain from entering into any contract or contract modification subject to Article III, Division 2 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.

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS 201845744

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

A. REQUIREMENTS - AN AFFIRMATIVE ACTION PLAN:

21.7% - 23.5%

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 Division of Small Business Opportunity (DSBO). 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	GOALS FOR
MINORITY PARTICIPATION	FEMALE PARTICIPATION
FOR EACH TRADE	FOR EACH TRADE
From January 1, 1982 to Until Further Notice	From January 1, 1982 to Until Further Notice

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).

6.9%

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 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.
- 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

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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.

- 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, 201 W. Colfax, Dept. 608, Denver, Colorado 80202, and shall be forwarded through and with the endorsement of the Director.

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS

CONTRACT NO. 201845744

PARK AVENUE REHABILITATION

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 201845744, hereinafter referred to as the "Contractor," party of the second part,

SEMA CONSTRUCTION, INC. 7353 South Eagle St. Englewood, CO 80112

WITNESSETH, Commencing on November 8, 2018, 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. 201845744 PARK AVENUE REHABILITATION

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, Divisions 1, 2, 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 Certificate of Contract Release Change Orders (as applicable) Federal Requirements (as applicable) Prevailing Wage Rate Schedule(s) **Technical Specifications** Contract Drawings Accepted Shop Drawings

SCOPE OF WORK 2.

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.

TERMS OF PERFORMANCE 3.

The Contractor agrees to undertake the performance of the Work under this Contract within ten (10) days after being notified to commence work by issuance of a Notice to Proceed in substantially the form contained herein from the Manager and agrees to fully complete said Work within 130 (One hundred thirty) consecutive calendar days from the effective date of said Notice, plus such extension or extensions of time as may be granted in accordance with the provisions of the General Contract Conditions and any applicable Special Contract Conditions.

4. TERMS OF PAYMENT

The City agrees to pay the Contractor for the performance of all of the Work required under this Contract, and the Contractor agrees to accept as the Contractor's full and only compensation therefore, such sum or sums of money as may be proper in accordance with the price or prices set forth in the Contractor's Bid Form hereto attached and made a part hereof for bid item numbers 202 through 700-70589 (Twenty [20]) total bid items plus Six (6) Force Accounts and Two (2) Allowances, the total estimated cost thereof being One Million One Hundred Fifteen Thousand Seventy-Three Dollars and Zero Cents (\$1,115,073.00). Adjustments to said Contract Amount and payment of amounts due hereunder shall be made in accordance with the provisions of the General Contract Conditions and any applicable Special Contract Conditions.

5. NO DISCRIMINATION IN EMPLOYMENT

In connection with the performance of work under this contract, the Contractor may not refuse to hire. discharge, promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. The Contractor shall insert the foregoing provision in all subcontracts.

6. COMPLIANCE WITH M/WBE REQUIREMENT

This Contract is subject to all applicable provisions of Divisions 1 and 3 of Article III, 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

Contract No. 201845744 BDP - 27 November 8, 2018 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, which 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, which 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

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. DISPUTES 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 and 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,

Contract No. 201845744 BDP - 28 November 8, 2018

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. 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 No. 201845744 BDP - 29 November 8, 2018

Contract Control Number:	
IN WITNESS WHEREOF, the parties h Denver, Colorado as of	ave 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 W day first above v	HEREOF, the parties have executed this agreement and affixed their seals at Denver, Colorado as of the pritten.
Contract Contr	ol Number: 201845744
Vendor Name:	SEMA CONSTRUCTION, INC. By:
# 23 24	Name: Steven C. Mills (please print)
	Title: Corporate V.P., Contracts (please print)

ATTEST: [if required]

By: Gatricia & Xmella

Name: <u>Patricia</u> D. <u>Kinsella</u> (please print)

Title: Secretary (please print)



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

General Contract Conditions

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CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS 201845744

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 2015 Series, City and County of Denver Amendments 2016)

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.

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 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 City Engineer 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 / Engineering Division,

Project ManagerTelephoneKayla Lorentz720-865-3119

Design ConsultantConsultant ContactTelephoneAECOMCraig Parent303-740-3876

SC-6 LIQUIDATED DAMAGES

Should the Contractor fail to complete all Work within the Contract Time allocated under the Contract Form at Paragraph 3, TERMS OF PERFORMANCE, the Contractor shall become liable to the City and County of Denver for liquidated damages, and not as a penalty, at the rate of \$3000.00 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.

Contract No. 201845744 BDP - 37 November 8, 2018

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 to request payment from the City and to pay subcontractors. All certified subcontractors or suppliers who are listed for participation towards any assigned program goal must be paid via Textura®. Contractor further agrees that, to the fullest extent possible within Textura, 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 Textura, including, but not limited to, information related to Contractor and subcontractor billings. To that end, Contractor agrees it will activate any available settings within Textura 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/Firm
 Name
 Telephone

 Public Works
 Kayla Lorentz
 720-865-3119

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.
- 4. Applications for Payment must be accompanied by completed Partial or Final Claim Release Form, as appropriate, from EACH subcontractor and supplier, <u>AND</u> the Contractors' Certification of Payment Form (CCP), unless an exception is approved pursuant to General contract condition 907.

The forms, Final/Partial Release and Certificate of Payment (Subcontractor/Supplier) and the Contractor's Certification of Payment (CCP), both of which must be used are attached below. If subcontractor or supplier payments are disbursed via Textura® CPM, those systems generated Release and CCP forms are acceptable.

DEPARTMENT OF PUBLIC WORKS

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

		Date:	, 20
(PROJECT NO. and NA!	ME)		
		Subcontract #:	
(NAME OF CONTRACT	OR)		
		Subcontract Value: \$ Last Progress Payment:	
(NAME OF SUBCONTRACTOR	/SUPPLIER)	Date:	: \$ <u> </u>
Check Applicable Box:	(SOLI LILK)	Total Paid to Date: \$.
[] MBE [] WBE		Date of Last Work:	
The Undersigned hereby certifies that all costs, undersigned for any work, labor or services per above referenced Project or used in connection duly paid in full.	formed and for any mate	erials, supplies or equipn	nent provided on the
The Undersigned further certifies that each of to be incurred, on their behalf, costs, charges of above referenced Project have been duly paid in	or expenses in connectio		
In consideration of \$ representing the of the Total Paid to Date, also referenced above the undersigned this day of and County of Denver (the "City"), the above referenced Contractor from all claims, liens, rig of every nature arising out of or in connection versions.	, and other good and val , 20, the Unders eferenced City Project, the hts, liabilities, demands	uable consideration recei igned hereby releases and he City's premises and pro and obligations, whether	ived and accepted by d discharges the City operty and the above
As additional consideration for the payments reand hold harmless the City, its officers, employing against all costs, losses, damages, causes of action connection with any claim or claims against performance of the Work Effort and which may of any tier or any of their representatives, office it is acknowledged that this release is for the	ees, agents and assigns a on, judgments under the the City or the Contribe easserted by the Undersers, agents, or employees	and the above-referenced e subcontract and expense actor which arise out o signed or any of its supplies.	Contractor from and es arising out of or in f the Undersigned's ers or subcontractors
Contractor.			
The foregoing shall not relieve the undersign subcontract, as the subcontract may have build undersigned's work effort including, without ndemnities.	een amended, which l	by their nature survive	completion of the
STATE OF COLORADO) ss.			
CITY OF)		(Name of Subcontractor)	
Signed and sworn before me this day of, 20	Ву:	(Ivanic of Subcontractor)	
<u>.</u>			
My Commission Expires	Title:		

	Cit	y and County of I	Office of Economic Development Compliance Unit				
Div	ision	of Small Business	201 W. Colfax Ave., Dept. 907 Denver, CO 80202				
				,			20.913.1999
Contractor's/	Cons	ultant's Certificat	tion of	Payment (CCP)			
	Phone	:		Project Manager:			
Pay Period:				Amount Requested: \$			
Project Name:							
Percent Complete:				Prepared By:			
			(II) - Curre	ent Contract Amount: \$			
A	В	С	U	E	ŀ	G	Н
Original Contract	% Bid (A/I)	Current Contract Amount including Amendments		Requested Amount of this Pay Application	Amount Paid on the Previous Pay Application #	Net Paid To Date	Paid % Achieved (G/II)
	-						
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+	-						
		rue, accurate and that the	e payment	s shown have been made	to all subcontractors a	nd suppliers used on th	nis project
orm, if more space is nec	essary.			I			
				Date:			
Page of COMP-FRM-027 rev 031816							
	Pay Period: Project Name: Percent Complete: A/E // Original Contract Amount	Division Contractor's/Cons Phone Pay Period: Project Name: Percent Complete: A B // Original Contract % Bid Amount (A/I)	Division of Small Business Contractor's/Consultant's Certificat Phone: Pay Period: Project Name: Percent Complete: A B C Original Contract % Bid Current Contract Amount including Amendments (A/I) including Amendments The contained in this document is true, accurate and that the form, if more space is necessary.	Division of Small Business Oppor Contractor's/Consultant's Certification of Phone: Pay Period: Project Name: Percent Complete: (II) - Current Contract Amount Revised (C/II) A B C D % Conginal Contract Mount (A/I) including Amendments (C/II)	Pay Period: Project Name: Percent Complete: Prepared By: (II) - Current Contract Amount: \$ (III) - Current Contract Amount: \$ (III) - Current Contract Amount: \$ Requested Amount of this pay Application Pay Application In contained in this document is true, accurate and that the payments shown have been made form, if more space is necessary.	Division of Small Business Opportunity Contractor's/Consultant's Certification of Payment (CCP) Phone: Project Manager: Amount Requested: \$ Prepared By: (II) - Current Contract Amount: \$ (II) - Griginal Contract Amount (A/I) including Amendments (C/II) Pay Application Previous Pay Applica	City and County of Denver Division of Small Business Opportunity Denvery Phone: 7. Contractor's/Consultant's Certification of Payment (CCP) Phone: Project Manager: Pay Period: Amount Requested: \$ Project Name: Percent Complete: Prepared By: (II) - Current Contract Amount: \$ Contract Contract (An) including Amendments (CIII) Pay Application Pay Net Paid Application Pay Application Pay Application Pay Net Paid Application Pay



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 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. Please complete an additional CCP if there is second tier-ing involved.

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

Contractor/Subcontractor or Subconsultant/Supplier Name: 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).

Rev 031816

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 (Sample)
- 3. Final/Partial Lien Release.

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:

- 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 were conducted inspections tests by the inspector or a City
- .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 the 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 Staff does not bill the City 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, Auto Liability, and Contractors Pollution 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

Contract No. 201845744 BDP - 43 November 8, 2018

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 caused by 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, or its equivalent, with minimum limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement. If transporting wastes, hazardous material, or regulated substances, Contractor shall carry a pollution coverage endorsement and an MCS 90 endorsement on their policy. Transportation coverage under the Contractors Pollution Liability policy shall be an acceptable replacement for a pollution endorsement to the Business Automobile Liability policy.
- (9) <u>Builder's Risk or Installation Floater</u>: Contractor shall maintain limits equal to the completed value of the project. Coverage shall be written on an all risk, replacement cost basis including coverage for soft costs, flood and earth movement, if in a flood or quake zone, and, if applicable, equipment breakdown including testing. The City and County of Denver, Contractor, and subcontractors shall be Additional Named Insureds under the policy. Policy shall remain in force until acceptance of the project by the City.
- (10) Contractors Pollution Liability: Contractor shall maintain limits of \$1,000,000 per occurrence and \$2,000,000 policy aggregate. Policy to include bodily injury; property damage including loss of use of damaged property; defense costs including costs and expenses incurred in the investigation, defense or settlement of claims; and clean-up costs. Policy shall include a severability of interest or separation of insured provision (no insured vs. insured exclusion) and a provision that coverage is primary and non-contributory with any other coverage or self-insurance maintained by the City.

(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 self-insurance 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 REQUIREMENTS

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.

 $\underline{http://www.denvergov.org/constructioncontracts/Home/ContractorResources/tabid/443154/Default.aspx}$

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Bond No. 9303676

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned <u>SEMA CONSTRUCTION, INC., 7353 South Eagle St., Englewood, CO 80112</u>, a corporation organized and existing under and by virtue of the laws of the State of <u>Colorado</u>, hereafter referred to as the "Contractor", and <u>Fidelity and Deposit Company of Maryland</u>, a corporation organized and existing under and by virtue of the laws of the State of <u>Maryland</u> 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 <u>One Million One Hundred Fifteen Thousand Seventy Three Dollars and Zero Cents</u> (<u>\$1,115,073.00</u>), 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. 201845744 PARK AVENUE REHABILITATION, 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

insella

14th day of January, 2019

Attest:

Secretary

SEMA Construction, Inc.

Copulactor

3 y:____

resident Corporate V.P., Contracts

Fidelity and Deposit Company of Maryland

Suret

By:

Attorney-In-Fact Angela M. Tindol

(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

By:

Assistant City Attorney

APPROVED FOR THE CITY AND COUNTY OF DENVER

By:

EXECUTIVE DIRECTOR OF PUBLIC WORKS

4

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **DAVID MCVICKER**, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Mona D. WEAVER, Anuj JAIN, Sheila J. MONTOYA, Charles M. MCDANIEL, Angela M. TINDOL, Janet M. ELWELL, Justin TOMLIN, Thomas F. MCCOY JR. and John BROWNING, all of Denver, Colorado, EACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 3rd day of October, A.D. 2018.

ATTEST:

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND







Ву:

Assistant Secretary Joshua Lecker Vice President David McVicker

State of Maryland County of Baltimore

On this 3rd day of October, A.D. 2018, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **DAVID** MCVICKER, Vice President, and JOSHUA LECKER, Assistant Secretary, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance a Dunn

Constance A. Dunn, Notary Public My Commission Expires: July 9, 2019

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, <u>Attorneys-in-Fact</u>. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

	IN TESTIMONY	WHEREOF, I have hereunto	o subscribed my nan	ne and affixed the corpo	orate seals of the said (Companies,
this	day of	, 20				







Michael Bond, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co. Attn: Surety Claims 1299 Zurich Way Schaumburg, IL 60196-1056



January 2, 2019

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

RE:

SEMA Construction, Inc. Contract No.: 201845744

Project Name: Park Avenue Rehabilitation

Contract Amt: \$1,115,073

Performance & Payment Bond No.: 9303676

Dearest City Attorney,

The Performance and Payment Bonds covering the above captioned project were executed by this agency, through <u>Fidelity and Deposit Company of Maryland</u>, on <u>January</u> 2, 2019.

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 303-414-6427.

Sincerely

Senior Account Manager

SEMACON

ACORD.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/02/2019

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 have ADDITIONAL INSURED provisions or 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 any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT Client Manager		
USI Colorado, LLC Construction	PHONE (A/C, No, Ext): 800 873-8500 FAX (A/C, No): 30	303-831-5295	
P.O. Box 7050	E-MAIL ADDRESS: den.contractors@usi.com		
Englewood, CO 80155	INSURER(S) AFFORDING COVERAGE	NAIC #	
800 873-8500	INSURER A : Arch Insurance Company	11150	
NSURED	INSURER B : National Fire & Marine Insurance Co.	20079	
SEMA Construction, Inc.	INSURER C:		
7353 S. Eagle St.	INSURER D :		
Centennial, CO 80112	INSURER E :		
	INSURER F:		

OVERAGES CERTIFICATE NUMBER:

Client#: 1481884

REVISION 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.

		SIGNS AND CONDITIONS OF SOCIE			E EIMITO ONOTHE MIXT TITLE DEL	POLICY FEE	POLICY EXP		
INSR LTR				SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	S
Α	Х	COMMERCIAL GENERAL LIABILITY	Х	X	71PKG8897405	04/01/2018	04/01/2019		\$2,000,000
1	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$100,000
1	CENTINO WADE 21 0000K				19			MED EXP (Any one person)	s Not Covered
1								PERSONAL & ADV INJURY	s2,000,000
1	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	s4,000,000
1		POLICY X PRO-						PRODUCTS - COMP/OP AGG	\$4,000,000
1		OTHER:							\$
A	AUT	OMOBILE LIABILITY	X	Х	71PKG8897405	04/01/2018	04/01/2019	COMBINED SINGLE LIMIT (Ea accident)	\$2,000,000
1	X	ANY AUTO						BODILY INJURY (Per person)	\$
	OWNED SCHEDULED AUTOS ONLY					12		BODILY INJURY (Per accident)	\$
	X	HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
1	П	42							\$
В	Х	UMBRELLA LIAB X OCCUR	Х	Х	42XSF30239402	04/01/2018	04/01/2019	EACH OCCURRENCE	\$25,000,000
	EXCESS LIAB CLAIMS-MAD							AGGREGATE	\$25,000,000
	DED RETENTION\$								\$
Α		RKERS COMPENSATION		Х	74WCI8897305	04/01/2018	04/01/2019	X PER OTH-	i,
	ANY PROPRIETOR/PARTNER/EXECUTIVE			VD EMPLOYERS' LIABILITY Y / N Y / N			E.L. EACH ACCIDENT	s1,000,000	
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)							E.L. DISEASE - EA EMPLOYEE	s1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below								s1,000,000
1									
						_			- 1

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: SEMA job #101901, Contract No. 201845744 Park Avenue Bridge Rehabilitation, City and County of Denver,

CO

As required by written contract, the City and County of Denver, its Elected and Appointed Officials, Employees and Volunteers are included as Additional Insured as respects General Liability and Auto Liability.

CERTIFICATE HOLDER	CANCELLATION
City and County of Denver Manager of Public Works 201 W. Colfax Dept. 608	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Denver, CO 80202	AUTHORIZED REPRESENTATIVE
	664

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NOTICE OF APPARENT LOW BIDDER (SAMPLE)

	(SAMPLE)
Current Date	

Gentlemen:

To:

The MANAGER OF PUBLIC WORKS has considered the Bids submitted on <u>December 6, 2018</u> for work to be done and materials to be furnished in and for:

PROJECT No. 201845744 PARK AVENUE REHABILITATION

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. Dept 614, 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
- b. One original plus four copies of the Power of Attorney relative to Performance and/or Payment Bond;

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)

Page 2
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 a penalty for the delay and extra work caused thereby.
Dated at Denver, Colorado this day of20
CITY AND COUNTY OF DENVER

By

Manager of Public Works

Denver Public Works/Office of the Executive Director 201 West Colfax Avenue, Dept 608 | Denver, CO 80202 www.denvergov.org/dpw p. 720.865.8630 | f. 720.865.8795

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PROJECT NO. 201845744



Current Date

NOTICE TO PROCEED (SAMPLE)

Name Company Street City/State/Zip

CONTRACT NO. 201845744, PARK AVENUE REHABILITATION

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 201845744, 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:

Denver Public Works/Office of the Executive Director 201 West Colfax Avenue, Dept 608 | Denver, CO 80202 www.denvergov.org/dpw p. 720.865.8630 | f. 720.865.8795

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Certificate of Contract Release (SAMPLE)

Date

Name Company Street City/State/Zip

RE: Certificate of Contract Release for **201845744, PARK AVENUE REHABILITATION**

Received this date of the City and County of Denver, as	s full 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 fu	all amount accruing to the undersigned by virtue	e of said
contract; said cash also covering and including full payr	nent for the cost of all extra work and material fu	urnished
by the undersigned in the construction of said improve	ments, and all incidentals thereto, and the under	ersigned
hereby releases said City and County of Denver from a	ny and all claims or demands whatsoever, regar	rdless of
how denominated, growing out of said contract.		
And these presents are to certify that all persons per improvements under the foregoing contract have been p		
payment.		
Contractor's Signature	Date Signed	
If there are any questions, please contact me by telepho		ment
via facsimile at (720) 913-1805 and mail to original to t	ne above address.	

Denver Public Works/Office of the Executive Director 201 West Colfax Avenue, Dept 608 | Denver, CO 80202 www.denvergov.org/dpw p. 720.865.8630 | f. 720.865.8795

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CITY AND COUNTY OF DENVER STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

Addenda

Contract Number: 201845744

Park Avenue Rehabilitation
November 8, 2018

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO.: 201845744 PROJECT NAME: Park Avenue Bridge Rehabilitation

ADDENDUM NO. 1 TO CONTRACT DOCUMENTS

Bidders are hereby instructed that the drawings, specifications, and other contract documents are modified, corrected, supplemented and/or superseded for the above-mentioned project as hereinafter described in the following attachments:

Question Deadline Extension

Please be advised that the question deadline will be extended until November 27^h, 2:00pm local time. Send all questions related to the project to: pw.procurement@denvergov.org

Technical Specifications:

- Insert Exhibit C as a sample agreement at the end of Section 631.
- Contractor to note requirements of Section 632, RTD Work Plan Item 8. The protections mentioned shall be included in the cost of the work.

Project Plans and Drawings:

• Remove and replace Sheet 13, BR-08.

Supplemental Information:

- Photos taken under the bridge during the site visit are attached for reference.
- As-built drawings have been sent 11/21/18 to all registered plan holders via QuestCDN.

Questions and Answers:

- 1. Could you clarify how and when we need to contact BNSF prior to work commencing on their property? A1. See the attached Exhibit C. The awarded contractor must contact BNSF to schedule a preconstruction meeting forty-five (45) days prior to work commencing on their property. Contact information is included in section 1.01.06. Contractor may contact BNSF prior to having an executed contract with the City, but the pre-construction meeting must occur after the contract has been executed.
- 2. Is the removal of plates at interior bearing pads on 22nd Street included in the cost of work?

 A2. Yes, this will be included in the cost of work.

This **ADDENDUM** shall be attached to, become a part of, and be returned with the Bid Proposal.

Lesley B. Thomas
City Engineer

Date

Contract No. 201845744 Park Ave. Rehab

Addendum #1

November 8, 2018

with the stipulations set forth herein.	-	
		Contractor
ADDENDUM NO. 1		
		Date

The undersigned bidder acknowledges receipt of this Addendum. The Proposal submitted herewith is in accordance

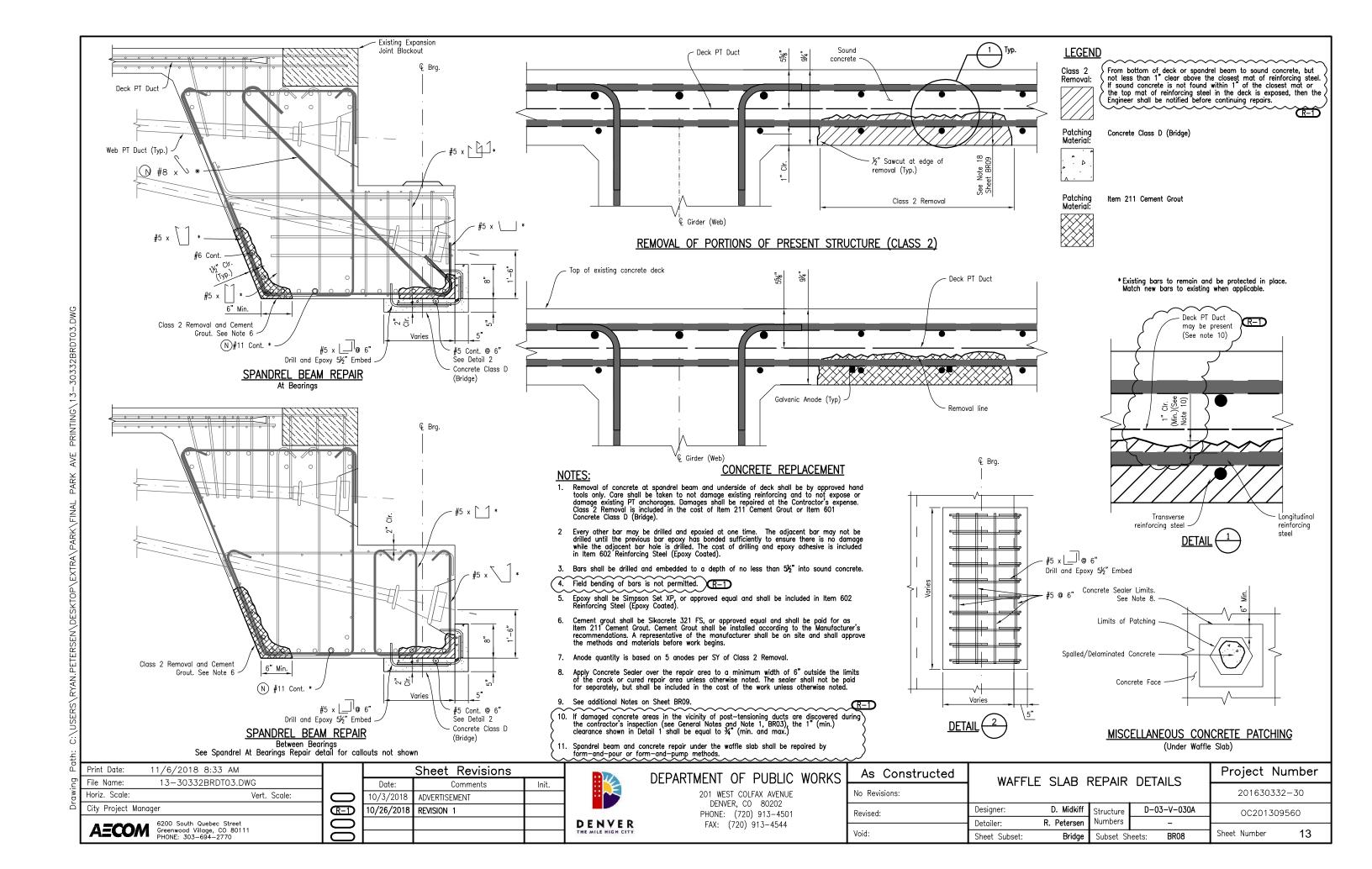


EXHIBIT "C"

CONTRACTOR REQUIREMENTS

1.01 General:

1.01.01 Ir	ne Contrac	tor must	coo	pera	te with Bi	NSF RAILV	VAY CC	MPA	NY , hereinat	te
referred to as	"Railway"	where wo	rk is	ove	r or under	on or adjace	ent to Ra	ailway	property and	/o
right-of-way,	hereafter	referred	to	as	"Railway	Property",	during	the	construction	0

- 1.01.02 The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1". Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.
- **1.01.03** The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.
- The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations. Railway will have the right to stop construction work on the Project if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the Project work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway's opinion, prosecutes the Project work in a manner which is hazardous to Railway property, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project; or (iv) Contractor fails to pay Railway for the Temporary Construction License or the Easement. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway's Division Engineer or until additional insurance has been delivered to and accepted by Railway. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, Railway may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway's right to stop the work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop construction work on the Project, Railway agrees to immediately notify the following individual in writing:

- 1.01.05 The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.
- 1.01.06 The Contractor must notify City and County of Denver at _____ and Railway's Manager Public Projects, email amber.stoffels@bnsf.com and/or by telephone number (303) 480-6584 at least forty-five (45) calendar days before commencing any work on Railway Property. Contractor's notification to Railway must refer to Railway's file
- For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.
- 1.01.08 Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

1.02 Contractor Safety Orientation

• 1.02.01 No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.BNSFContractor.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

1.03 Railway Requirements

- 1.03.01 The Contractor must take protective measures as are necessary to keep railway
 facilities, including track ballast, free of sand, debris, and other foreign objects and materials
 resulting from his operations. Any damage to railway facilities resulting from Contractor's
 operations will be repaired or replaced by Railway and the cost of such repairs or replacement
 must be paid for by the Agency.
- 1.03.02 The Contractor must notify the Railway's Division Engineer _____ at (_____)__ and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.
- 1.03.03 The Contractor must abide by the following temporary clearances during construction:
 - 15'-0" Horizontally from centerline of nearest track
 - 21'-6" Vertically above top of rail
 - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
 - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
 - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
 - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts
- 1.03.04 Upon completion of construction, the following clearances shall be maintained:
 - 25' Horizontally from centerline of nearest track
 - 23' 6" Vertically above top of rail
- 1.03.05 Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the City and County of Denver and must not be undertaken until approved in writing by the Railway, and until the City and County of Denver has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

- 1.03.06 In the case of impaired vertical clearance above top of rail, Railway will have the
 option of installing tell-tales or other protective devices Railway deems necessary for
 protection of Railway operations. The cost of tell-tales or protective devices will be borne by
 the Agency.
- 1.03.07 The details of construction affecting the Railway's Property and tracks not included
 in the contract plans must be submitted to the Railway by City and County of Denver for
 approval before work is undertaken and this work must not be undertaken until approved by
 the Railway.
- 1.03.08 At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railways tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.
- 1.03.09 Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.
- 1.03.10 The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan:

- 1.04.01 Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site www.BNSFContractor.com, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.
- 1.04.02 Contractor shall have a background investigation performed on all of its

employees, subcontractors and agents who will be performing any services for Railroad under this Agreement which are determined by Railroad in its sole discretion **a)** to be on Railroad's property, or **b)** that require access to Railroad Critical Infrastructure, Railroad Critical Information Systems, Railroad's Employees, Hazardous Materials on Railroad's property or is being transported by or otherwise in the custody of Railroad, or Freight in Transit involving Railroad.

The required background screening shall at a minimum meet the rail industry background screening criteria defined by the e-RAILSAFE Program as outlined at www.everifile.com, in addition to any other applicable regulatory requirements.

Contractor shall obtain written consent from all its employees, subcontractors or agents screened in compliance with the e-RAILSAFE Program to participate in the Program on their behalf and to release completed background information to Railroad's designee. Contractor shall be subject to periodic audit to ensure compliance.

Contractor subject to the e-RAILSAFE Program hereunder shall not permit any of its employees, subcontractors or agents to perform services hereunder who are not first approved under e-RAILSAFE Program standards. Railroad shall have the right to deny entry onto its premises or access as described in this section above to any of Contractor's employees, subcontractors or agents who do not display the authorized identification badge issued by a background screening service meeting the standards set forth in the e-RAILSAFE Program, or who in Railroad's opinion, which may not be unreasonable, may pose a threat to the safety or security of Railroad's operations, assets or personnel.

Contractors shall be responsible for ensuring that its employees, subcontractors and agents are United States citizens or legally working in the United States under a lawful and appropriate work VISA or other work authorization.

1.05 Railway Flagger Services:

- 1.05.01 The Contractor must give Railway's Roadmaster (telephone 303-480-6251) a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.
- 1.05.02 Unless determined otherwise by Railway's Project Representative, Railway flagger
 will be required and furnished when Contractor's work activities are located over, under and/or
 within twenty-five (25) feet measured horizontally from centerline of the nearest track and
 when cranes or similar equipment positioned beyond 25-feet from the track centerline could
 foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto
 for the following conditions:

- 1.05.02a When, upon inspection by Railway's Representative, other conditions warrant.
- 1.05.02b When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.
- 1.05.02c When work in any way interferes with the safe operation of trains at timetable speeds.
- 1.05.02d When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.
- 1.05.02e Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.
- 1.05.03 Flagging services will be performed by qualified Railway flaggers.
 - **1.05.03a** Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.
 - **1.05.03b** Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.
 - 1.05.03c The cost of flagger services provided by the Railway will be borne by City and County of Denver. The estimated cost for one (1) flagger is approximately between \$800.00-\$1,600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. THE FLAGGING RATE IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF FLAGGING PURSUANT TO THIS PARAGRAPH.
 - 1.05.03d The average train traffic on this route is 5 freight trains per 24-hour period at a timetable speed 20 MPH and 2 passenger trains at a timetable speed of 20 MPH.

1.06 Contractor General Safety Requirements

• 1.06.01 Work in the proximity of railway track(s) is potentially hazardous where movement

of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.

- 1.06.02 Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing <u>must</u> include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).
- 1.06.03 Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.
- 1.06.04 When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railway's representative in charge of the project must be notified. A minimum of two employees must be present at all times.
- 1.06.05 Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.
- 1.06.06 Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.
- **1.06.07** For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.
- 1.06.08 All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, www.BNSFContractor.com, however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats; c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railway's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. (NOTE Should there be a discrepancy between the information contained on the web site and the information in

this paragraph, the web site will govern.)

- 1.06.09 THE CONTRACTOR MUST NOT PILE OR STORE ANY MATERIALS, MACHINERY OR EQUIPMENT CLOSER THAN 25'-0" TO THE CENTER LINE OF THE NEAREST RAILWAY TRACK. MATERIALS, MACHINERY OR EQUIPMENT MUST NOT BE STORED OR LEFT WITHIN 250 FEET OF ANY HIGHWAY/RAIL AT-GRADE CROSSINGS OR TEMPORARY CONSTRUCTION CROSSING, WHERE STORAGE OF THE SAME WILL OBSTRUCT THE VIEW OF A TRAIN APPROACHING THE CROSSING. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST ESTABLISH A STORAGE AREA WITH CONCURRENCE OF THE RAILWAY'S REPRESENTATIVE.
- 1.06.10 Machines or vehicles must not be left unattended with the engine running. Parked
 machines or equipment must be in gear with brakes set and if equipped with blade, pan or
 bucket, they must be lowered to the ground. All machinery and equipment left unattended on
 Railway's Property must be left inoperable and secured against movement. (See internet
 Engineering Contractor Safety Orientation program for more detailed specifications)
- 1.06.11 Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.
- 1.06.12 All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below 15 feet; 200 to 350 KV 20 feet; 350 to 500 KV 25 feet; 500 to 750 KV 35 feet; and 750 to 1000 KV 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.07 Excavation:

- 1.07.01 Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact BNSF's Field Engineering Representative Rafer Nichols (303-480-6586). All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.
- 1.07.02 The Contractor must cease all work and notify the Railway immediately before
 continuing excavation in the area if obstructions are encountered which do not appear on
 drawings. If the obstruction is a utility and the owner of the utility can be identified, then the
 Contractor must also notify the owner immediately. If there is any doubt about the location of
 underground cables or lines of any kind, no work must be performed until the exact location

has been determined. There will be no exceptions to these instructions.

- 1.07.03 All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.
- 1.07.04 Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

1.08 Hazardous Waste, Substances and Material Reporting:

• 1.08.01 If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

1.09 Personal Injury Reporting

• 1.09.01 The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

(If injuries are in connection with rail equipment accident/incident, highway rail grade crossing accident or automobile accident, ensure that appropriate information is obtained, forms completed and that data entry personnel are aware that injuries relate to that specific event.)

Injured Pe	erson Type:		
	Passenger on train (C)	Non-employee (N) (i.e., emp of another railroad, o	or, non-BNSF emp involved in vehicle accident, including
	Contractor/safety sensitive (F)	Contractor/non-safety	sensitive (G)
	Volunteer/safety sensitive (H)	Volunteer/other non-sa	afety sensitive (I)
	Non-trespasser (D) - to include l go around or through gates	nighway users involved in highw	ay rail grade crossing accidents who did not
	Trespasser (E) - to include highwor through gates	ray users involved in highway ra	il grade crossing accidents who went around
	Non-trespasser (J) - Off railroad	property	
	If train involved, Train ID:		
	attached information to Accident/ 352-7595 or by Phone 1-8		il to: <u>Accident-Reporting.Center@BNSF.com</u>
Officer Pr	roviding Information:		
(Name)		(Emplayee No.)	(Phone #)

REPORT PREPARED TO COMPLY WITH FEDERAL ACCIDENT REPORTING REQUIREMENTS AND PROTECTED FROM DISCLOSURE PURSUANT TO 49 U.S.C. 20903 AND 83 U.S.C. 490

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IT IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

l. Accident City/St:	2. Date:		Time:	
County:	3. Temper	ature:	4. Weather:	
(if non BNSF location)				
Mile Post / Line Segment:				
5. Driver's License No (and state) or other ID:		SSN (require	d):	
6. Name (last, first, mi):				
7. Address:	City:	St:	Zip:	
8. Date of Birth:	and/or Age: (if available	Gender:)		
Phone Number:	Employer:			
9. Injury:		10. Body Part:		
(i.e., Laceratio	n, etc.)	(i.	e., Hand, etc.)	
II. Description of Accident (To include location, action, r	esult, etc.):			
12. Treatment:				
First Aid Only				
Required Medical Treatment				
Other Medical Treatment				
13. Dr. Name:		Date:		
14. Dr. Address:				
Street:	City:	St:	Zip:	
I5. Hospital Name:		_		
IG. Hospital Address:				
Street:	City:	St:	Zip:	
17. Diagnosis:				_

REPORT PREPARED TO COMPLY WITH FEDERAL ACCIDENT REPORTING REQUIREMENTS AND PROTECTED FROM DISCLOSURE PURSUANT TO 49 U.S.C. 20903 AND 83 U.S.C. 490

EXHIBIT "C-1"

Agreement Between BNSF RAILWAY COMPANY and the CONTRACTOR

Railway File:			
Agency Project:			
<%Contractor.LegalName%> [Insert contractor's legal	<mark>ıl name here]</mark> (hereinafter	called	"Contractor"), has
entered into an agreement (hereinafter called "Agreement	') dated,	201_, [***Drafter's Note:
insert the date of the contract between the Agency a	nd the Contractor here]	with Ci	ty and County of
Denver for the performance of certain work in connection	n with the following proje	ct:	
Performance of such work will necessarily require Contract	or to enter BNSF RAILWA	Y COM	PANY (hereinafter
called "Railway") right of way and property (hereinafter call-	ed "Railway Property"). Th	e Agree	ment provides that
no work will be commenced within Railway Property until t	ne Contractor employed in	connec	tion with said work
for City and County of Denver (i) executes and delivers	to Railway an Agreement	in the fo	orm hereof, and (ii)
provides insurance of the coverage and limits specified	in such Agreement and	Section	3 herein. If this
Agreement is executed by a party who is not the Owne	er, General Partner, Presi	dent or	Vice President of
Contractor, Contractor must furnish evidence to Railway of this Agreement on behalf of Contractor.	ertifying that the signatory	is emp	owered to execute

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Agreement, has agreed and does hereby agree with Railway as follows:

1) RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE

DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENSIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE LOCOMOTIVE INSPECTION ACT, WHENEVER SO CLAIMED.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILWAY FOR RAILWAY'S ACTS OF NEGLIGENCE.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

2) TERM

This Agreement is effective from the date of the Agreement until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

3) **INSURANCE**

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

- A. Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000 but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:
 - Bodily Injury and Property Damage
 - Personal Injury and Advertising Injury
 - ♦ Fire legal liability
 - Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ♦ The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.
- ♦ The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to *Railway* employees.

No other endorsements limiting coverage as respects obligations under this_Agreement may be included on the policy with regard to the work being performed under this agreement.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:

- ♦ Bodily injury and property damage
- Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railway.
- Additional insured endorsement in favor of and acceptable to Railway.
- Separation of insureds.
- ♦ The policy shall be primary and non-contributing with respect to any insurance carried by Railway.
- C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:
 - Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
 - ♦ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railway.
- A. Railroad Protective Liability insurance naming only the *Railway* as the Insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 12 04 and include the following:
 - ♦ Endorsed to include the Pollution Exclusion Amendment
 - Endorsed to include the Limited Seepage and Pollution Endorsement.
 - ◆ Endorsed to remove any exclusion for punitive damages.

- No other endorsements restricting coverage may be added.
- ◆ The original policy must be provided to the *Railway* prior to performing any work or services under this Agreement
- Definition of "Physical Damage to Property" shall be endorsed to read: "means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured care, custody, and control arising out of the acts or omissions of the contractor named on the Declarations.

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate (if available) in Railway's Blanket Railroad Protective Liability Insurance Policy.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages.

Contractor agrees to waive its right of recovery against *Railway* for all claims and suits against *Railway*. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against *Railway* for all claims and suits. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against *Railway* for loss of its owned or leased property or property under Contractor's care, custody or control.

Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Contractor is not allowed to self-insure without the prior written consent of *Railway*. If granted by *Railway*, any self-insured retention or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. Any and all *Railway* liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing services, Contractor shall furnish to *Railway* an acceptable certificate(s) of insurance from an authorized representative evidencing the required coverage(s), endorsements, and amendments. The certificate should be directed to the following address:

BNSF Railway Company c/o CertFocus P.O. Box 140528 Kansas City, MO 64114 Toll Free: 877-576-2378

Fax number: 817-840-7487

Email: BNSF@certfocus.com

www.certfocus.com

Contractor shall notify *Railway* in writing at least 30 days prior to any cancellation, non-renewal,

substitution or material alteration.

Any insurance policy shall be written by a reputable insurance company acceptable to *Railway* or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in

which the service is to be provided.

If coverage is purchased on a "claims made" basis, Contractor hereby agrees to maintain coverage in

force for a minimum of three years after expiration, cancellation or termination of this Agreement.

Annually Contractor agrees to provide evidence of such coverage as required hereunder.

Contractor represents that this Agreement has been thoroughly reviewed by Contractor's insurance

agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required

by this Agreement.

Not more frequently than once every five years, *Railway* may reasonably modify the required insurance

coverage to reflect then-current risk management practices in the railroad industry and underwriting

practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the

subcontractor shall provide and maintain insurance coverage(s) as set forth herein, naming *Railway* as an additional insured, and shall require that the subcontractor shall release, defend and indemnify

Railway to the same extent and under the same terms and conditions as Contractor is required to

release, defend and indemnify *Railway* herein.

Failure to provide evidence as required by this section shall entitle, but not require, *Railway* to terminate

this Agreement immediately. Acceptance of a certificate that does not comply with this section shall not

operate as a waiver of Contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not

be deemed to release or diminish the liability of Contractor including, without limitation, liability under the

indemnity provisions of this Agreement. Damages recoverable by *Railway* shall not be limited by the amount of the required insurance coverage.

In the event of a claim or lawsuit involving *Railway* arising out of this agreement, Contractor will make available any required policy covering such claim or lawsuit.

These insurance provisions are intended to be a separate and distinct obligation on the part of the Contractor. Therefore, these provisions shall be enforceable and Contractor shall be bound thereby regardless of whether or not indemnity provisions are determined to be enforceable in the jurisdiction in which the work covered hereunder is performed.

For purposes of this section, *Railway* shall mean "Burlington Northern Santa Fe LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

4) SALES AND OTHER TAXES

In the event applicable sales taxes of a state or political subdivision of a state of the United States are levied or assessed in connection with and directly related to any amounts invoiced by Contractor to Railway ("Sales Taxes"), Railway shall be responsible for paying only the Sales Taxes that Contractor separately states on the invoice or other billing documents provided to Railway; *provided*, *however*, that (i) nothing herein shall preclude Railway from claiming whatever Sales Tax exemptions are applicable to amounts Contractor bills Railway, (ii) Contractor shall be responsible for all sales, use, excise, consumption, services and other taxes which may accrue on all services, materials, equipment, supplies or fixtures that Contractor and its subcontractors use or consume in the performance of this Agreement, (iii) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) that Contractor fails to separately state on the invoice or other billing documents provided to Railway or fails to collect at the time of payment by Railway of invoiced amounts (except where Railway claims a Sales Tax exemption), and (iv) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) if Contractor fails to issue separate invoices for each state in which Contractor delivers goods, provides services or, if applicable, transfers intangible rights to Railway.

Upon request, Contractor shall provide Railway satisfactory evidence that all taxes (together with any penalties, fines or interest thereon) that Contractor is responsible to pay under this Agreement have been paid. If a written claim is made against Contractor for Sales Taxes with respect to which Railway may be liable for under this Agreement, Contractor shall promptly notify Railway of such claim and provide Railway copies of all correspondence received from the taxing authority. Railway shall have the right to contest, protest, or claim a refund, in Railway's own name, any Sales Taxes paid by Railway to Contractor or for which Railway might otherwise be responsible for under this Agreement; provided, however, that if Railway is not permitted by law to contest any such Sales Tax in its own name, Contractor shall, if

requested by Railway at Railway's sole cost and expense, contest in Contractor's own name the validity, applicability or amount of such Sales Tax and allow Railway to control and conduct such contest.

Railway retains the right to withhold from payments made under this Agreement amounts required to be withheld under tax laws of any jurisdiction. If Contractor is claiming a withholding exemption or a reduction in the withholding rate of any jurisdiction on any payments under this Agreement, before any payments are made (and in each succeeding period or year as required by law), Contractor agrees to furnish to Railway a properly completed exemption form prescribed by such jurisdiction. Contractor shall be responsible for any taxes, interest or penalties assessed against Railway with respect to withholding taxes that Railway does not withhold from payments to Contractor.

1) EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Agreement, and the Contractor Requirements set forth on Exhibit "C" attached to the Agreement and this Agreement, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site. Contractor shall execute a Temporary Construction Crossing Agreement or Private Crossing Agreement (http://www.bnsf.com/communities/faqs/permits-real-estate/), for any temporary crossing requested to aid in the construction of this Project, if approved by BNSF.

2) TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may

suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. The rate then in effect at the time of performance by the Contractor hereunder will be used to calculate the actual costs of train delay pursuant to this agreement.

Contractor and its subcontractors must give Railway's representative Rafer Nichols eight (8) weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed by its duly authorized officer the day and year first above written.

<%Contractor.LegalName%>	BNSF Railway Company		
Ву:	By:		
Printed Name:	Name: Manager Public Projects		
Title:	•		
	Accepted and effective thisday of 20		
Contact Person:			
Address:			
City:			
State: Zip:			
Fax:			
Phone:			
F-mail:			











CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO.: 201845744 PROJECT NAME: Park Avenue Bridge Rehabilitation

ADDENDUM NO. 2 TO CONTRACT DOCUMENTS

Bidders are hereby instructed that the drawings, specifications, and other contract documents are modified, corrected, supplemented and/or superseded for the above-mentioned project as hereinafter described in the following attachments:

Questions and Answers:

In regard to the public information specs for the Park Avenue Rehab project (Quest Project #6008942) we have a few questions:

Q1: What radius shall we use for mailing project fliers (directly adjacent, 3 block, ½ miles, etc)?

A1: Within 3/4 mile of the intersection.

Q2: After the initial project announcement, do you want any update fliers sent? If so, at what frequency (monthly, every other month, etc.)?

A2: Every other month.

Q3: We have found SMS texting service a useful tool on other City projects to provide drivers with an opt-in method to receive current information on road closure information. Is this a service the City would like added to the public information line item?

A3: No.

This ADDENDUM	shall be attached to.	become a part of, and b	e returned with the Bid Proposal

Lesley B. Thomas
City Engineer

The undersigned bidder acknowledges receipt of this Addendum. The Proposal submitted herewith is in accordance with the stipulations set forth herein.

	Contractor
ADDENDUM NO. 2	2. 4
	Date

Contract No. 201845744 Park Ave. Rehab

CITY AND COUNTY OF DENVER STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

Prevailing Wage Rates

Contract Number: 201845744

Park Avenue Rehabilitation
November 8, 2018





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: Susan Keller, Human Resources Technician, Classification & Compensation

DATE: Monday, July 16, 2018

SUBJECT: Latest Change to Prevailing Wage Schedules

Please be advised, prevailing wage rates for some building, heavy, highway, and residential 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 is **Friday**, **July 13**, **2018** 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. CO180019
Superseded General Decision No. CO20170019
Modification No. 1
Publication Date: 07/13/2018
(5 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.

Attachments as listed above.



General Decision Number: CO180019 07/13/2018 CO19

Superseded General Decision Number: CO20170019

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 \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any 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 \$10.35 per hour (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 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/05/2018 1 07/13/2018

* CARP9901-008 05/01/2018

	Rates	Fringes	
CARPENTER (Form Work Only)	\$ 25.50	9.47	
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-	.nna	05/01	/2017

	Rates	Fringes
POWER EQUIPMENT OPERATOR: (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 including 6 cu. yd.) (3)-Loader (under 6 cu. yd.)	\$ 27.60	10.10
Denver County	\$ 27.60	10.10
Douglas County	\$ 27.60	10.10
bowl, under 40 cu. yd) (4)-Loader (over 6 cu. yd)		10.10
Denver County(5)-Drill Rig Caisson (Watson 2500 similar or larger), Crane (51-90		10.10
<pre>tons), Scraper (40 cu.yd and over), (5)-Motor Grader (blade- finish)</pre>	\$ 27.92	10.10
Douglas County		10.10 10.10
SUCO2011-004 09/15/2011		
	Rates	Fringes
CARPENTER (Excludes Form Work).	\$ 19.27	5.08
CEMENT MASON/CONCRETE FINISHER Denver Douglas		5.75 3.00
ELECTRICIAN (Excludes Traffic Signal Installation)	\$ 35.13	6.83
FENCE ERECTOR (Excludes Link/Cyclone Fence Erection)	\$ 13.02	3.20
GUARDRAIL INSTALLER	\$ 12.89	3.20
HIGHWAY/PARKING LOT STRIPING:Painter		
Denver Douglas		3.21 3.21
IRONWORKER, REINFORCING		

IRONWORKER, REINFORCING
(Excludes Guardrail

Installation)\$	16.69	5.45
IRONWORKER, STRUCTURAL (Includes Link/Cyclone Fence Erection, Excludes Guardrail		
Installation)\$	18.22	6.01
LABORER		
Asphalt Shaveler		4.25 4.25
Asphalt Shoveler\$ Asphalt Spreader\$		4.25
Common or General		
Denver\$		6.77
Douglas\$ Concrete Saw (Hand Held)\$		4.25 6.14
Landscape and Irrigation\$		3.16
Mason Tender-		
Cement/Concrete Denver\$	16.06	4.04
Douglas\$		4.04
Pipelayer	10.27	1.25
Denver\$		2.41
Douglas\$		2.18
Traffic Control (Flagger)\$ Traffic Control (Sets	9.55	3.05
Up/Moves Barrels, Cones,		
Install Signs, Arrow		
Boards and Place		
Stationary Flags)(Excludes	10.40	2 00
Flaggers)\$	12.43	3.22
PAINTER (Spray Only)\$	16.99	2.87
PAINTER (Spray Only)\$ POWER EQUIPMENT OPERATOR:	16.99	2.87
POWER EQUIPMENT OPERATOR: Asphalt Laydown		
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$	22.67	8.72
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$	22.67	
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$	22.67 23.67	8.72 8.47
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$ Asphalt Paver	22.67 23.67 24.97	8.72
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$ Asphalt Paver Denver\$ Douglas\$ Asphalt Roller	22.67 23.67 24.97 25.44	8.72 8.47 6.13 3.50
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$ Asphalt Paver Denver\$ Douglas\$ Asphalt Roller Denver\$	22.67 23.67 24.97 25.44 23.13	8.72 8.47 6.13 3.50 7.55
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$ Asphalt Paver Denver\$ Douglas\$ Asphalt Roller Denver\$ Douglas\$	22.67 23.67 24.97 25.44 23.13 23.63	8.72 8.47 6.13 3.50 7.55 6.43
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$ Asphalt Paver Denver\$ Douglas\$ Asphalt Roller Denver\$	22.67 23.67 24.97 25.44 23.13 23.63	8.72 8.47 6.13 3.50 7.55
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver \$ Douglas \$ Asphalt Paver Denver \$ Douglas \$ Asphalt Roller Denver \$ Douglas \$ Asphalt Spreader \$ Backhoe/Trackhoe Douglas \$	22.67 23.67 24.97 25.44 23.13 23.63 22.67	8.72 8.47 6.13 3.50 7.55 6.43
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver\$ Douglas\$ Asphalt Paver Denver\$ Douglas\$ Asphalt Roller Denver\$ Douglas\$ Asphalt Spreader\$ Backhoe/Trackhoe Douglas\$ Bobcat/Skid Loader\$	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver. \$ Douglas. \$ Asphalt Paver Denver. \$ Douglas. \$ Asphalt Roller Denver. \$ Douglas. \$ Asphalt Spreader \$ Backhoe/Trackhoe Douglas. \$ Boom. \$ Broom/Sweeper Denver. \$ Douglas. \$ Bulldozer. \$ Concrete Pump. \$	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver. \$ Douglas. \$ Asphalt Paver Denver. \$ Douglas. \$ Asphalt Roller Denver. \$ Douglas. \$ Asphalt Spreader \$ Backhoe/Trackhoe Douglas. \$ Bobcat/Skid Loader \$ Boom. \$ Broom/Sweeper Denver. \$ Douglas. \$ Bulldozer. \$ Concrete Pump. \$ Drill	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90 21.60	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59 5.21
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90 21.60 20.48	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59 5.21 4.71
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver. \$ Douglas. \$ Asphalt Paver Denver. \$ Douglas. \$ Asphalt Roller Denver. \$ Douglas. \$ Asphalt Spreader \$ Backhoe/Trackhoe Douglas. \$ Bobcat/Skid Loader \$ Boom. \$ Broom/Sweeper Denver. \$ Douglas. \$ Bulldozer. \$ Concrete Pump. \$ Drill	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90 21.60 20.48 20.71	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59 5.21
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90 21.60 20.48 20.71 15.91	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59 5.21 4.71 2.66 4.68
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90 21.60 20.48 20.71 15.91	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59 5.21 4.71 2.66 4.68 8.72
POWER EQUIPMENT OPERATOR: Asphalt Laydown Denver	22.67 23.67 24.97 25.44 23.13 23.63 22.67 23.82 15.37 22.67 22.47 22.96 26.90 21.60 20.48 20.71 15.91	8.72 8.47 6.13 3.50 7.55 6.43 8.72 6.00 4.28 8.72 8.72 8.72 8.22 5.59 5.21 4.71 2.66 4.68

Douglas\$	21.67	8.22
Mechanic		
Denver\$	22.89	8.72
Douglas\$		8.22
Oiler	23.33	0.22
Denver\$	22 72	8.41
Douglas\$	24.90	7.67
Roller/Compactor (Dirt and		
Grade Compaction)		
Denver\$		5.51
Douglas\$	22.78	4.86
Rotomill\$	16.22	4.41
Screed		
Denver\$	22 67	8.38
Douglas\$		1.40
Tractor\$		
iractor	13.13	2.95
EDITER OF CHILD FOR		
TRAFFIC SIGNALIZATION:		
Groundsman		
Denver\$		3.41
Douglas\$	18.67	7.17
TRUCK DRIVER		
Distributor		
Denver\$	17.81	5.82
Douglas\$	16.98	5.27
Dump Truck		
Denver\$	15 27	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		
Denver\$	14 24	3.77
Douglas\$		3.68
Semi/Trailer Truck\$		4.13
·		
Truck Mounted Attenuator\$	12.43	3.22
Water Truck		
Denver\$		5.27
Douglas\$	19.46	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) Revised 4/11/2017)

<u>Classification</u>		Base	<u>Fringe</u>
Ironworker (Ornamental)		\$26.05	\$12.00
Laborer	Removal of Asbestos	\$21.03	\$8.55
Line Construction	Lineman, Gas Fitter/Welder	\$36.88	\$9.55
	Line Eq Operator/Line Truck Crew	\$25.74	\$8.09
Millwright		\$28.00	\$10.00
Pipefitter		\$30.45	\$12.85
Plumber		\$30.19	\$13.55
Power Equipment Operator (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 Operator	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
Truck Driver	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

Go to $\underline{\text{http://www.denvergov.org/Auditor}} \text{ to view the Prevailing Wage Clarification Document for a list of complete classifications used.}$

CITY AND COUNTY OF DENVER STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

Technical Specifications

Contract Number: 201845744

Park Avenue Rehabilitation
November 8, 2018

Park Avenue Viaduct Bearing Replacement and Waffle Slab Repair

STANDARD SPECIFICATIONS FOR CONSTRUCTION

The Standard Specifications for Construction used for this Project shall be the Colorado Department of Transportation "Standard Specifications for Road and Bridge Construction," adopted in 2017 and as hereinafter modified.

STANDARD CONSTRUCTION DETAILS

Applicable City and County of Denver standard details are required to be used by the Contractor. For other applicable details, except as modified or altered by the general notes on the Contract Drawings to be approved or by the revisions to Technical Specifications and Contract Documents, it is the intent of the City to use the Colorado Department of Transportation M & S Standards, most recent edition.

Transportation related appurtenances shall be constructed as specified in the most recent edition of the City and County of Denver, Department of Public Works documents titled:

- 1. Transportation Standards and Details for the Engineering Division
- 2. Traffic Signal and Sign & Marking Standards
- 3. Manuals and Regulations for Wastewater

These documents can be found at the following web address:

https://www.denvergov.org/content/denvergov/en/right-of-way-services/engineering-regulatory-analytics/engineering-plan-review/manuals-regulations.html

CONSTRUCTION SPECIFICATIONS

The Colorado Department of Transportation General Provisions consists of Sections 100 through 109 of the above mentioned specifications. With the exception of General Provision Sections 101, 102.05, 105.02, 105.11, 107.06, 107.08, 107.12, and 108.09, all other General Provisions are not applicable to this Project and are hereby deleted. In place of the deleted sections, the City and County of Denver "Standard Specifications for Construction, General Contract Conditions," 2011 Edition, shall apply to this contract. Supplements or amendments to the Standard Specifications for Construction, General Contract Conditions are listed in the Special Contract Conditions.

The following Project Special Provisions take precedence over Specifications or Plans and supplement or amend the referenced "Standard Specifications for Road and Bridge Construction" adopted in 2017 by the Colorado Department of Transportation, which is to be used to control construction of this Project.

COMMENCEMENT AND COMPLETION OF WORK (WORKING HOURS, SCHEDULE, AND CITY FURLOUGH DAYS)

The Contractor shall commence work under the Contract per the City General Contract Conditions. All work above and below the structure on mainline Park Avenue West and within 25 feet of the centerline of the Regional Transportation District (RTD) North Metro track (N-Line) shown in these plans and described in these specifications that may impact the operation of the RTD North Metro Line shall be completed as soon as possible after Notice-to-Proceed (NTP) but no later than July 1, 2019. This includes but is not limited to the following: expansion bearing replacement, and concrete repair under the concrete waffle slab

The Contractor shall furnish their bond rider within 10 working days after notice of being the apparent low bidder. The Contractor shall be deemed non-responsive if this is not supplied within the requested time frame.

Salient features to be shown on the Contractor's Progress Schedule are:

- 1. Mobilization
- 2. Traffic Control
- 3. Removal and Replacement of Expansion Bearings
- 4. Concrete repair under the waffle slab
- 5. Contractor-Proposed RTD Commuter Rail Shutdowns

Contractor Schedule

The Contractor's progress schedule shall be a Critical Path Method Schedule submitted for approval. The schedule shall clearly show work items that are required to be completed by July 1, 2019. The schedule shall include 5 days of down time (float) for utility conflicts and delays. The schedule as well as modifications shall be provided to RTD/Denver Transit Operators (DTO) and the railroads.

The Contractor will not be compensated for administrative or management costs incurred during down time due to utility or other delays. No additional payment will be made for out of sequence work.

Working Hours

For information on working hours see the Environmental Notes section in the construction plans.

Full closure of the waffle slab and any of the adjacent viaduct structures is strictly prohibited without approval from the Engineer and the City Traffic Engineer.

Project Meetings

Contractor shall conduct daily construction briefings in the morning prior to starting the work to discuss issues including but not limited to daily tasks, safety, and impacts to RTD, the railroads, and the City and county of Denver (CCD). RTD/DTO and the railroads shall be invited to all construction briefings. In addition, RTD/DTO and the railroads shall be invited to all project progress meetings.

Work Restrictions for City Holidays

Work shall not occur on holidays listed below. Work shall cease at 12:00 p.m. (noon) the day before the holiday or on the Friday before a Monday holiday. Work may resume at 9:00 a.m. the first weekday after the holiday. All travel ways shall be open to the public and clear of obstructions during the holiday non-working periods listed above. Holidays:

- New Year's Day
- Martin Luther King Day
- President's Day
- Cesar Chavez Day
- Memorial Day
- Independence Day
- Labor Day
- Veteran's Day
- Thanksgiving Day
- Christmas Day

Work Restrictions for City sponsored or sanctioned events: Work may be restricted by City sponsored or sanctioned events. The Project Manager will inform the Contractor of such events a minimum of two weeks prior to said event.

Contractor shall be permitted to work through the City and County of Denver Holiday Moratorium, with the exception of the City Holidays listed above.

Work Restrictions for City Noise Ordinance and Street Occupancy Permit

Work shall be in conformance with the City's Noise Ordinance and the Contractor's street occupancy permit.

Substantial Completion

Substantial completion has one component: Substantial completion of facilities open to the Public. Each component will be approved separately by the Project Engineer.

PERMITS AND LICENSES

Unless otherwise specified, the Contractor shall procure all necessary permits and licenses; pay all charges, fees, and taxes, including permits procured for this project by others; and give all notices necessary and incidental to the due and lawful prosecution of the work. The costs of these permits will not be paid for separately, but shall be included in the work.

Prior to beginning work, the Contractor shall furnish the Engineer with a written list of all permits required for the proper completion of the contract. The list shall clearly identify the types of permits that must be obtained before work on any particular phase or phases of work can be started. Copies of the fully executed permits shall be furnished to the Engineer upon request.

The Contractor shall obtain the required permits, which may include, but are not limited to, the following permits:

Permits, Clearances, Etc.	Required By	Responsible	Notes
CCD Street Cut and Right-of-Way (ROW) Occupancy Permit	CCD	Contractor	Apply through ROWS Construction Engineering at least two weeks prior to scheduled start of work. Traffic control plans and project schedule must be approved prior to permit application. Submittals shall be sent to PWPermits@denvergov.org
Construction Activities Stormwater Discharge Permit (CASDP)	CCD	Contractor	Contractor shall also submit to RTD/DTO.
State Construction Stormwater Permit	Colorado Department of Public Health and Environment (CDPHE)	Contractor	Contractor shall also submit to RTD/DTO.
CCD Construction Permit	CCD	Contractor	
APEN (Air Pollution Emissions Notice) Permit	CDPHE	Contractor	Contractor shall also submit to RTD/DTO.
RRP Track Allocation	RTD/(Regional Rail Partners (RRP)/Federal Transit Administration (FTA)	Contractor	RRP Contact is David Whitley (720) 315-4408

PROJECT SPECIAL PROVISIONS

The following Special Provisions take precedence over the Standard Specifications or Plans. Anything mentioned in the specifications and not shown in the drawings, or shown in the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. These Special Provisions supplement or amend the referenced Standard Specifications.

	(0	DOD :
Standard Specifications for Construction		PSP— i
Standard Construction Details		PSP— i
Construction Specifications		PSP— i
Commencement and Completion of Work		PSP— ii
Permits and Licenses		PSP— iv
Project Special Provisions	(October 3, 2018)	PSP— v
CDOT Standard Special Provisions		PSP—vi
Revision of Section 101 Definition of Terms	(October 3, 2018)	PSP— 1
Revision of Section 105 Control of Work	(October 3, 2018)	PSP—2
Construction Limits	(October 3, 2018)	PSP-3
Notice to Bidders	(October 3, 2018)	PSP—4
Performance of Safety Critical Work	(October 3, 2018)	PSP—5
Revision of Section 202—Removal of Portions of Present Structure	(October 3, 2018)	PSP—7
(Class 2)	,	
Revision of Section 202—Removal of Bearing Device	(October 3, 2018)	PSP—9
Revision of Section 202—Sandblasting and Cleaning Reinforcing Steel	(October 3, 2018)	PSP—10
Revision of Section 204—Bridge Jacking and Shoring		PSP— 11
Revision of Section 208—Erosion Control	(October 3, 2018)	PSP— 14
Revision of Section 209—Watering and Dust Palliatives	(October 3, 2018)	PSP— 19
Revision of Section 509—Paint Existing Structure	(October 3, 2018)	PSP— 20
Revision of Section 515—Concrete Sealer		PSP— 22
Revision of Section 519—Epoxy Resin (Injection)	(October 3, 2018)	PSP— 24
Revision of Section 601 – Structural Concrete		PSP— 25
Revision of Section 601—Concrete Class D (Bridge)	(October 3, 2018)	PSP— 26
Revision of Section 626—Public Information Services		PSP— 27
Revision of Section 630—Construction Zone Traffic Control		PSP— 34
Revision of Section 631—Railroad Coordination		PSP 39
Revision of Section 632—RTD Coordination	(October 3, 2018)	PSP— 41
Force Account Items	(October 3, 2018)	PSP-51
Allowance Account Items		PSP—52
Utilities	, ,	PSP—53

CDOT STANDARD SPECIAL PROVISIONS

Name	Date	No. of Pages
Revision of Section 108 - Liquidated Damages	(July 20, 2017)	1
Revision of Section 250 - Environmental, Health & Safety Manage	ment (July 3, 2017)	3
Railroad Insurance	(July 3, 2017)	1

Park Ave. Viaduct Preventative Maintenance & Evaluation City and County of Denver Project No. OC201309560 PS & E Submittal June 14, 2018

REVISION OF SECTION 101 DEFINITION OF TERMS

Section 101 of the Standard Specifications is hereby revised for this project as follows:

Subsection 101.28 shall be replaced with the following:

The City and County of Denver's Department of Public Works

Subsection 101.29 shall be replaced with the following:

The designated Project Engineer with the City and County of Denver Department of Public Works, who is responsible for engineering and administrative supervision of the project.

Subsection 101.51 shall be replaced with the following:

The City and County of Denver's duly authorized representative who is in direct charge of the work and is responsible for the administration and satisfactory completion of the project under contract. The Project Engineer or Manager for this project will be an employee with the City's Public Works Department.

REVISION OF SECTION 105 CONTROL OF WORK

Section 105 of the Standard Specifications is hereby revised for this project as follows:

Subsection 105.11 shall include the following:

The Contractor shall coordinate with the City and County of Denver (CCD) to identify any ongoing or proposed construction activity and events occurring in the vicinity of the project. The Contractor shall coordinate and cooperate fully with any and all other contractors doing construction work within the limits of the project. The Contractor shall coordinate with the CCD Project Manager regarding events occurring near the project area.

The Contractor shall coordinate construction activities, detours, traffic control, and lane closures so as to not adversely impact that Contractor's operations, events, or the traveling public.

The Contractor's Construction Plan shall include a detailed RTD Work Plan for review and approval by RTD. No removal operations will be permitted over the RTD right of way until the required RTD Work Plan has been reviewed and approved by RTD. Section 632 – Regional Transportation District (RTD) Coordination details the minimum content requirements for the RTD Work.

CONSTRUCTION LIMITS

The "construction limits" for the Site are defined as the minimum area necessary to repair the underside of the concrete post-tensioned waffle slab and replace the bearings at the juncture of the five viaducts (D-03-V-030A, D-03-V-036A, D-03-V-032A, D-03-V-034A, and D-03-V-038A) with the waffle slab including the areas required for Best Management Practices. Refer to the construction plans for a more detailed delineation of the construction limits. Impacts to existing railroad property, RTD facilities, landscaping, pavement, structures, fencing, signage, etc. that occur within the right-of-way, but are not specifically designated to be removed by the plans or by the Project Manager, will be repaired by the Contractor at their own expense.

NOTICE TO BIDDERS

The proposal guaranty shall be a certified check, cashier's check, or bid bond in the amount of 5 percent of the Contractor's total bid.

It is recommended that bidders on this project review the work site and plan details with an authorized Department representative. Prospective bidders shall contact one of the following listed authorized Department representatives at least 12 hours in advance of the time they wish to go over the project.

City and County of Denver Contracts Liaison

The above referenced individuals are the only representatives of the Department with authority to provide any information, clarification, or interpretation regarding the plans, specifications, and any other contract documents or requirements.

If the bidder has a question or requests clarification that involves the bidder's innovative or proprietary means and methods, phasing, scheduling, or other aspects of construction of the project, the Project Manager will address the question or clarification. The Project Manager will keep the bidder's innovation confidential and will not share this information with other bidders.

The Project Manager will determine whether questions are innovative or proprietary in nature. If the Project Manager determines that a question does not warrant confidentiality, the bidder may withdraw the question. If the bidder withdraws the question, the Project Manager will not answer the question and the question will not be documented. If the bidder does not withdraw the question, the question will be answered, and both the question and City answer will be posted on the web site. If the Project Manager agrees that a question warrants confidentiality, the Project Manager will answer the question, and keep both question and answer confidential. The City will keep a record of both question and answer in their confidential file.

All questions shall be directed to the City contact listed above no later than 7:00 A.M. Monday of the week of bid opening. Final questions and answers will be posted no later than Tuesday morning of bid opening week

Questions and answers shall be used for reference only and shall not be considered part of the Contract.

PERFORMANCE OF SAFETY CRITICAL WORK

The following work elements are considered safety critical work for this project:

- (1) Removal of portion of Bridges D-03-V-030A, D-03-V-036A, D-03-V-032A, D-03-V-034A, and D-03-V-038A
- (2) Work requiring the use of cranes or other heavy lifting equipment to make overhead repairs, or to complete work near active traffic lanes, rail facilities, or when construction materials are being lifted that may fall onto active traffic lanes and rail facilities.
- (3) Bridge jacking
- (4) Work below the bridges in the vicinity of rail tracks.
- (5) Work in the vicinity of the RTD Switching Station as shown in the plans.

The Contractor shall submit, for record purposes only, an initial detailed construction plan that addresses safe construction of each of the safety critical elements. When the specifications already require an erection plan, a bridge removal plan, or a removal of portion of bridge plan, it shall be included as a part of this plan. The plan shall also include a plan for safe use of the existing bridge. The detailed construction plan shall be submitted two weeks prior to the safety critical element conference described below. The construction plan shall be stamped "Approved for Construction" and signed by the Contractor. The construction plan will not be approved by the Engineer.

The Construction Plan shall include the following:

- (1) Safety Critical Element for which the plan is being prepared and submitted.
- (2) Contractor or subcontractor responsible for the plan preparation and the work.
- (3) Schedule, procedures, equipment, and sequence of operations, that comply with the working hour limitations
- (4) Temporary works required: falsework, bracing, shoring, etc.
- (5) Additional actions that will be taken to ensure that the work will be performed safely. Any work that could potentially cause debris to fall below the structure shall be adequately protected from falling debris by the use of approved containment methods such as canvas, wood, and steel. Any electrically conductive materials such as steel shall be grounded.
- (6) Names and qualifications of workers who will be in responsible charge of the work:
 - A. Years of experience performing similar work
 - B. Training taken in performing similar work
 - C. Certifications earned in performing similar work
- (7) Names and qualifications of workers operating cranes or other lifting equipment
 - A. Years of experience performing similar work
 - B. Training taken in performing similar work
 - C. Certifications earned in performing similar work
- (8) The construction plan shall address how the Contractor will handle contingencies such as:
 - A. Unplanned events (storms, traffic accidents, etc.)
 - B. Structural elements that do not fit or line up
 - C. Work that cannot be completed in time for the roadway to be reopened to traffic
 - D. Replacement of workers who do not perform the work safely
 - E. Equipment failure
 - F. Other potential difficulties inherent in the type of work being performed
- (9) Name and qualifications of Contractor's person designated to determine and notify the Engineer in writing when it is safe to open a route to traffic after it has been closed for safety critical work. The person shall be a Colorado Licensed Professional Engineer.
- (10) Erection plan or bridge removal plan when submitted as required elsewhere by the specifications. Plan requirements that overlap with above requirements may be submitted only once.

-2PERFORMANCE OF SAFETY CRITICAL WORK

A safety critical element conference shall be held two weeks prior to beginning construction on each safety critical element. The Engineer, the Contractor, the safety critical element subcontractors, and the Contractor's Engineer shall attend the conference. Required pre-erection conferences or bridge removal conferences may be included as a part of this conference.

After the safety critical element conference, and prior to beginning work on the safety critical element, the Contractor shall submit a final construction plan to the Engineer for record purposes only. The final construction plan shall be stamped "Approved for Construction" and signed by the Contractor.

The Contractor's Engineer shall be on site to inspect and provide written approval of safety critical work for which he provided signed and sealed construction details. Unless otherwise directed or approved, the Contractor's Engineer need not be on site during the actual performance of safety critical work, but shall be present to conduct inspection for written approval of the safety critical work.

When ordered by the Engineer, the Contractor shall immediately stop safety critical work that is being performed in an unsafe manner or will result in an unsafe situation for workers or the traveling public. Prior to stopping work, the Contractor shall make the situation safe for work stoppage. The Contractor shall submit an acceptable plan to correct the unsafe process before the Engineer will authorize resumption of the work.

When ordered by the Engineer, the Contractor shall remove workers from the project that are performing the safety critical work in a manner that creates an unsafe situation for the public.

Should an unplanned event occur or the safety critical operation deviate from the submitted plan, the Contractor shall immediately cease operations on the safety critical element, except for performing any work necessary to ensure worksite safety, and provide proper protection of the work, workers, and the traveling public. If the Contractor intends to modify the submitted plan, he shall submit a revised plan to the Engineer prior to resuming operations.

All costs associated with the preparation and implementation of each safety critical element construction plan will not be measured and paid for separately, but shall be included in the work.

Nothing in the section shall be construed to relieve the Contractor from ultimate liability for unsafe or negligent acts or to be a waiver of the Colorado Governmental Immunity Act on behalf of the Department.

REVISION OF SECTION 202 REMOVAL OF PORTIONS OF PRESENT STRUCTURE (CLASS 2)

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

Subsection 202.02 shall include the following:

General. The Contractor shall submit details of the removal operations showing the methods and sequence of removal and equipment to be used to the Engineer at least 10 working days prior to the proposed start of removal operations. All methods and equipment used to accomplish this task shall be approved by the Engineer, prior to the beginning of the work.

The deteriorating concrete shall be removed as shown on the plans or directed by the Engineer. An inspection using approved methods shall be held 7 days prior to the beginning of repairs to locate any additional repairs beyond those shown in the plans. The Engineer, Contractor, and the Project Manager are required to attend. If additional concrete is removed without the direction of the Engineer, the Contractor shall not be compensated for the additional quantities required to perform repairs.

During removal, transport and disposal operations, the Contractor shall contain all materials, prevent materials from falling onto the bare ground and prevent materials from escaping the containment system. Power washing or other washing based methods are permitted but the Contractor shall contain the water such that is does not fall to the bare ground. All work will adhere to the Colorado Department of Public Health and Environment Colorado Discharge Permit System (CDPS) and US Army Corps of Engineers Nationwide Permit 3 (NWP3) requirements.

Within 24 hours before concrete or cement grout is placed, the entire existing concrete surface against which new concrete or grout is to be placed, and which was exposed by the hand tool methods herein, shall be roughened by sandblasting or other approved methods to remove all fractured particles in order to promote a good bond with the new concrete or cement grout. All areas below the structure shall be protected from debris from sandblasting or other approved roughening methods with suitable containment measures. The entire surface shall be moistened with water prior to placement of new concrete.

The Contractor shall take all steps necessary to prevent cutting or otherwise damaging reinforcing steel and structural steel. All bar or steel damaged by the Contractor's operations shall be repaired at the Contractor's expense.

Following sandblasting or other appropriate repair methods, the condition of all exposed reinforcing bars shall be inspected by the Engineer. If, in the Engineer's opinion, the bars are deteriorated to less than 75 percent of their original cross section, the Contractor shall add additional bars as approved by the Engineer.

New added bars shall be lap spliced as shown in the plans or as directed by the Engineer. Payment for the new reinforcement steel shall be made in accordance with Section 602. If the required lap splice length cannot be utilized, a mechanical splice shall be used. The mechanical splice shall develop at least 125 percent of the specified yield strength of the bar. The mechanical splice shall be included in CDOT's list of approved products. The mechanical splice shall not be paid for separately but shall be included in the cost of the work.

All reinforcing steel shall be secured to adjacent bars or to the deck as provided in Section 602.

All areas of the prepared surface contaminated by oil or other materials detrimental to good bond shall be thoroughly cleaned by a method approved by the Engineer. Such cleaning work will not be paid for separately, but shall be included in the work.

-2REVISION OF SECTION 202 REMOVAL OF PORTIONS OF PRESENT STRUCTURE (CLASS 2)

Class 2. Removal of Portions of Present Structure (Class 2) shall consist of removing existing concrete within the limits shown on the plans, or as designated by the Engineer. Class 2 removal limits shall not extend to the deck Post Tensioning (PT) ducts. If the PT duct is exposed, or the Contractor feels the removal should be deeper than shown on the plans due to loose or deteriorated concrete, then the Engineer shall be notified immediately.

Whenever solid bond between existing concrete and reinforcing steel is lacking, or where more than half of the diameter of the reinforcing bars is exposed by removal of concrete, the concrete adjacent to the bar shall be removed a minimum of ½ inch beyond and around the bar to permit new construction to bond to the entire periphery of the bar. Care shall be taken so as not to fracture sound concrete.

Removal may be performed by hand tools only in accordance with these specifications or as otherwise approved by the Engineer.

Surface Preparation Equipment. Sandblasting equipment shall be capable of removing rust scale from reinforcing bars and removing small chips of concrete partially loosened or fractured by the scarifying or chipping operations. Sandblasting is only permitted on non-epoxy reinforcing unless otherwise approved by the Engineer.

Hand tools such as hammers and chisels shall be provided for removal of final particle of loose, unbounded concrete. Only short, one-handed hammers with a maximum head weight of 5 lbs will be allowed.

Subsection 202.11 shall include the following:

Removal of Portions of Present Structure (Class 2) will not be paid for separately and shall be included in the cost of Item 211 Cement Grout or Item 601 Concrete Class D (Bridge) as appropriate.

Payment for the containment system will not be paid for separately, but included in the cost of the work.

REVISION OF SECTION 202 REMOVAL OF BEARING DEVICE

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

Subsection 202.01 shall include the following:

This work shall consist of removing existing bridge bearing devices including full removal of existing grout pads, bearing pad, plates (bearing, masonry, and sole plates), and anchor bolts at locations shown on the plans in accordance with the applicable portions of Section 202 of the Standard Specifications or as amended by these Special Provisions and in conformity with the plans or as directed.

Subsection 202.02 shall include the following:

Removal operations shall be coordinated with all other construction tasks shown in the plans, indicated in the Project Special Provisions, or as directed by the Engineer.

The methods and equipment used for the bearing device removal shall be approved by the Engineer. The Contractor shall take all steps necessary to avoid damage to all steel girders, end diaphragms/cross frames, concrete beam seats, concrete corbel/spandrel beams, and related attachments/appurtenances. Any damage shall be repaired at the Contractor's expense with no allowance for time extension. Surfaces above and below the new bearings shall be smooth and even with the original surfaces after removal. This includes the beam seats after removal of the grout pads and the bottom flanges (and any other related plates) of the steel girders.

The removed bearing devices shall become the property of the Contractor.

Subsection 202.11 shall include the following:

Bearing devices removed shall be measured by each bearing.

Subsection 202.12 shall include the following:

Payment shall be made at the contract unit price per each bearing device for the accepted quantity removed.

Payment will be made under:

Pay ItemPay UnitRemoval of Bearing DeviceEA

REVISION OF SECTION 202 SANDBLASTING AND CLEANING REINFORCING STEEL

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

Subsection 202.01 shall include the following:

Sandblasting and Cleaning Reinforcing Steel shall consist of cleaning exposed reinforcing steel designated to remain in place by sandblasting or other approved methods following the removal of adjacent concrete and prior to placing new concrete in accordance with the applicable portions of Section 202 of the Standard Specifications or as amended by these Special Provisions or as directed. Sandblasting is not permitted on epoxy coated reinforcing unless otherwise approved by the Engineer.

Subsection 202.08 paragraph 3 shall include the following:

Rust which may form on the reinforcing steel within seven calendar days following the accepted sandblasting or cleaning, will not be cause for rejection of the steel.

When acceptable reinforcing steel is exposed to the elements for more than seven calendar days prior to encasement in concrete, adequate measures shall be taken by the Contractor, as approved by the Engineer, to protect the steel from contamination or corrosion. Reinforcing steel contaminated as a result of the Contractor's failure to provide adequate protection as stipulated herein, shall be re-sandblasted at the Contractor's expense with no allowance for contract time extension.

Damaged epoxy coated reinforcing steel shall be coated with epoxy paint immediately after cleaning. Epoxy coated reinforcing steel contaminated as a result of the Contractor's failure to provide adequate protection as stipulated herein, shall be re-cleaned at the Contractor's expense with no allowance for contract time extension.

Subsection 202.12 shall include the following:

Sandblasting and Cleaning Reinforcing Steel and repairing epoxy coating shall not be paid for separately but shall be included in the cost of the work.

SECTION 204 BRIDGE JACKING AND SHORING

Section 204 is hereby added for this project to include the following:

DESCRIPTION

204.1 This work consists of the installation of blocking, steel shims, hydraulic jack systems and raising and lowering the bridge superstructure as shown on the plans for the purpose of bearing device replacement at the waffle slab/steel viaduct interface. This work also includes construction engineering if an alternate jacking system is provided as well as making adjustments to dimensions and elevations based on using an alternate design or due to varying field conditions. The Contractor is responsible for the stability of the structure during construction and verifying all relevant dimensions in the field.

CONTRACTOR'S EXPERIENCE REQUIREMENTS

The Contractor or subcontractor performing this work shall submit proof of at least two projects successfully completed in the last three years involving jacking a bridge superstructure. A brief description of each project with owner's name and current phone number shall be included and submitted to the Engineer prior to the preconstruction meeting.

MATERIALS

204.2 The Contractor has the option to use other jacking systems or vary from what is shown in the plans and described in the specifications. In either case, the Contractor shall submit calculations, fabrication details, and drawings signed and sealed by a Colorado Registered Professional Engineer based on the loads shown in the plans.

The hydraulic jacking system shall be a ganged system working off a common manifold or similar device with an electric/hydraulic pump, shut-off valves, load-lowering valves, and pressure gages. The jacking system shall have a minimum capacity shown in the plans for each ram and a minimum stroke of 1 inch.

If alternate jacking systems involve jacking frames or other structural steel other than temporary bearing/shim plates, the steel shall be new material. The Contractor shall provide the Engineer with copies of all certified mill test reports for all structural steel and bolts. Structural steel may be reused on subsequent jacking operations provided that acceptable condition is maintained. The structural steel shall conform to the requirements of AASHTO M270 Grade 50. If welds are necessary, the welds shall be made according to AWS D1.5. The Contractor's welders shall be qualified according to AWS D1.5 to make all necessary welds. All structural steel field connections shall be bolted with new high strength bolts conforming to Section 509. High strength bolts, including suitable nuts and plain hardened washers, shall conform to the requirements of ASTM A-325. Bolts shall be Type 3.

CONSTRUCTION REQUIREMENTS

204.3 The Contractor shall measure the height of all existing bearings prior to ordering new bearings. Measurements shall be submitted to the Engineer in order to make any necessary adjustments to the dimensions. The Contractor shall have a sufficient number of steel shims available at the construction site during jacking operations to ensure the top of the masonry plate and bottom of the sole plate of the new bearings are level to the satisfaction of the Engineer.

When raising and lowering the superstructure, all live load traffic shall be detoured away from the girders being jacked such that traffic live load and vibration does not impact jacking operations. If night work is approved, work shall comply with CCD Noise Ordinance.

-2-SECTION 204 BRIDGE JACKING AND SHORING

Lifting of the bridge superstructure shall be done uniformly with a minimum of three jacks per bearing replacement but shall be increased as necessary to prevent damage to the structure. Damage to the bridge structure shall be repaired at the Contractor's expense. The Contractor shall install string lines or other approved systems by which the Engineer can monitor the relative movement of the bridge. If three jacks are used, the following shall be provided:

- 1. For exterior girders, the first two adjacent girders shall be jacked.
- 2. For interior girders, the adjacent girder on either side shall be jacked.

The maximum amount of superstructure lift shall be 0.125 inch above the rebound height of the bearing. Adjacent jacks shall be loaded only enough to achieve the aforementioned lift at the bearing being replaced without damaging the bridge. A jacking plan indicating the number of adjacent jacks shall be submitted to the Engineer for approval. In the event that, in the opinion of the Engineer, any jacking operation is causing distress or damage to the bridge structure, jacking operation shall be immediately terminated.

The Contractor shall submit a jacking and bearing replacement sequence for approval that includes all steps necessary for existing bearing removal and complete bearing replacement. A recommended sequence is as follows:

- Set up jacking system. Shims and bearing plates may be necessary to prevent damage to the top of the spandrel beam and to have a level jacking surface under the girder at the jacking stiffener.
- 2. Remove the end diaphragm
- 3. Jack the girders in accordance with the limitations provided in this specification.
- 4. Remove the existing bearings. The existing welds shall be ground smooth along the existing bearing flange and filler plates. Damage to the girder shall be repaired at the Contractor's expense.
- 5. Remove the concrete grout pad and grind flush with the top of the waffle slab spandrel beam
- 6. Drill anchor hole
- 7. Set the new bearing devices. Use shims to ensure top of masonry plate is level.
- 8. Install the adhesive anchor rod through the sole plate and masonry plate
- 9. Reset girder on top of bearing. Use shims to ensure the bottom of sole plate is level
- 10. Weld the sole plate to the bearing filler plates.
- 11. Reconnect the end diaphragm. Diaphragm reconnection shall be coordinated with adjacent bearing installation.
- 12. Paint the new bearing.

METHOD OF MEASUREMENT

204.4 Bridge jacking and shoring will be measured by the individual bearing being replaced.

-3-SECTION 204 BRIDGE JACKING AND SHORING

BASIS OF PAYMENT

204.5 The accepted quantity shall be paid for at the contract unit price for the pay unit listed below.

Payment will be made under:

Pay Item Pay Unit

Bridge Jacking and Shoring EA

Payment shall be full compensation for all work necessary to complete the item, which shall include but not be limited to design, field adjustments, fabrication, welding, bolted connections, transportation to the bridge site, blocking, raising and lowering the superstructure for each bearing replacement. Payment for this item will not be made for this item until all required submittals have been approved by the Engineer.

REVISION OF SECTION 208 EROSION CONTROL

Section 208 of the Standard 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 Management (ECM): Erosion Control Management for this project shall consists of Erosion Control Inspection and the Administration of the Stormwater Management Plan (SWMP). All ECM staff shall have working knowledge and verifiable experience in construction as well as applicable certifications as determined by the Department. The Superintendent will not be permitted to serve in an ECM role. The Erosion Control Inspector and the Stormwater Administrator may be the same person.

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, 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.

-2-REVISION OF SECTION 208 EROSION CONTROL

Major SWMP Modification: Changes to the original SWMP that removes or adds additional area to the Project, or modifies the final 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 Public Works Project Controls Office. As a clarification, the Development Services Department of the City serves as the point of intake and permit processing center.

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.

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: www.cdphe.state.co.us

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.

-3-REVISION OF SECTION 208 EROSION CONTROL

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 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 or Landscape Architect, 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, drainageways, 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.

-4REVISION OF SECTION 208 EROSION CONTROL

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

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:

The Contractor shall submit a complete SWMP and application to the Permit Authority to obtain the required CASDP. The Contractor shall use the provided "For reference only" erosion control drawings provided in the Contract as a starting point for preparation of required SWMP elements (as required for CASDP) and for general information as to the origin of pay items included in the Bid Documents. The included erosion control drawings have been previously reviewed by the Permit Authority, and the BMPs shown therein have been found to be generally acceptable by the Permit Authority.

It shall be the responsibility of the Contractor to prepare and acquire approval of a complete SWMP and obtain a CASDP from the Permit Authority prior to beginning construction. The Contractor is hereby made aware that the Permit Authority allots up to 3 weeks per review cycle for CASDP applications (2 review cycles are not uncommon).

Per CASDP requirements, the Contractor shall obtain the endorsement of a Professional Engineer licensed in the State of Colorado for preparation of the initial SWMP and/ or any proposed Major or Minor SWMP Amendments. This will require the Contractor to provide or retain a Professional Engineer or subcontract with the original Professional Engineer of the "For reference only" erosion control drawings.

Per definition, a Major SWMP Modification requires the submission of revised SWMP elements to the Permit Authority for review and approval.

Prior to construction, the Contractor shall obtain the required State Construction Stormwater Permit(s) as applicable.

-5-REVISION OF SECTION 208 EROSION CONTROL

PART V: BASIS OF PAYMENT

Erosion log will be measured by linear foot of bag that is installed and accepted. Payment will be full compensation for all work, materials and equipment required to complete the item, including surface preparation, maintenance throughout the project, and removal upon completion of work.

Sweeping, when used as a BMP as shown in the Contract, will be not be measured separately but shall be included in the cost of the work. Each week the Contractor shall submit to the Engineer a statement detailing the type of sweeping equipment used. Operator will not be measured and paid for separately, but shall be included in the work.

Pay Item	Pay Unit
Erosion Control Management	Day
Vehicle Tracking Pad	EA
Concrete Washout Structure	EA
Erosion Log Type I (12 Inch)	LF

REVISION OF SECTION 209 WATERING & DUST PALLIATIVES

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

In Subsection 209.07, delete the first paragraph and replace with the following:

Water will not be measured, but shall be included in the work.

In Subsection 209.08, delete the third paragraph and replace with the following:

Water required for all items of work, including dust control, will not be paid for separately, but shall be included in the work.

REVISION OF SECTION 509 PAINTING EXISTING STRUCTURE

Section 509 of the Standard Specifications is hereby revised for this project as follows:

Subsection 509.01 shall include the following:

This work consists of all painting required for the installation of Bearing Devices (Type II), including but not limited to the girder ends, end diaphragms connected to the bearing stiffeners, all plates, and connections. Painting the bearing devices shall be in accordance with Section 512 Bearing Device and Section 509 Steel Structures.

Subsection 509.29 shall include the following:

(f) Field Cleaning and Painting of Steel

After the structural steel surfaces have been prepared in accordance with the manufacturer's recommendations, they shall be painted with the three coat paint system defined below.

All three coats of paint shall be supplied from the same paint manufacturer. The dry film thickness of each coat shall be 3-4 mils. Each coat shall contain less than 0.01 percent lead in the dry film thickness and no more than trace amounts of hexavalent chromium, cadmium, mercury or other toxic heavy metals. The volatile organic compounds (VOC) of each coat shall not exceed 3.5 lbs. per gallon as applied. All paint shall be applied in accordance with the manufacturer's recommendations.

- A Type II, organic zinc-rich primer conforming to SSPC-Paint 20 shall be applied to the prepared steel surfaces before new rust forms. The primer shall contain a minimum of 77% to 85% zinc dust (Level 2) by weight in the dry film. The zinc dust shall comply with the requirements of ASTM D 520, Type II.
- 2. The intermediate coat shall be a solvent based two part catalyzed epoxy compatible with the primer and top coats. The intermediate coat's color shall be noticeably different than the primer and the top coat, but in the same color family as the top coat.
- 3. The top coat shall be an aliphatic polyurethane compatible with the epoxy intermediate coat. The color of the top coat shall match the existing paint color to the extent possible and approved by the Engineer.
- 4. The product data sheets for the paint shall be provided to the Engineer prior to initiating the repair.
- 5. Painting operations shall be in conformance with National Emission Standards for Hazardous Air Pollutants (NESHAP).

The Contractor shall consult with the paint manufacturer to confirm the compatibility of the existing and new paint systems.

The Contractor shall provide all personnel (Construction and the Department's) safe access to all locations where painting operations are in progress in accordance with the requirements of subsection 107.06.

Alternate paint systems of equal or better quality successfully used for other existing steel bridges in the State of Colorado may be submitted for approval.

(g) Contractor shall perform Lead Based Paint testing prior to paint removal. Cost is considered incidental to the cost of the work.

-2-REVISION OF SECTION 509 PAINTING EXISTING STRUCTURE

In subsection 509.32, add the following:

(d) Painting of existing structure will not be measured and paid for separately, but shall be included in the cost of Item 204 Bridge Jacking and Shoring.

The work includes all labor, materials, and equipment necessary to complete the work including paint removal and containment, waste disposal, preparing steel surface, primer, intermediate coat, and top coat.

REVISION OF SECTION 515 CONCRETE SEALER

Section 515 of the Standard Specifications is hereby revised for this project as follows:

Subsection 515.01 shall include the following:

This work consists of applying a penetrating corrosion inhibitor to finished surfaces of existing concrete as directed by the Engineer Concrete sealer shall be applied to concrete repair areas and as directed by the Engineer. Repair areas with structural concrete coating shall be re-coated with structural concrete coating. The corrosion inhibitor shall be placed under the direction of a manufacturer's representative in accordance with the manufacturer's instructions and as described herein.

Subsection 515.02 shall include the following:

The corrosion inhibitor shall consist of calcium nitrite and liquid carriers or penetrating vehicles, or organic inhibitors such as amino alcohols. The corrosion inhibitor shall conform to AASHTO M194, except for the requirements in Tables 1, and 2, and Sections 11 through 17. The corrosion inhibitor shall be one on the approved products list of the Department. If there are no approved products on the list the corrosion inhibitor shall be a product approved by the Engineer. If the plans specify the use of a calcium nitrite inhibitor, the inhibitor shall be calcium nitrite. If the plans specify the use of an organic inhibitor, an organic inhibitor shall be used. If the plans do not specify the type of inhibitor, either or both types of inhibitor may be used either individually or in combination, provided that the combination use is in accordance with the manufacturer's recommendations.

Subsection 515.05 (a) shall include the following:

Prior to the application of the corrosion inhibitor, surfaces to be treated shall be cleaned by air, sand, or water blasting and flushed with water until all material and contaminants which may interfere with the inhibitor's penetration have been removed.

Subsection 515.05 (b) shall include the following:

The corrosion inhibitor shall be applied when the surface to be treated has been dry for at least 24 hours and above a temperature of 40F, or within a more restrictive temperature range if recommended by the manufacturer.

Subsection 515.05 (c) shall include the following:

After the exposed surfaces have been prepared and allowed to dry, coats of corrosion inhibitor shall be applied in accordance with the manufacturer's recommendations. Each coat shall be evenly applied. Each application shall be allowed to dry prior to making the next application. Exposed surfaces shall be protected from precipitation and heavy dew during and after the application of the penetrating inhibitor. Traffic shall not be allowed on the treated surface until the corrosion inhibitor has penetrated the concrete and the liquid corrosion inhibitor is no longer visible on the surface. The Contractor shall follow all manufacturer's recommendations, including penetration time, prior to opening treated surfaces to traffic or completing the work.

-2-REVISION OF SECTION 515 CONCRETE SEALER

Enough coats shall be applied so that each square yard of treated surface shall have absorbed 0.12 lb. of calcium nitrite or organic inhibiting agent. When treating areas from which damaged concrete has been removed, lap the treated area onto the adjacent surface at least 6" beyond the removal unless otherwise shown in the plans.

Subsection 515.07 Basis of Payment, shall include the following:

The quantity of concrete sealer will be paid for as part of Item 211 Cement Grout or Item 601 Concrete Class D (Bridge)

REVISION OF SECTION 519 EPOXY RESIN (INJECTION)

Section 519 is hereby added for this project to include the following:

DESCRIPTION

519.1 This work consists of the repair of concrete cracks using epoxy injection as shown in the plans or as directed by the Engineer.

MATERIALS

519.2 Provide an epoxy resin that cures in 4 hours or less and retains the injected epoxy. Epoxy resin shall be a low viscosity injection epoxy certified to meet ASTM C881, Type I or IV, Grade 1, Class B or C (as temperature conditions require.). Epoxy resin selected shall be submitted to the Engineer for approval. The Epoxy resin type may vary and shall be applicable to the crack width determined in the field.

CONSTRUCTION REQUIRMENTS

519.3 Epoxy injection shall be applied in accordance with the manufacturer's specifications as approved by the Engineer.

MEASUREMENT AND PAYMENT

The accepted quantity will be paid for at the contract unit price per linear foot complete in place. Payment will be made under:

Pay ItemPay UnitEpoxy Resin (Injection)LF

Payment will be full compensation for all work and materials required to complete the item including preparation, furnishing and applying the epoxy injection.

REVISION OF SECTION 601 STRUCTURAL CONCRETE

Subsection 601.20 shall include the following delineation of concrete repair. See plans and other Project Special Provisions for additional information:

Concrete Class D for repair under waffle slab (spandrel beam (corbel) repair) shall be paid for as Item 601 Concrete Class D measured in cubic yards for payment.

Sikacrete 321 or approved equal used for patching under the bridge structures shall be paid for as Item 211 Cement Grout measured in cubic yards for payment.

REVISION OF SECTION 601 CONCRETE CLASS D (BRIDGE)

Subsection 601.20 shall include the following:

Curing concrete and cold-weather protection of concrete including all material, equipment and labor, shall be considered essential and incidental to completing the concrete pay items. No additional payment will be made for cold-weather protection and curing concrete items.

REVISION OF SECTION 626 PUBLIC INFORMATION SERVICES

Section 626 of the Standard Specifications is hereby revised for this project to include the following:

DESCRIPTION

This work consists of providing regular and continuous public information services throughout the duration of the project. Final approval of approach and collateral will be given by the Engineer. Anticipated communications issues on this project include:

- (1) Major impacts to traffic
- (2) Changes in closures/traffic patterns
- (3) Changes to bus routes

CONSTRUCTION REQUIREMENTS

- (a) Public Information Manager (PIM). The Contractor shall provide a full-time Public Information Manager (PIM) who will be the responsible charge for all activities associated with public information services. As part of the key project staff submittal prior to the Preconstruction Conference, the Contractor shall submit the name, contact information and qualifications of the Public Information Manager (PIM) for this project for approval by the Engineer. The PIM shall have professional experience in Public/Media Relations, Marketing or other related field and good verbal and written communications skills. PIM may be a qualified sub-consultant or a member of the Contractor's personnel, provided he has limited project duties outside those duties relating to Public Information Services. The Engineer will coordinate all aspects of the PIM's work, including all required submittals.
- (b) Activities of the PIM. Throughout the duration of the project, the PIM shall be responsible for the following:
 - (1) On Call. The PIM shall be available or on call on every day there is work on the project and shall be available upon the Engineer's request at other than normal working hours.
 - (2) Project Meetings. The PIM shall be available, as requested by the Engineer, to participate in weekly project meetings held on-site. At the meetings, PIM will discuss communications issues and develop strategies to provide timely details for upcoming media advisories/press releases, lane closure reports, website updates and information line recordings.
 - (3) Public Information Line/Communications. The PIM shall establish a public information office equipped with a telephone, voicemail, computer and email address. The public information office may be located off-site or within the PIM's field office, provided that the telephone line is a local call line. The voicemail greeting for the project information line shall provide an updated message each week, or each day if necessary, concerning the project's completion date and forthcoming activities on the project and allow the recording of a message from the caller. If unable to answer the public information line, the PIM shall check and respond to voicemail messages throughout each day of construction operations and lane closures are being carried out. The PIM shall track inquiries made by citizens and businesses, including names, addresses, phone numbers, and subsequent action taken during construction; these customer inquiries and follow-up action shall be entered into Dialog, a web-based contact and issue tracking database provided by the Department. The system shall provide an automated report to the Engineer

-2REVISION OF SECTION 626 PUBLIC INFORMATION SERVICES

each week. All inquiries and complaints shall be followed up with a return phone call or email from either the PIM and, when necessary, the Engineer.

- (4) Photos/Video. The PIM shall take and submit photos/videos of the project work on regular intervals. A cell phone camera is permitted. Photographs/videos may include traffic control, paving, slope repair, erosion control, bridge deck and rail work, and other key areas of work identified by the Contractor and the Department for use in reports to interested agencies, social media, and flyers. A minimum of two digital photographs/videos shall be submitted each month to the Engineer.
- (5) Media Relations. At least one week prior to the project start date, the PIM shall prepare a media release summarizing the project scope, construction phasing, potential traffic and construction, duration of project and summary of project benefits. The PIM shall develop additional media releases and traffic advisories based on major construction milestones such as major traffic shifts, key closures, etc. or as requested by CCD. The media releases and traffic advisories will be submitted for approval in accordance with Table 626-2. CCD will distribute media releases, traffic advisories and other information.

The PIM shall immediately notify the Engineer of any on-site situations involving the media. CDD will address all media inquiries and media requests.

- (6) Lane Closure Reports. PIM shall submit a Lane Closure Report each Thursday, for the following week's activities (Saturday through Friday), to the contacts listed on the Report and at the end of this specification. Contact the Engineer for an electronic copy of this report.
- (7) Web Page Updates. The PIM shall work with CCD to develop internet web page content specifically for this project and provide consistent updates with the latest project information (web page development experience is not necessary as the PIM will simply supply information to CCD). It shall contain all appropriate links to/from other sites if applicable, e.g., local city, county, bus service, etc. PIM will ensure the web page is updated at least weekly with pertinent schedule information, new photos, contact information, etc.
- (8) Project Fliers. At least 10 working days prior to the start of work, the PIM shall prepare and deliver one flier to each property owner potentially impacted by the highway work zone such as properties with direct access to the highway, nearby businesses, schools, homes, churches or others who rely on regular traffic access in the construction zone. An email containing the flier shall also be sent to all those known to use the project limits having significant or daily use of the roadway contained within the project corridor. Examples of these are bus services, community centers, schools.

The flier shall provide the anticipated project start and end date, location and description of work, traffic impacts and hours/days of operation, PIM's project information line, email address, web address, project map (if necessary) and a construction safety message as defined by the department. Flier may also contain contractor logo, if desired. Fliers shall be submitted for approval in accordance with Table 626-2. Final approval is provided by the Engineer. The PIM

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shall contact the Engineer for a flier template which will include CCD's logo, project logo, or both.

Language Assistance for LEP Persons. LEP persons are individuals for whom English is not their primary language and who have a limited ability to read, write, speak or understand English. Examples of language assistance include, but are not limited to, translation of meeting notices and interpretation services at meetings. At a minimum, the PIM shall work with CCD to provide interpretation services upon request by an LEP person. Additionally, the project flyers shall be translated. The PIM shall document all measures taken to communicate with LEP persons and record all requests for language assistance.

- (c) Construction Signing. A minimum of one week prior to start of work, the Contractor shall erect signs at both ends of the project limits, with the estimated dates when the project will commence and end. The signs shall include the Contractor's name and public information contact number.
- (d) Response Protocol to CCD and the Public. The PIM shall conform to the table below in responding to correspondence from stakeholders and the public:

RESPONSE PROTOCOL

	THUNG OF PEOPONICE
TYPE OF COMMUNICTION	TIMING OF RESPONSE
Hotline Calls	Check messages throughout day
	Respond same day (initial call) or within 24 hours (including weekends if work is occurring)
Email	Same day (within two business days for high volume situations)
Call from CDOT Staff	As soon as possible
Webpage Inquiries	Same day (within two business days for high volume situations)
Public Meeting Inquires	Within one week of the meeting

(e) Deliverables Protocol to CCD. The PIM shall conform to the following table in submitting the following for Department review and approval prior to dissemination:

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DELIVERABLES AND SUBMITTAL TIME TO CCD ENGINEER

Deliverable	When to be submitted	
PIM Name and Credentials	Before Pre-Construction Meeting (along with key staff submittal)	
PIM Contact Information	At Pre-Construction Meeting	
Emergency Response Telephone Tree (when required in the Contract)	Before works starts	
Local Telephone Hotline	Before works starts	
Stakeholder Distribution List (if required for non- work zone flyer recipients and emergency service providers)	At Pre-Construction Meeting	
Lane Closure Reports	Weekly, on Thursday by noon	
Traffic Advisories/Media Releases	48 hours prior to scheduled distribution date	
Fliers, posters or other public material	5 Working Days prior to the scheduled distribution date	
	In cases of rapid response, 48 hours prior to distribution	
Photos/Video	Two a month or as requested.	

(f) Deliverable protocols to the public. The PIM shall conform to the following table in providing the following information to the public:

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DELIVERABLES AND SUBMITTAL TIME TO THE PUBLIC

Deliverable	When to be published		
Full road closures, detours, and major traffic impacts lasting seven days or longer	14 days prior to the beginning of activity in any area of the Project.		
Major project activities (such as major lane shifts, bridge demolitions, etc.) lasting seven days or less	7 days prior to the beginning of the activity		
Other remaining types of construction Activities in any area of the Project including:	7 days prior to the beginning of activity in any area of the Project or as determined jointly by teams		
Night Work			
Utilities			
 Change of business/residential access 			
Other construction updates (e.g., cancellation of planned closures, additional lane closures, closure removals, major traffic shifts, etc.) that directly impact the public.	As soon as known with at least 24 hours' notice		

(g) *Public Information Contact Sheet.* A Public Information Contact Sheet shall be completed by the PIM with the names of contact as appropriate to the project:

Public Information Services Contact Sheet

City and County of Denver, Engineer

Name: Kayla Lorentz

Address: 201 W Colfax Dept 506, Denver, CO 80223

Phone/s: 720-865-3119

Email: kayla.lorentz@denvergov.org

City and County of Denver, Public Works Communications

Name: Nancy Kuhn

Address: 201 W Colfax Dept 506, Denver, CO 80223

Phone/s: 720-865-8720

Email: nancy.kuhn@denvergov.org

City and County of Denver, Web Site Administrator

Name: Sarah Stanek

Address: 201 W Colfax Dept 506, Denver, CO 80223

Phone/s: 720-865-8713

Email: sarah.stanek@denvergov.org

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City

City Manager's Office Contact

City Public Works

City PIO

Chamber of Commerce

City Fire/Rescue

Police Department

Local Colorado State Patrol Office

Hospital

Ambulance

County

County Sheriff's Office

County Road & Bridge

County PIO

Key Stakeholders (as appropriate)

Schools/School District

Businesses

Community Centers

Churches

Visitor Centers/Tourist Destinations

Railroads

Neighborhood Associations

Multi-Family Housing/Property Management Firms

Special Districts (Business Improvement, Parks, Maintenance, Water, etc.)

Airports

Utility Owners

Commercial Vehicle Operators

Others

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METHOD OF MEASUREMENT

The Engineer will monitor the PIM and all public information services. When the PIM provides acceptable public information services in accordance with these specifications, partial payments for the pay item Public Information Services will be made as the work progresses. Failure to provide acceptable public information services will result in withholding of payment for this item. These partial payments will be made as follows:

Partial payments for public information services will be made once each month as work progresses. The monthly partial payments will be determined by pro-rating the lump sum bid amount by the number of months in the actual construction schedule.

BASIS OF PAYMENT

Payment will be made under:

Pay ItemPay UnitPublic Information Services (Tier III)Lump Sum

Payment for Public Information Services will be full compensation for all work, materials and equipment to provide public information throughout the project in accordance with this specification.

Construction Signs will be measured and paid for in accordance with Section 630.

REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

Section 630 of the Standard Specifications is hereby revised as follows:

Subsection 630.01 shall be revised to include the following:

The Contractor shall submit, in writing, the proposed Method of Handling Traffic (MHT) to the Engineer for approval. The MHT shall be developed according to this section and the construction plans.

Subsection 630.05 Traffic Cones shall include the following:

Steel drum channelizing devices shall not be used for traffic control.

Subsection 630.06 shall include the following:

Non-metallic drums or tubular markers may be substituted for vertical panel channelizing devices.

Subsection 630.10(a), shall include the following:

When a different MHT is required for a subsequent construction phase, it must be submitted at least two weeks prior to starting that phase. All proposed methods of handling traffic shall be approved, in writing, by the Project Engineer following approval of the Traffic Engineering Services Department.

Approval of the proposed MHT 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.

The Contractor shall notify the Project Engineer by Thursday at 3:00 P.M. which streets they intend to work on the following week. This notification will be made for all phases of construction.

Subsection 630.10(a) shall be modified as follows:

The key elements of the Contractor's method of handling traffic (MHT) are outlined in subsection 630.10(a).

The components of the Traffic Control Plan (TCP) for this project are included in the following:

- Subsection 104.04 and Section 630 of the Standard Specifications.
- Latest revised Standard Plan S-630-1, Traffic Controls for Highway Construction and Standard Plan S-630-2.

-2REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

Special Traffic Control Plan requirements for this project are as follows:

- 1. The Contractor shall prepare Traffic Control Plans for the project based on the construction plans. The TCP shall conform to the most recent version of the MUTCD and CCD standards. The TCP shall generally describe all lane and sidewalk configurations, including widths, traffic control signing, traffic control devices, temporary signalization, construction access, work areas, and pedestrian/bike/bus requirements necessary for each phase of construction. The TCP shall be signed and sealed by a Professional Engineer (PE) with active status in the State of Colorado. The TCP shall be submitted to the City for Acceptance 14 days prior to implementation of the particular TCP. Traffic Control Plans will not be paid for separately, but included in the lump sum cost.
- 2. During the construction of this project, traffic shall use the present traveled roadway.
- 3. The Contractor shall comply with the following:
 - Contractor shall coordinate lane closures with adjacent projects.
 - Contractor shall maintain business access during business hours.
 - The Contractor shall coordinate all of the work during any special event with the City and County of Denver.
 - Any lane closures must be removed by 3 hours prior to the start time of any Colorado Rockies home game. Lane closures during non-game days or Rockies away games are allowed to remain in-place per the traffic control specifications and the plans. Should the City approve night work for the Contractor, lane closures must not be placed until 3 hours after the completion of any Rockies game.
- 4. The Contractor shall install construction traffic control devices where they do not block or impede other existing traffic control devices or sidewalks for pedestrians, disabled persons or bicyclists. The Contractor is restricted from storing any materials, construction traffic control devices, signs, etc. in any median area or park area.
- 5. Construction equipment used on this project shall meet the same minimum exhaust requirements as those specified by the manufacturer of the equipment.
- 6. The Contractor and subcontractors shall equip their construction vehicles with flashing amber lights. Equipment to be used at night shall also be equipped with flashing amber lights. Flashing amber lights on vehicles and equipment shall be visible from all directions.
- 7. The Access Maintenance Plan shall be coordinated with all affected owners and tenants. The Access Maintenance Plan shall include documentation of this coordination, including the approval signature of each affected owner or tenant. Should the Contractor be unable to obtain approval and signatures, documentation of the efforts made to obtain said approval and signatures must be submitted. All access shall be maintained on surfaces equal to or better than those existing at the time the access is first disturbed. For short periods of time only as allowed by the Engineer, access may be maintained on an aggregate base course surfaces.
- 8. The Contractor shall maintain continuous access throughout the project for pedestrians, bicyclists, and disabled persons. When the existing access route is disturbed by construction, a temporary all-weather access shall be provided. All temporary access shall be a minimum of 5 feet wide and meet Americans with Disabilities Act (ADA) requirements. Acceptable all-weather surfacing shall be concrete or asphalt surface, or as approved by the Engineer. Delineation of pedestrian access through the work area shall be accomplished using temporary plastic fencing.

-3REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

- 9. The costs of maintaining access will not be paid for separately, unless otherwise provided, but shall be included in the work. Utilization of materials to be incorporated into the work may be permitted. However, any degradation or other contamination or destruction shall be corrected at the Contractor's expense prior to acceptance.
- 10. During non-construction periods (evenings, weekends, holiday periods, etc.) all work shall be adequately protected to insure the safety of vehicular and pedestrian traffic, as detailed in the Contractor's MHT. Excavations or holes shall be filled in or fenced when unattended.
- 11. Whenever the Contractor removes, obliterates, or overlays any pavement markings, he /she shall replace them on a daily basis prior to opening the affected areas to traffic. All temporary pavement markings shall fully comply with the Standard Specifications and Special Provisions.
- 12. The Contractor shall not have construction equipment or materials in the lanes open to traffic any time unless directed by the Engineer.
- 13. All personal vehicle and construction equipment parking is prohibited where it conflicts with safety, access, or the flow of traffic. Landscaped areas, public park areas, and roadway shoulders shall be kept clear of parking and storage of all personal and construction equipment except where approved by the Engineer.
- 14. The Contractor shall not place tack coat on any surface to be paved where traffic will be forced to travel upon fresh bituminous materials.
- 15. Regional Transportation District (RTD) bus operations shall be uninterrupted unless otherwise approved. The Contractor shall be required to make arrangements with the Regional Transportation District (RTD) prior to closing any existing bus stops within the project limits. Temporary stops will be required as directed by the Engineer and as required by RTD. Construction phasing plans must be submitted to RTD Bus Operations for approval and to make any necessary announcements to bus drivers and patrons. For bus stop/route conflicts Regional Transportation District, RTD / 1560 Broadway, Suite 700, Denver, CO 80202 shall be contacted ten business days prior to start of construction. RTD Bus Operations Points of Contact: Gina Callahan, (303) 299-6926 gina.callahan@rtd-denver.com and Tim Lucero, (303) 299-6928, timothy.lucero@rtd-denver.com.
- 16. The Contractor shall be required to maintain temporary drives at any existing establishment that has singular access off of the roadways, unless otherwise approved in writing by the property owner.
- 17. No work that interferes with traffic will be allowed on holidays or any day of a three-day or four-day weekend that includes a holiday. Holidays on which this restriction applies consist of those holidays recognized by the State of Colorado as listed in subsection 101.36
- 18. All lane closures shall be subject to the approval of the Engineer. Request for each closure shall be made at least 24 hours in advance of the time the lane closure is to be implemented. Lane closures will not be allowed to remain unless being utilized in continuum for the intended purpose for which they were set up.
- 19. During no-working hours, the roadways shall be restored to a safe travel conditions for the free flow of traffic. Any maintenance required restoring the roadways to this condition, including the pavement patching and grading, shall be done prior to opening the areas to traffic or completing work for the day.

-4REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

- 20. The Contractor shall clean the roadway of all construction debris before opening it to traffic.
- 21. All flagging stations used at night shall be illuminated with floodlights. Street, highway lights and "high mast lighting" may be used for flagging station illumination when approved by the Engineer. Floodlights shall be located and directed so as not to interfere with the sight of any motorists, and the cost to be included in the work.
- 22. Prior to removal and resetting of any sign the Contractor and Engineer shall prepare an inventory. Any signs damaged due to the Contractor's operations shall be replaced in kind or repaired by the Contractor at no additional cost to the project.
- 23. Unless noted otherwise, all costs incidental to the foregoing requirements shall be included in the original contract prices for the project, including any additional traffic control items required for haul routes into the project.

Subsection 630.10 (11) shall be added as follows:

Contractor shall obtain all required access and construction permits from the City & County of Denver prior to initiating work along City right of way.

All lane closures require an arrow board to be installed.

All streets that will be reduced in the number of travel lanes should have variable message boards installed for a minimum of 3 days after the striping change to inform drivers of the lane reduction.

Subsection 630.14 shall include the following:

The flagger's STOP/SLOW sign paddle shall be 18 inches with letters six inches high.

Subsection 630.15 is hereby deleted and replaced with the following:

Temporary pavement markings for traffic control will not be measured and paid for separately, but shall be included in the work.

Subsection 630.16 is hereby deleted and replaced with the following:

All costs incidental to maintenance of access will not be paid for separately, unless otherwise provided, but shall be included in the work.

All costs incidental to the foregoing requirements shall be included in the original Contract prices for the project.

-5-REVISION OF SECTION 630 CONSTRUCTION ZONE TRAFFIC CONTROL

Subsection 630.18 shall include the following:

Project assumes the following traffic control devices based on advance sign sequences and construction phasing:

ITEM#	SIGN DESCRIPTION	UNIT	QTY
630	Construction Traffic Sign (Panel Size A)	EA	16
630	Advance Warning Flashing or Sequencing Arrow Panel	EA	2
630	Portable Message Sign Panel	EA	2
630	Concrete Barrier (Temporary)	LF	960
630	Reset Concrete Barrier	LF	960
	Construction Fence	LF	1060
630	Impact Attenuator (Temporary)	EA	4
630	Barricade (Type 3 M-B) (Temporary)	EA	2

Any increases to these listed quantities will not be paid for separately, but included in the lump sum cost.

631 RAILROAD COORDINATION

Section 631 is hereby added to the Standard Specification for these project as follows:

The Contractor shall follow all the requirements related to the BNSF Railway Company (BNSF), Union Pacific Railroad (UPRR) or construction activities on or affecting BNSF or UPRR property.

WORK PLAN

The Contractor shall submit a work plan with phasing to the BNSF and the UPRR for approval. The work plan shall include a description of all means and methods necessary to complete the work within the railroad right-of-way including but not limited to equipment location, shoring, falsework, debris containment and removal, and right-of-entry. All electrically conductive materials used for shoring, forming, and debris containment shall be grounded.

RIGHT-OF-ENTRY AGREEMENT

The Contractor shall be responsible for obtaining a Contractor's Right-of-Entry Agreement from the BNSF and the UPRR prior to entering their property and commencing the work. The Contractor will be responsible for coordinating daily activities with the BNSF Railroad Flagger or UPRR Flagger.

When the Contractor's Right-of-Entry (C&M) is fully executed with the BNSF, the BNSF will provide a contact person to the Contractor including their phone number and address. This information is typically included in the C&M Agreement.

RAILROAD SAFETY TRAINING

The Contractor, all subcontractors, on-site suppliers, and all craftspersons of contractor and subcontractors shall obtain all required BNSF On-Track Safety Training before entering the BNSF Railway right-of-way. The Contractor shall register with eRailsafe or the UPRR approved risk assessment company and complete their program testing as necessary. Review

https://www.up.com/cs/groups/public/@uprr/@environment/@safety/documents/up_pdf_nativedocs/pdf_up_safety_erail_access.pdf for additional information.

RAILROAD FLAGGING

If within BNSF or UPRR property or within 25 feet of a BNSF or UPRR track, no construction activities shall be performed without the presence of at least one BNSF or UPRR Railroad flagger at all times.

TEMPORARY CROSSING

The Contractor shall be responsible for coordinating use of the existing BNSF Railway Maintenance-of-Way private at-grade crossings in order to perform the work over the BNSF.

CONSTRUCTION STAGING AREA

The Contractor shall be responsible for coordinating all necessary construction staging activities, outside of the BNSF Railway, in order to perform the work within the BNSF property.

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RAILROAD INSURANCE

The Contractor shall obtain all necessary insurance for construction in BNSF and UPRR property including that which is adjacent to AMTRAK Tie-Up Track. Construction includes but is not limited to construction staging, access, and performance of the work. The insurance required by both railroads may include general liability of \$5,000,000/incident and \$10,000,000/aggregate and railroad protective liability of \$2,000,000/incident and \$6,000,000/aggregate. Insurance may also include business automobile of \$5,000,000/incident. In addition to the statutory requirements for worker's compensation insurance, the BNSF policy shall include employer's liability of \$5,000,000. In addition to the statutory requirements for worker's compensation insurance, the UPRR policy shall include employer's liability of \$1,000,000. Both BNSF and UPRR shall be named as additional insured.

Payment will be made under:

Pay ItemPay UnitRailroad CoordinationHour

632 REGIONAL TRANSPORTATION DISTRICT (RTD) COORDINATION

Section 632 is hereby added to the Standard Specification for these project as follows:

The Contractor shall follow all the requirements related to Regional Transportation District (RTD), Denver Transit Partners (DTP), and Denver Transit Operators (DTO) for construction activities on or affecting any RTD and DTP/DTO facilities, property, and traffic operations related to RTD bus services. The Contractor shall obtain Right-of-Entry (ROE) and conform to all conditions and requirements provided herein as well as in the construction drawings through the duration of this project. The Contractor shall notify the Engineer if conflicting information exists prior to executing the work and shall conform to the prevailing decision. The RTD contacts necessary for this contract are provided below.

RTD RIGHT-OF-ENTRY CONDITIONS AND REQUIREMENTS

The Contractor shall obtain the required ROE Agreement from RTD at least 30 days before entering RTD/DTP/DTO facilities, right-of-way (ROW) or trackway. The ROE Agreement should also include the use of the existing RTD private road crossing. The Contractor shall confirm that CCD has a completed RTD Agreement prior to beginning any work. The Contractor shall submit the RTD CRT Access Permit available at http://www.rtd-denver.com/documents/utility/DTO-RTDC-ROW-Access-Permit-Request-Form.doc (example provided in these specifications).

- 1. The Regional Transportation District (RTD) is not the owner of the property underneath the waffle slab unless otherwise shown in the plans.
- 2. Denver Regional Transportation District Commuter Railroad (RTD-C) is a railroad with operations regulated by the Federal Railroad Administration (FRA).
- 3. The tracks underneath Park Avenue are also used by Federally regulated railroads other than both RTD and railroads operated by Denver Transit Operators (DTO)
- 4. Under the proposed work area, and in the vicinity, RTD-C has the following railroad lines:

	A-Line	G-Line (Gold Line)	N-line (North Metro Rail Line)
Operator	DTO, under concession agreement	DTO, under concession agreement	RTD-C
Status	Active Commuter Rail Line	Commuter Rail Line expected to go into revenue service soon. Currently under testing.	Under construction. Regional Rail Partners (RRP) is the contractor. This segment is expected to be turned over to RTD for testing.
Schedule	See RTD website	In development, train movement expected 22 hours a day	In development, train movement expected 22 hours a day, once the line goes into testing.
Safety Training program in place	Contact DTO	Contact DTO	Contact RRP during construction and RTD-C if during operation

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- The RTD commuter rail system in this area has an overhead 25kV (nominal) AC overhead catenary system (OCS). Whenever work is performed in the vicinity of electrified tracks and/or high voltage wires, particular care must be exercised.
- 6. Contractor shall schedule all work to minimize interference with train operations, construction activities and/or rail line testing.
- 7. Contractor shall verify the time and schedule of track outages from RTD before scheduling any of their work on, over, under, within, or adjacent to the RTD tracks.
- 8. RTD normally provides bus bridges in case rail service is disrupted. Due to a driver shortage, it is extremely difficult to arrange for a service disruption requiring a bus bridge. Service disruptions need to be approved by the RTD General Manager at least 45 days in advance.
- 9. The Right-of-Entry (ROE)/Insurance Requirements are identified only for this project. Future Park Ave. projects will require new ROEs/Insurance requirements as they are being completed at different times using a different contract. Permission granted to enter upon RTD premises will be used solely in connection with an authorized purpose and will terminate once that purpose is accomplished.

10. Insurance Requirements

Contractor must maintain Railroad Protective Liability (RRPL) insurance written on ISO occurrence form CG 00 35 12 03 and shall name only RTD, DTP, DTO, and Regional Rail Partners (RRP) on individual policies. The coverage obtained under this policy shall be effective during the entire period of construction operations. If further maintenance of the Facilities is needed at a later date, an additional Railroad Protective Liability (RRPL) Insurance Policy shall be required. The policy shall include the following:

Amount of Coverage: \$10,000,000 per occurrence \$10,000,000 aggregate

Specified RRPL Endorsements to include:

- Pollution Exclusion Amendment
- Limited Seepage and Pollution Endorsement
- Evacuation Expense Coverage Endorsement
- No other endorsements restricting coverage may be added
- Definition of "Physical Damage to Property" "means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured's care, custody and control arising out of the acts or omission of the contractor(s) named on the Declarations."

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11. RTD Contacts:

Main Point of Contact:

Ashland Vaughn, P.E.
Manager, Engineering Construction
Regional Transportation District
1560 Broadway, Suite 700, FAS-72 | Denver, CO 80202
o 303.299.6986 | m 720.883.8067
Ashland.vaughn@rtd-denver.com

RTD Main Alternate:

Joey Davidson, P.E.
Manager, Facilities Buildings and Bridges (North Metro)
Regional Transportation District
1560 Broadway Suite 700, FAS-72 Denver, CO 80202
O 303.299.2120 | m 702.379.3363
Joey.davidson@rtd-denver.com

RTD North Metro Rail Contact:

Chuck Culig, P.E.
North Metro Rail Project Manager
Regional Transportation District
1765 West 121st Ave., Westminster, CO 80234
O 303.299.2409 | m 303.548.8864
Chuck.culig@rtd-denver.com

RTD Eagle P3 Operations Point of Contact: (Includes coordination with Bus Operations for developing work orders for bus bridges CRT shutdown)

Kevin Steele Commuter Rail Vehicle Manager/CRT Oversight Regional Transportation District (RTD) 1560 Broadway, Suite 650, FAS-61 | Denver, CO 80202 o 303.299.2505 | m 303-929-7468 kevin.steele@rtd-denver.com

Michael Millage
Eagle Construction Manager/3rd Party Projects
Regional Transportation District (RTD)
1560 Broadway, Suite 650, FAS-61 | Denver, CO 80202
o 303.299.2897 | m 719-325-9888
michael.millage@rtd-denver.com

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DTO Eagle P3 Operations Point of Contact:

Kelly Abaray
Engineering Program Manager
Denver Transit Operators (DTO)
5151 Fox Street | Denver, CO
0 720-460-5859 | m 720-261-4536
kelly.abaray@rtdcrail.com

Travis Johnson
Commuter Rail Track Usage and Logistics Coordinator (Permits and CRT Flaggers)
Denver Transit Operators (DTO)
5151 Fox Street | Denver, CO
o 720-460-5803 | m 617-650-5626
travis.johnson@rtdcrail.com

Additional contacts necessary for this contract are provided in the following table:

	RTD Team Lead/Structural		
Ken Fleck	Engineer (Project)	Ken.Fleck@RTD-Denver.com	303-299-2870
	RTD Supervisor, Bus Stop		
Michelle Sims	Program	Michelle.Sims@rtd-denver.com	303.299.6563
	RTD Assistant Supervisor, Bus		
Lindsey Smith	Stop Program	<u>Lindsey.Smith@rtd-denver.com</u>	303.299.6561
Tim Lucero	RTD General Superintendent, Street Operations	timothy.lucero@rtd-denver.com	303.299.6928
	RTD Assistant General Superintendent, Street		
Daniel Lamorie	Operations	daniel.lamorie@rtd-denver.com	303.299.6676
Marisela Quiroz	RTD Lead Street Supervisor	Marisela.Quiroz@RTD-Denver.com	303-299-6570
Derek Rice	RTD Lead Street Supervisor	Derek.Rice@RTD-Denver.com	303-299-6259
Greg Wing	RTD Lead Street Supervisor	Greg.Wing@RTD-Denver.com	303-299-6578
Len Grant	RTD Lead Street Supervisor	Leonard.Grant@rtd-denver.com	303-299-5007
Jaime Urenda	RTD Lead Dispatcher	Jaime.Urenda@rtd-denver.com	303-299-3135
David Sesack	RTD Lead Dispatcher	David.Sesack@RTD-Denver.com	303-299-3128
Bill Beins	RTD Lead Dispatcher	William.Beins@rtd-denver.com	303-299-3122
Joe Christie	RTD Project Director – EAGLE	joe.christie@rtd-denver.com	303-299.6989
Patrick Stanley	RTD	patrick.stanley@rtd-denver.com	303-299-2906
David Richmond	RRP Construction Manager	drichmond@rrpjv.com	720-618-1025
Steven Hope	RTD	steven.hope@rtd-denver.com	719-369-3677
Kirk Strand	RTD	Kirk.strand@rtd-denver.com	
Allen Miller	RTD	Allen.miller@rtd-denver.com	
Paul Deeley	RTD	Paul.deeley@rtd-denver.com	
Gina Callahan	RTD Deputy AGM of RTD Bus		202 200 6026
Gina Callanan General	Operations	gina.callahan@rtd-denver.com	303 299-6926
Oversight	RTD	crtoversightgroup@rtd-denver.com	

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TRACK SAFETY TRAINING AND BADGE REQUIREMENTS TO WORK ON FEDERAL RAILROAD ADMINISTRATION (FRA) REGULATED RAILWAYS

- If on Eagle P3 trackway (A-Line and Gold Line), the Contractor, subcontractors, on-site suppliers, and all craftspersons shall complete the DTO Roadway Worker Protection (RWP) training and receive DTO RWP training card. Classes are offered once a month or available on-line at a \$25 fee per applicant.
- All Contractor employees working on the RTD & Freight corridors must have Erail Safe training and badge which includes background check.
- All Contractor employees working RTD & Freight corridors must complete BNSF and UPRR contractor orientation training and have a badge.
- All Contractors working on the North Metro Rail Line (NMRL) alignment will need to complete the RRP Safety Training and Roadway Worker Protection Program (assume one full day) and obtain a Track Allocation Permit. If work is conducted during NMRL Operations, safety training and track allocation will be conducted by RTD-C.

Contractor shall keep all training requirements current, and shall notify the Engineer immediately if unable to do so. Proof of completed safety training must be on site at all times.

SUBMITTAL OF CRT PERMITS/TRACK USAGE/DETERMINATION OF EIC/FLAGGER REQUIREMENTS

- The Park Avenue Bearing Replacement and Waffle Slab Repair Project shall be coordinated with Travis Johnson, DTO, Track Usage Coordinator to get the project and activities on Commuter Rail Track (CRT) weekly/daily track usage bulletin. This will be required for the entire project due to the proximity of work and access points to the site.
- Contractor work plans which includes outlining equipment/falsework-protection devices being used and access points to the site must be submitted to RTD/DTO/RRP for review to ensure no exception is taken. The plan will be evaluated to determine if an Employee-in-Charge (EIC)/Flagger is required due to interface with the Eagle P3 corridors (A-line/B-Line/G-Line) or potential requirement for CRT OCS shutdown. Within 25 feet of the RTD track, an EIC/Flagger will be required and within 10 feet of the OCS, a power shutdown will be required. DTO Safety and Track Usage Coordinator will make the determination and coordinate with RTD. The contractor shall follow its work plan. Any deviation from the approved work plan, the Contractor must submit changes to RTD/DTO/RRP for review and approval with determination of EIC/Flagger and power shutdown requirements. If work is not following the approved work plan, RTD/DTO/RRP reserve the right to shut down the project until a safety stand down has been completed by the contractor.
- Any unauthorized personnel accessing the A-Line, G-Line, and N-Line corridors will be in violation of trespassing and will be subject to all applicable violations including penalties and jail.

RESPONSIBILITY OF COSTS AND COORDINATION FOR DTO EIC/FLAGGERS-CRT OCS SHUTDOWN AND RTD BUS BRIDGES DUE TO INTERFACE OF PARK AVENUE PROJECT WITH RTD CRT OPERATIONS

- All costs for DTO EIC/Flaggers, DTO shutdown(s) and RTD Bus Bridges will be the responsibility
 of the Park Ave project.
- Implementation of DTO EIC/Flaggers and RTD Bus Bridges will be processed through a DTO work order and RTD work order, respectively, to properly process invoices and payments.

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- The Contractor shall coordinate and submit requested proposals and dates for EIC/Flagger, CRT OCS shutdown and Bus Bridges. CRT OCS Shutdown and Bus Bridge approvals from RTD will be dependent on events/holidays and require approval from RTD Senior Management.
- The Contractor shall take any and all measures to protect RTD Infrastructure. Any damage to RTD Infrastructure shall be a cost to the Contractor.

REQUIREMENTS AT THE RTD-C SWITCHING STATION

- DTO EIC will be required for work inside or above the RTD-C switching station. DTO EIC must be made a minimum of 7-days in advance. A signed Work Order between, RTD/DTO/City and County of Denver (CCD) or Contractor must be in place prior to any DTO services being rendered.
- Any vehicles requiring entry into the RTD-C switching station shall use tracking mats or be four wheel drive.
- Walking on or using the RTD-C switching station roof for any purposes is prohibited.
- Due to the level of pigeon feces on the roof of the switching station, the Contractor should consider the use of a respirator.
- Contractor shall perform a pre-construction, on-site meeting with DTO to review switching station entry plans a minimum of 7-days prior to work being executed.
- Contractor shall protect all switching station lighting. Any damage to the lighting or other facilities within switching station are found, Contractor will reimburse RTD/DTO for the repairs.
- Contractor shall grade the roadway gravel inside the switching station upon completion of work to its current condition or better.
- DTO will unlock and lock the switching station each day work inside the gated area is required.
- DTO shall inspect and accept the area prior to the Contractor demobilizing.
- Switching station fence shall remain in place. Relocation of the fencing is not permitted.
- Contractor is permitted to park on electrical vaults inside the Switching Station.

RESPONSIBILITY OF SITE SECURITY

- The Contractor will be responsible for all site security required to perform the project
 activities. This includes securing access points and equipment/material on site. The Contractor
 must document its site security plan being implemented through the course of the project.
- Contractor must have an approved RTD/DTO/RRP Access Plan and adhere to it at all times.

OTHER COORDINATION ITEMS

- The Contractor shall be responsible for coordinating daily activities with the appropriate people from the contact list above including but not limited to the RTD North Metro Operations Manager, the RTD/DTO Employee-in-Charge (EIC), the provided bus service contact, and Denver Transit Operators (DTO) at track.usage@rtdcrail.com. The Contactor shall coordinate all work along Bus Routes and Bus Facilities with RTD Bus Operations (contacts listed above).
- Contractor shall submit any and all methods of handling traffic (MHTs) if required on Park Ave/Wewatta St. for coordination with RTD Bus Operations.
- The Contractor shall be responsible for coordinating all necessary temporary crossings of the
 existing at grade private road crossing with the RTD Flagger in order to perform the work within the
 RTD trackway or ROW.
- The Contractor shall be responsible for coordinating all necessary construction staging activities outside of RTD trackway and ROW, in order to perform the work within RTD ROW or trackway

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REQUIREMENTS FOR THE NORTH METRO RIGHT-OF-ENTRY

- CCD shall coordinate a pre-construction meeting with the RTD North Metro Project Manager immediately following the notice to proceed.
- CCD contractor shall prioritize the bridge repair work over the North Metro tracks and within 20ft from the OCS wires to be completed as soon as possible after NTP, or as approved by RTD's North Metro Project Manager.
- Contractor shall utilize all necessary and required safety precautions for working above and adjacent to the 25kV OCS and shall coordinate with the RTD North Metro team to coordinate when the OCS is live or is shut off.
- 4. Contractor may work outside an area that is 20 feet from the OCS wires and shall establish a physical identification marker at the 20 foot point for their crews to visually know their proximity to a live 25kV OCS power line.
- 5. Contractor shall coordinate with RTD for a North Metro flagger and shall be responsible for all costs associated with the flagger while working within 40 feet of the OCS wire.

RTD WORK PLAN

The Contractor's Construction Plan shall include a detailed RTD Work Plan for review and approval by RTD. No removal operations will be permitted over the RTD right-of-way (ROW) or trackway until the required RTD Work Plan has been reviewed and approved by RTD. The RTD Work Plan shall encompass the following:

- 1) Provide a scale drawing showing the plan view, elevation and location of the structure and locations of any access roads needed on RTD ROW or trackway to access the job site. The as-built drawings may be used for the submittal provided the removal steps are clearly marked and legible.
- 2) Indicate the position of all railroad tracks, OCS wire/arms/poles, signal masts/components/enclosures, fencing, and other features below the bridge. Identify locations where temporary crossings will be installed to cross equipment over each track.
- 3) List in sequential order, all procedures necessary to repair the bridge in a safe and controlled manner. Include step by step details of each sequence and the elapsed time required to execute the sequence. The removal plan must specify which, if any, sequences will render a track impassable during execution of the sequence. If more than one track is adjacent to the work area, specify which tracks will be impassable during execution of each sequence.
- 4) Include text, drawings or photos to communicate the types of equipment that will be utilized. Include diagrams showing the position of the equipment in relation to the tracks.
- 5) For every sequence, specify the minimum horizontal clearance from centerline of track and the minimum vertical clearance above top of rail for equipment, falsework, rubble shields and temporary supports. If a crane is to be utilized, include clearances for the backswing radius of the crane counterweight and the position of the outriggers.
- 6) If the RTD Work Plan includes concrete demolition, include the details of rubble control such as maximum anticipated size of rubble, drop distance, shield size and shield position.

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- 7) The RTD Work Plan shall indicate locations and types of temporary supports, shoring, cables or bracing required. Prevent any debris from falling onto the RTD rail system from the overhead work.
- 8) The RTD Work Plan shall include details, limits, and locations of protective shields or other measures designed to protect the rails, ties and ballast, OCS wire/arms/poles, signal masts/components/enclosures, fencing, arc flash shielding located on the bottom of the bridge, and other features from falling debris. Include the design load for the shields for both the maximum static load and the maximum anticipated impact loads from falling debris. Specify the type of equipment that will be utilized to remove the debris and shields from operational tracks. The arc flash shielding located on the bottom of the bridge and associated framing and grounding cables shall be protected in place. If work cannot be performed with shielding in-place, the Contractor shall coordinate with RTD to review the extent of repair and the location of arc shielding impacted by the work.
- 9) Protection of the track ballast section must be provided to avoid contamination of the rock with concrete rubble/debris, fine dust, sand blasting media, sealer, and other materials produced during repair activities. Filter fabric or some other effective means to prevent ballast contamination should be incorporated into the repair plan.
- 10) The RTD Work Plan should include details of planned on-site fire suppression.
- 11) Job Briefings must be conducted with all individuals involved in the task before work begins and if the work plan or work group changes. The job briefing must:
 - Consider existing and potential hazards that might be involved as a result of: Weather, Scope of work; and Tools and equipment.
 - Identify PPE requirements.
 - Review electronic device use restrictions.
 - · Assign responsibility.
 - Explain group / individual assignments, while considering abilities and experience.
 - Be aware of work groups and equipment in work area.
 - Identify job location.
 - Verify understanding of instructions and assignments.

Approval and/or comments furnished by RTD in the course of review of the Contractor's RTD Work Plan will not relieve the Contractor of the ultimate responsibility for the safe and secure repair of the structure and protection of all RTD infrastructure located under and in the vicinity of the project.

OTHER CONSTRUCTION REQUIREMENTS

Contractor's personnel shall not crawl under, climb over or pass through standing railway equipment.

Contractors must wear PPE high visible outerwear color, and wear clothing that allows the person to perform duties safely and efficiently.

No use, possession, distribution, offering or sale of alcohol, illegal drugs or drug paraphernalia.

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RTD has power and/or communication cables buried under and in the vicinity of the tracks. The Contractor shall be sure of their location before making any excavation, driving stakes or otherwise penetrating the ground surface.

No RTD plant, signal, structure, equipment or property of any kind may be tampered with, modified or removed.

Upon completion of the work, Contractor shall remove all machinery, equipment, surplus materials, falsework, trash, and temporary structures, and shall leave the area in a condition satisfactory to RTD.

RESTRICTIONS

The Contractor shall make every attempt to time work over all RTD tracks with any RTD/DTO-generated shutdown. These dates can be requested from the Engineer at the beginning of the project. Any additional shutdowns must be completed between 9:00 PM and 2:30 AM. If the Contractor requires a shutdown outside of these hours, it must be requested at least 30 calendar days in advance of the work, with detailed support as to why shutdown must take place outside of the provided hours. Contractor shall make every effort to include additional shutdowns in the work plan submitted to RTD at the beginning of the project. Shutdowns will not be considered if work can be safely accomplished otherwise. Shutdowns must be approved by both the Engineer and the RTD General Manager, and all costs related to this shutdown must be documented and paid for under the Force Account RTD/DTO Rail Shutdowns. The rates included in the table below are DTO 2018 rates. These rates are for reference only and are subject to final negotiation.

Task	Level of Effort	Occ	Per Occurrence		Additional Hourly Rate	
Overhead power shutdown	18	\$	2,159	\$	100	
Flagger or Watchman	8	\$	1,080	\$	89	
Special Inspection	3	\$	1,006	\$	211	
Generator temporary power	8	\$	1,191	\$	102	

Unless otherwise specified, payment for compliance with the ROE conditions and requirements will be made under:

Pay ItemPay UnitRTD CoordinationHour



Company Representing:						
Person Submitting Request: *Phon	ne:		*Email:			
On Site Contact Person *Pho	221		*Email:			
PURE NEW YORK STREET STREET	700		-Email:			
Requested Dates of Access (Not to Exc	ceed 30 Days):	*From:		*To):	
Requested Time Per	iod (military):	*From:		*To): *	
Requested Loc	ation of Work	*From:		*To):	
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Issue Date: 08/24/2015	Revision 1	Page 1 of 1

Commercial in Confidence

FORCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the City and County of Denver's estimate for Force Account items included in the Contract. The estimated amounts will be added to the total bid to determine the amount of the performance and payment bonds. Force Account work shall be performed as directed by the Engineer.

BASIS OF PAYMENT

Payment will be made in accordance with the provision of General Condition Title 11. Payment will constitute full compensation for all work necessary to complete the item.

Force account work valued at \$5,000 or less, that must be performed by a licensed journeyman in order to comply with federal, state, or local codes, may be paid for after receipt of an itemized statement endorsed by the Contractor.

Item No.	Force Account Item	Quantity	Estimated Amount
F/A 01	Railroad Coordination Fees	F/A	\$15,000
F/A 02	Railroad Contractor Orientation Course	F/A	\$3,000
F/A 03	Railroad Inspector Coordinator	F/A	\$32,500
F/A 04	Railroad Flagging	F/A	\$80,000
F/A 05	RTD/DTO Training	F/A	\$6,000
F/A 06	RTD/DTO Rail Shutdowns	F/A	\$50,000

ALLOWANCE ACCOUNT ITEMS

DESCRIPTION

This special provision contains the City and County of Denver's estimate for Allowance Account items included in the Contract. The estimated amounts will be added to the total bid to determine the amount of the performance and payment bonds. Allowance Account work shall be performed as directed by the Engineer.

BASIS OF PAYMENT

Payment will be made in accordance with the provision of General Condition Title 11. Payment will constitute full compensation for all work necessary to complete the item.

Allowance account work valued at \$5,000 or less, that must be performed by a licensed journeyman in order to comply with federal, state, or local codes, may be paid for after receipt of an itemized statement endorsed by the Contractor.

Item No.	Allowance Account Item	Quantity	Estimated Amount
A/A 01	Erosion Control	A/A	\$10,000
A/A 02	Environmental Health and Safety Management	A/A	\$15,000
A/A 01	<u>Erosion Control</u> – This work consists of stormwater Engineer. This Force Account is to pay for all necessitems not identified in the plans and at the Engineer's time and materials used to perform the work. All item prior to installation or they will be at no cost to the prior	sary work and mate s direction. Paymen ms shall be pre-app	erials for erosion control t will be made based on
A/A 02	Environmental Health and Safety Management – Environmental, Health, and Safety Management of the state of the		

UTILITIES

The known utilities within the limits of this project are:

UTILITY	CONTACT/EMAIL	PHONE/FAX
Xcel Electrical Distribution	Walter Wojciechowski	(303) 571-3274
Xcel Electrical Street Lighting	Susan Davies	(303) 571-3780
CCD Public Works – Permit Writer	Michael Holm	(303) 446-3639
CCD Public Works - Sanitary Sewer	Ted Christianson	(303) 446-3722
CCD Public Works – Traffic	Chris Lillie	(720) 865-4066
Century Link	Justin Metzler	(720) 578-3710
Century Link – RTD	Rob McLeod	(303)949-2187
Level 3 Communications	Thomas Mieczkowski	(720) 888-2013

The work described in these plans and specifications requires full cooperation between the Contractor and the utility owners in accordance with Subsection 105.11 and CCD General Condition 804 in conducting their respective operations, to complete the utility work with minimum delay to the project.

-2-UTILITIES

PART 1 - CONTRACTOR SHALL PERFORM THE WORK LISTED BELOW:

Coordinate project construction with performance by the utility owner of each utility work element listed in Part 2 below. Perform preparatory work specified in Part 2 for each utility work element. Provide an accurate construction schedule that includes all utility work elements to the owner of each impacted utility. Provide each utility owner with periodic updates to the schedule. Conduct necessary utility coordination meetings, and provide other necessary accommodations as directed by the Engineer. Notify each utility owner in writing, with a copy to the Engineer, prior to the time each utility work element is to be performed by the utility owner. Provide notice, as specified in Part 2, immediately prior to the time the utility work must begin to meet the project schedule.

Provide traffic control, as directed by the Engineer, for any utility work performed by the utility owner within the project limits expected to be coordinated with construction. However, traffic control for utility work outside of typical project work hours shall be the responsibility of the utility owner.

Perform each utility work element for every utility owner listed here in Part 1. Notify each utility owner in advance of any work being done by the Contractor to its facility, so that the utility owner can coordinate its inspections for final acceptance of the work with the Engineer.

All Utility Companies

The Contractor will contact each utility company a minimum of 2 business days, unless otherwise noted, prior to working in the utility company's area so that the utility company can provide an inspector and/or complete any necessary adjustments or relocations.

The Contractor shall identify existing utilities (by potholing if necessary) and protect the existing buried utilities when constructing the project, including sub excavation work. If existing utilities are within close proximity horizontally or vertically, the Contractor shall alter the sub excavation work limits, construction methods or equipment to avoid impacting the existing utilities.

If a need for utility work by either the Contractor or a Utility Company arises, the following shall apply:

The Contractor shall be responsible for coordinating the adjustment of utilities on this project. The Contractor shall keep each utility company advised of any work being performed in the vicinity of their facilities, so that each utility company can coordinate any needed locates, adjustments or inspections. Contractor shall provide the appropriate utility company ample notice, but not less than two (2) working days, prior to commencing activities in the vicinity of their facilities. Any additional work performed by the Contractor on behalf of the impacted utility company shall not be paid for by the City and County of Denver, but shall be paid by the utility company requiring the work, unless otherwise agreed to in writing by the Engineer.

PART 2 - <u>UTILITY OWNERS</u> SHALL PERFORM THE WORK LISTED BELOW:

Although the Contractor shall provide traffic control for utility work expected to be coordinated with construction, traffic control for utility work outside of typical project work hours or outside of project limits shall be the responsibility of the utility owner. The utility owner shall prepare and submit to the Engineer a Method of Handling Traffic for utility work to be performed outside typical project work hours or outside of project limits. The utility owner shall obtain acceptance of the Method of Handling Traffic from the Engineer prior to beginning the utility work to be performed outside typical project work hours or outside of project limits.

-3-UTILITIES

This work will be performed by the utility owners as necessary to avoid conflicts with construction activities. New locations shall be as indicated in the plans. Utility owners shall comply with schedule requirements of the Contractor and make every effort not to impact the overall construction schedule. Unless otherwise approved by the Engineer, abandoned aboveground appurtenances such as pedestals shall be removed and abandoned underground utilities and manholes/handholes shall be abandoned in place.

Utility owners are responsible for obtaining all necessary permits from the City and County of Denver, as required.

GENERAL:

The Contractor shall comply with Article 1.5 of Title 9, CRS ("Excavation Requirements") when excavating or grading is planned in the area of underground utility facilities. The Contractor shall notify all affected utilities at least two (2) business days, not including the actual day of notice, prior to commencing such operations. The Contractor shall contact the Utility Notification Center of Colorado (UNCC) at phone no. 811 or 1-800-922-1987, to have locations of UNCC registered lines marked by member companies. All other underground facilities shall be located by contacting the respective owner. Utility service laterals shall also be located prior to beginning excavation or grading.

The locations of utility facilities as shown on the plan and profile sheets were obtained from the best available information. No warranty is made for the adequacy or accuracy of subsurface information provided. The Contractor shall cooperate with the utility owners in their relocation operations as provided in CCD General Condition 804. No guarantee is made that utility conflicts will be resolved prior to construction activities and any delays resulting from utility relocation work shall be dealt with in accordance with CCD General Conditions.

All costs incidental to the foregoing requirements will not be paid for separately, but shall be included in the work.

CITY AND COUNTY OF DENVER STATE OF COLORADO



DEPARTMENT OF PUBLIC WORKS

Plans/Drawings

Contract Number: 201845744

Park Avenue Rehabilitation
November 8, 2018

CITY & COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION

PLANS OF PROPOSED

DENVER CONTRACT CONTROL No. PWTRN201630332, TASK ORDER No. 30

PARK AVENUE VIADUCT BEARING REPLACEMENT AND WAFFLE SLAB REPAIR

PROJECT MASTER NUMBER: 2017-PROJMSTR-0000048

CONTRACT NUMBER: OC201309560



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3-4	GND2-GNO3	PROJECT GENERAL NOTES		
5	GND4	Project Summary of approximate quantities Bridge general notes and summary of quantiti		
6	BR01			
7 BR02 8–10 BR03–BR05		BRIDGE GENERAL LAYDUT		
		BRIDGE STRUCTURE PLAN AND TYPICAL SECTIONS		
11-12	BR06-BR07	BEARING DEVICE (TYPE II) AND JACKING DETAILS		
13-14	BRO8-BR09	WAFFLE SLAB REPAIR AND CORBEL REPAIR DETAILS		
15-19	TC01-TC05	TRAFFIC CONTROL PLANS		
20	SW01	SWMP GENERAL NOTES		
21-22	SW02-SWJ	SWMP PLANS AND DETAILS		
23	RR01	RAILROAD TRACK KEY PLAN		
24-26	RR02-RR04	RAILROAD TRACK PLANS		
27	PL01	PROPERTY LIMITS		

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

APPROVED BY:

DIFFECTOR OF PUBLIC WORKS

DATE

O 10.19

CITY ENGINEER

DATE

10/08/20/8

CITY TRAFFIC ENGINEER

DATE

DATE

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DATE

VICINITY MAP

Print Date: 10/3/2018 4:22	РМ			Sheet Revisions	
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City Project Manager					
AECOM 6200 South Quebec Greenwood Village, GPHONE: 303-694-2	Street :0 80111 770	18			



DEPARTMENT OF PUBLIC WORKS

As Constructed		TITLE	SHEET		Project Number	
No Revisions:	1	IIILL	SHEEL		201630332-30	
Revised:	Designer: D. Midkiff Structure				-	OC201309560
	Detailer:	R. Petersen	Numbers	_		
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		NEW OF		PAGE
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	M-100-2	_	ACRONYMS AND ABBREVIATIONS (4 SHEETS)	
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	M-203-1		SUPERELEVATION CROWNED AND DIVIDED HIGHWAYS (3 SHEETS)	
	M-203-12	2	SUPERELEVATION STREETS (2 SHEETS)	
	M-206-1		EXCAVATION AND BACKFILL FOR STRUCTURES	15–16
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	M-208-1		TEMPORARY EROSION CONTROL (11 SHEETS) (REVISED ON AUGUST 10, 2	
	M-210-1		MAILBOX SUPPORTS (2 SHEETS)	
	M-214-1		PLANTING DETAILS	
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	M-412-1		CONCRETE PAVEMENT JOINTS (5 SHEETS) (REVISED ON JANUARY 18, 2018	
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COLORADO
DEPARTMENT OF TRANSPORTATION

M&S STANDARDS PLANS LIST

July 04, 2012

Revised on July 16, 2018

ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

NEW OR REVISED STANDARD PLAN SHEETS APPLICABLE TO THIS PROJECT, INDICATED BY A MARKED BOX ■, WILL BE ATTACHED TO THE PLANS.

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S STANDARD

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PLAN NEW OR

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	AECO/	Greenwood Village, CC PHONE: 303-694-27	70					



DEPARTMENT OF PUBLIC WORKS

As Constructed	91	TANDARDS	Project Number				
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	Detailer:	R. Petersen	Numbers		-		\dashv
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GENERAL NOTES

- 10 DAYS PRIOR TO WORK COMMENCING. THE CONTRACTOR'S POTENTIAL POLLUTION REPORT—SPILL CONTINGENCY PREVENTION PLAN SHALL BE COPIED AND ATTACHED TO THE PLANS PER SECTION 107.25 OF THE CDOT STANDARD SPECIFICATIONS. VEHICLE CLEANING MAY OCCUR ON SITE, IN APPROVED AREA, WHERE WASTE WATER CAN BE CONTAINED AND DISPOSED OF PROPERLY.
- 2. THERE SHALL BE NO STOCKPILING OR SIDE CASTING OF WASTE MATERIALS INCLUDING BUT NOT LIMITED TO PAINT CHIPS, ASPHALT, AND CONCRETE ADJACENT TO ANY STATE WATERS THAT RESULT FROM PROJECT ACTIVITIES.
- CONTAINMENT AND CLEAN UP OF EQUIPMENT FUEL, OIL AND LUBRICANT LEAKS: CONTRACTOR SHALL INSPECT AND CERTIFY EQUIPMENT AND VEHICLES DAILY TO ENSURE PETROLEUM, OILS AND LUBRICANTS (POL) ARE NOT LEAKING ONTO THE SOIL OR PAVEMENT. ABSORBENT MATERIAL OR CONTAINERS APPROVED BY THE ENGINEER SHALL BE USED TO PREVENT LEAKING POL FROM REACHING THE SOIL OR PAVEMENT. CONTRACTOR SHALL HAVE READY APPROVED ABSORBENT MATERIAL OR CONTAINERS OF SUFFICIENT CAPACITY TO CONTAIN ANY LEAK POL THAT CAN REASONABLY BE FORESEEN. ALL MATERIALS RESULTING FROM POL LEAKAGE CONTROL AND CLEANUP SHALL BE THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE SITE. THE COST FOR CONTROL AND CLEANUP OF POL LEAKS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
- THE CONTRACTOR SHALL NEITHER STAGE OR PARK EQUIPMENT AT ANY TIME OFF THE ROADWAY/SHOULDER OR ON VEGETATED AREAS, ON PRAIRIE DOG HOLES, OR WITHIN 300 FEET OF WATERWAYS. THE CONTRACTOR 14. THE CONTRACTOR SHALL REMOVE ON A DAILY BASIS ALL SEDIMENT AND CONSTRUCTION DEBRIS FROM THE SHALL BE FULLY RESPONSIBLE FOR STAGING AREAS. THE CONTRACTOR SHALL COMPLETE WORK IN ONE LOCATION BEFORE THEY MOVE TO ANOTHER LOCATION. FOR GRINDING THE CONTRACTOR SHALL USE CHANGE STACKED DIAMOND TIP BLADES AND HAVE A VACUUM MACHINE ON SITE TO CONTROL DUST AND SLURRY. THIS ITEM WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
- THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE. LIMITS OF DISTURBANCE SHALL BE DETERMINED BY THE ENGINEER AND THE CONTRACTOR. ANY DISTURBANCES BEYOND THESE LIMITS SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. DISTURBANCES WITHIN THE LIMITS SHALL BE RESTORED BY THE CONTRACTOR AND SHALL BE INCLUDED IN THE COST OF THE WORK. CONSTRUCTION ACTIVITIES IN ADDITION TO NORMAL CONSTRUCTION PROCEDURE SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS. ANY OFF ROAD STAGING AREAS MUST BE PRE-APPROVED BY THE ENGINEER.
- NO OFF ROAD PARKING, STAGING, OR WORK SHALL OCCUR AT ANY IRRIGATED LANDSCAPES. THE CONTRACTOR SHALL REPLACE ANY DAMAGED LANDSCAPE, INCLUDING GRASS, IRRIGATION SYSTEM COMPONENTS, TREES, SHRUBS AND GROUND COVER TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. SOD SHALL MATCH EXISTING. THE CONTRACTOR SHALL COORDINATE WITH CITY AND COUNTY OF DENVER PERSONNEL AT LEAST 5 WORKING DAYS IN ADVANCE OF ANY DISTURBANCE IN THE AREA. NO LANDSCAPE SHALL BE WITHOUT WATERING SERVICES DURING THE GROWING SEASON. IF THE IRRIGATION SERVICE IS INTERRUPTED FOR MORE THAN THREE DAYS, THE CONTRACTOR SHALL BE LIABLE TO HAND TRUCK WATER. IF IRREPARABLE DAMAGE TO LANDSCAPED AREAS OCCURS CONTRACTOR WILL BE RESPONSIBLE FOR ALL PLANT REPLACEMENT IN THE AFFECTED AREA. LANDSCAPE RESTORATION SHALL BE CONSIDERED COMPLETE WHEN THE LANDSCAPE AND IRRIGATION SYSTEM IS RESTORED TO ITS ORIGINAL CONDITION AND APPROVED BY THE MAINTAINING PERSONNEL. ALL REPAIR WORK, TO ANY IRRIGATION COMPONENTS, SHALL BE INSPECTED BY THE CITY AND COUNTY OF DENVER LANDSCAPE MAINTENANCE FORCES PRIOR TO BURIAL AND ACCEPTANCE OF SAID WORK
- THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN DRAINAGE DURING THE WORK. ANY EXTRA WORK NECESSARY AS A RESULT OF THE CONTRACTOR'S FAILURE TO PERFORM DRAINAGE MAINTENANCE DURING WORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

GENERAL NOTES (CONT.)

- 8. THE CONTRACTOR SHALL COORDINATE WITH JOHN YU OF PW-TRAFFIC ENGINEERING SERVICES AT 720-865-3176 AND LINDSEY VAN CLEAVE FROM PW-STREET MAINTENANCE AT 303-446-3548 PRIOR TO CONSTRUCTION AT ALL PROJECT INTERSECTIONS. THE CONTRACTOR SHALL CONTACT PW-CONSTRUCTION ENGINEERING AT 303-446-3469 FOR STREET OCCUPANCY PERMIT WITH MHT AT LEAST 5 DAYS PRIOR TO THE START OF CONSTRUCTION.
- 9. ALL CITY & COUNTY OF DENVER (CCD) STORM DRAIN AND SANITARY PIPES AND APPURTENANCES SHALL BE PROTECTED AT ALL TIMES.
- 10. INSTALLATION AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES IS THE RESPONSIBILITY OF THE CONTRACTOR
- 11. THE ROADWAY SHALL BE KEPT CLEAN. SWEEPING DIRT AND GRAVEL TRACKED ONTO THE ROADWAY WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.
- 12. THE CONTRACTOR, AT NO EXPENSE TO THE PROJECT, SHALL REPLACE SIGNS, DELINEATORS, AND/OR ANY OTHER STRUCTURE OR MARKER DAMAGED BY THE WORK.
- 13. ALL BRIDGE DRAINS SHALL BE PROTECTED IF NECESSARY DURING CONSTRUCTION OPERATIONS TO AVOID ROADWAY MATERIAL FROM ENTERING THE WATERWAY. IN ADDITION TO PROTECTING DRAINS. THE CONTRACTOR SHALL EMPLOY ALL NECESSARY MEASURES TO PREVENT ANY CONSTRUCTION RELATED MATERIALS FROM ENTERING THE WATERWAY. THIS PROTECTION SHALL BE INCLUDED IN THE WORK.
- FLOW LINES AS NECESSARY TO AVOID POLLUTANTS FROM DISCHARGING INTO WATERWAYS. THE COST FOR REMOVAL SHALL BE INCLUDED IN THE WORK.
- 15. IT IS ESTIMATED THAT 1 SANITARY FACILITY, AND 1 MOBILIZATION WILL BE REQUIRED ON THIS PROJECT. SANITARY FACILITIES SHALL BE FULLY OPERATIONAL BEFORE CONSTRUCTION BEGINS. SANITARY FACILITY PAY ITEM INCLUDES CLEANING A MINIMUM OF TWICE PER WEEK.
- 16. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH OTHER ACTIVE PROJECTS IN AND AROUND THE PROJECT SITE. IN ADDITION, THE CONTRACTOR SHALL COORDINATE WITH THE CCD PROJECT MANAGER REGARDING EVENTS TAKING PLACE AROUND THE PROJECT SITE
- 17. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). THE CONTRACTOR IS HEREBY NOTIFIED THAT THE OSHA SILICA REQUIREMENTS HAVE BEEN UPDATED IN 2017.

UTILITIES

- 1. EXISTING UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION
- 2. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH UTILITY OWNERS IN THEIR REMOVAL, ADJUSTMENT AND/OR RELOCATION OPERATIONS SO THAT THE UTILITY WORK CAN BE ACCOMPLISHED WITHOUT IMPACTING THE CONSTRUCTION SCHEDULE. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE UTILITY PROJECT SPECIAL PROVISION.

UTILITY CONTACTS

<u>UTILITY</u>	CONTACT	<u>PHONE</u>
CCD PUBLIC WORKS - PERMIT WRITER	MICHAEL HOLM	303-446-3639
CCD PUBLIC WORKS - SANITARY SEWER	TED CHRISTIANSON	303-446-3722
CCD PUBLIC WORKS - TRAFFIC	CHRIS LILLIE	720-865-4066
CENTURYLINK	JUSTIN METZLER	720-578-3710
CENTURYLINK - RTD	ROB MCLEOD	303-949-2187
LEVEL 3 COMMUNICATIONS	THOMAS MIECZKOWSKI	720-888-2013
XCEL ELECTRICAL DISTRIBUTION	WALTER WOJCIECHOWSKI	303-571-3274
XCEL ELECTRICAL STREET LIGHTING	BRAD PFENNINGER	303-571-3257

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Sheet Revisions Date: Comments Init. 10/3/2018 ADVERTISEMENT



DEPARTMENT OF PUBLIC WORKS 201 WEST COLFAX AVENUE

DENVER, CO 80202 PHONE: (720) 913-4501 FAX: (720) 913-4544

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REGIONAL TRANSPORTATION DISTRICT (RTD) NOTES

- REFER TO PROJECT SPECIAL PROVISION 632 REGIONAL TRANSPORTATION (RTD) COORDINATION FOR DETAILED RIGHT-OF-ENTRY REQUIREMENTS AND CONDITIONS. CONTRACTOR SHALL NOTIFY THE ENGINEER IF CONFLICTING INFORMATION IS PRESENT PRIOR TO EXECUTING THE WORK AND SHALL CONFORM TO THE PREVAILING DECISION.
- 2. CONTRACTOR SHALL COMPLETE ALL APPLICABLE COMMUTER RAIL SAFETY TRAINING, WHICH DTO SHALL PROVIDE AT CONTRACTOR'S COST. CONTRACTOR SHALL PROVIDE PROOF OF CURRENT SAFETY TRAINING, PRIOR TO THE PRE—CONSTRUCTION MEETING, FOR ANY WORK ON, ADJACENT TO, OR ACROSS RTD CRT RIGHT—OF—WAY (ROW) OR TRACKWAY. PROOF OF CURRENT SAFETY TRAINING MUST BE READILY AVAILABLE WHILE WORKING ON SITE. SEE PROJECT SPECIAL PROVISION 632 FOR MORE DETAILED TRAINING REQUIREMENTS.
- 3. CONTRACTOR SHALL NOTIFY RTD'S UTILITY ENGINEERING/CONSTRUCTION TEAM NOTED IN PROJECT SPECIAL PROVISION 632 AND DTO'S RAIL OPS (720-460-5803) A FULL 30-DAYS PRIOR TO CONSTRUCTION AND SHALL ARRANGE TO ATTEND A MONTHLY 3RD PARTY RAIL CONSTRUCTION MEETING WITH RTD AND DTO CURRENTLY HELD AT 3PM ON THE FIRST WEDNESDAY OF EACH MONTH AT THE COMMUTER RAIL MAINTENANCE FACILITY.
- 4. CONTRACTOR SHALL ATTEND RTDC-DTO'S TRACK USAGE RAIL CONSTRUCTION MEETING AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION AT A TIME AND DATE ESTABLISHED BY DTO. CONTRACTOR MAY NOT BEGIN ANY WORK WITHOUT AN RTDC-DTO ACCESS PERMIT. RTDC-DTO WILL NOT ISSUE A PERMIT WITHOUT AN EXECUTED UTILITY AGREEMENT IN PLACE.
- 5. CONTRACTOR SHALL NOT BEGIN ANY WORK ON OR ACROSS RTD ROW/TRACKS UNTIL RTD HAS ISSUED AND EXECUTED UTILITY AGREEMENT.
- 6. CONTRACTOR SHALL NOTIFY RTD'S UTILITY ENGINEERING/CONSTRUCTION TEAM NOTED IN PROJECT SPECIAL PROVISION 632 AND RTDC-DTO'S RAIL OPS (720-460-5803) A FULL TWO WEEKS PRIOR TO CONSTRUCTION AND SHALL COORDINATE A PRE-CONSTRUCTION MEETING WITH RTD AND RTDC-DTO, AND ARRANGE FOR AN RTD REPRESENTATIVE TO BE ON-SITE DURING CONSTRUCTION. THE PRE-CONSTRUCTION MEETING SHALL OCCUR WITHIN A WEEK OF THE START OF CONSTRUCTION.
- 7. CONTRACTOR MAY NOT BEGIN WORK UNTIL RTD AND RTDC-DTO HAS ISSUED A PRE-CONSTRUCTION RESOLUTION RECORD (PCRR). A PCRR WILL BE COMPLETED, SIGNED, AND ISSUED BY RTDC-DTO'S REPRESENTATIVE DURING THE PRE-CONSTRUCTION MEETING AND MUST BE KEPT ON-SITE AT ALL TIMES DURING CONSTRUCTION.
- 8. TRAFFIC CONTROL PLANS ARE REQUIRED IF WORK HAS THE POTENTIAL OF IMPACTING RTD COMMUTER RAIL OPERATIONS OR AUTOMOBILE TRAFFIC NEAR RTDC RAILROAD CROSSINGS. TRAFFIC CONTROL PLANS MUST BE SUBMITTED TO RTD FOR APPROVAL PRIOR TO CONSTRUCTION.
- 9. CONTRACTOR SHALL NOTIFY RTDC-DTO OCC (OPERATIONS CONTROL CENTER) DISPATCH PRIOR TO ENTERING THE RTD RIGHT-OF-WAY (ROW) IN ORDER TO ACTIVATE THE PERMIT, AND IMMEDIATELY AFTER CLEARING THE SITE IN ORDER TO DEACTIVATE THE PERMIT AS FOLLOWS:
 - CALL 720-460-5807 FOR WORK ALONG THE A-LINE
 - CALL 720-460-5808 FOR WORK ALONG THE G-LINE

AN RTDC-DTO EIC (EMPLOYEE IN CHARGE)/FLAGGER IS REQUIRED TO BE ON-SITE ANYTIME CONTRACTOR WORKERS OR EQUIPMENT ARE WITHIN 25 FT. OF THE NEAREST RUNNING RAIL. IF RTDC-DTO DEEMS NECESSARY, AN RTD-DTO EIC/FLAGGER MAY ALSO BE REQUIRED AT OTHER TIMES DURING CONSTRUCTION. THE EIC/FLAGGER MUST BE SCHEDULED AT LEAST ONE WEEK PRIOR TO THE START OF WORK AND SHALL BE COORDINATED AT THE PRE-CONSTRUCTION MEETING AND SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE. IF THERE ARE OTHER ADJACENT RAILROADS (BNSF, UPRR, ETC) A SEPARATE EIC/FLAGGER MUST BE ARRANGED THRU THOSE RAILROADS. THE RTDC-DTO EIC/FLAGGER WILL NOT FLAG FOR OTHER RAILROADS.

RTD NOTES (CONT.)

- 10. RTD AND RTDC-DTO ASSUMES NO RESPONSIBILITY FOR UTILITY LOCATIONS SHOWN ON THESE CONSTRUCTION DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
- 11. IF POTENTIAL TO BE WITHIN 10 FT. OF OVERHEAD CATENARY SYSTEM (OCS), A POWER SHUTDOWN IS REQUIRED.
- 12. ANY VEHICLE REQUIRING ENTRY TO THE RTDC SWITCHING STATION SHALL BE 4X4'S OR RUN ON MATS.
- 13. THE CONTRACTOR SHALL SUBMIT A WORK PLAN WITH PHASING TO THE RTD FOR APPROVAL. PRIOR TO APPROVAL, THE CONTRACTOR SHALL ATTEND WORKING MEETINGS WITH RTD TO FINALIZE THE WORK PLAN. THE WORK PLAN SHALL INCLUDE A DESCRIPTION OF ALL MEANS AND METHODS NECESSARY TO COMPLETE THE WORK WITHIN THE ROW OR TRACKWAY INCLUDING BUT NOT LIMITED TO CONSTRUCTION ACCESS, EQUIPMENT LOCATION, SHORING, FALSEWORK, DEBRIS CONTAINMENT AND REMOVAL, TRAFFIC CONTROL, SIGNAGE, PLANNED LANE CLOSURES, PLANNED FLAGGERS, AND RIGHT-OF-ENTRY. THE WORK PLAN SHALL IDENTIFY PHASED WORK LOCATIONS AND SHALL BE LIMITED TO AREAS OVER ONE TRACK AT A TIME. FOR EXAMPLE, WORK SHALL BE COMPLETED WITHIN THE GENERAL LIMITS OF RTD NORTH METRO TRACK 1 PRIOR TO WORKING OVER RTD NORTH METRO TRACK 2. WORK OVER RTD NORTH METRO TRACK 2 SHALL BE COMPLETED PRIOR TO WORKING OVER BNSF TRACK 0002.
- 14. POWER SHUTDOWNS SHALL BE COORDINATED WITH RTD/DTO AND MUST RECEIVE APPROVAL FROM RTD GM OF BUS OPERATIONS.
- 15. CONTRACTOR IS RESPONSIBLE FOR SECURING ITS EQUIPMENT, MATERIAL, AND ACCESS POINTS TO RTD ROW OR TRACKWAY EACH DAY.
- 16. CONTRACTOR IS REQUIRED TO DEVELOP AND SUBMIT HAZARDOUS MATERIALS AND DEBRIS CLEANUP REPORTS TO RTD AND OTHER AUTHORITIES AS APPROPRIATE. IN ADDITION, THE CONTRACTOR IS REQUIRED TO PHOTO DOCUMENT THE PRE AND POST—CONSTRUCTION CONDITION TO VERIFY APPROPRIATE CLEANUP ACTIVITIES HAVE BEEN PERFORMED.
- 17. CONTRACTOR MUST HAVE THE FOLLOWING DOCUMENTS ON-SITE DURING CONSTRUCTION AT ALL TIMES:
 - CONTRACTOR'S RIGHT-OF-ENTRY;
 - RTDC-DTO'S APPROVED COMMUTER RAIL ACCESS PERMIT;
 - RTDC-DTO'S RAILROAD SAFETY TRAINING CERTIFICATES;
 - PE STAMPED/SIGNED FOR CONSTRUCTION PLANS/PROFILES APPROVED BY RTD;
 - RTD RR CROSSING APPLICATION DATA SHEET;
 - RTD'S SIGNED PRE-CONSTRUCTION RESOLUTION RECORD;
 - APPROVED WORK PLAN.
- 18. CONTRACTOR SHALL NOTIFY RTD/RRP PRIOR TO WEWATTA JACKING TO UNBOLT THE PEDESTRIAN SCREENING ABOVE.

RAILROAD NOTES

- 1. REFER TO PROJECT SPECIAL PROVISION 631 RAILROAD COORDINATION.
- 2. BNSF CALL BEFORE YOU DIG # 1-800-533-2891.
- 3. REFER TO TRACK PLANS FOR TRACK IDENTIFICATION AND CLEARANCE REQUIREMENTS.

ENVIRONMENTAL NOTES

- 1. CONTRACTOR SHALL TAKE REASONABLE MEASURES TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE AND TO PREVENT THE VISIBLE DISCHARGE OF FUGITIVE PARTICULATE EMISSIONS BEYOND THE PROPERTY ON WHICH THE EMISSIONS ORIGINATE. THE MEASURES TAKEN MUST BE EFFECTIVE IN THE CONTROL OF FUGITIVE PARTICULATE EMISSIONS AT ALL TIMES ON THE SITE, INCLUDING PERIODS OF INACTIVITY SUCH AS EVENINGS, WEEKENDS, AND HOLIDAYS AS WELL AS ANY OTHER PERIOD OF INACTIVITY.
- 2. DURING ANY SOIL DISTURBING ACTIVITIES, IF UNKNOWN/UNIDENTIFIED UNDERGROUND STORAGE TANKS, DRUMS, ODOROUS SOIL, STAINED SOIL, ASBESTOS—CEMENT PIPE (TRANSITE), BUILDING DEBRIS OR WASTE MATERIALS ARE ENCOUNTERED DURING THE PROJECT, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA OF THE DISCOVERY UNTIL DENVER ENVIRONMENTAL HEALTH (DEH) MAKES A DETERMINATION OF HOW TO PROCEED.
- 3. CONTRACTOR SHALL IMMEDIATELY NOTIFY DEH OF THE DISCOVERY VIA THE PHONE NUMBER 720-460-1706.
- 4. THE CONTRACTOR SHALL DIRECT NON-RECYCLABLE, NON-HAZARDOUS WASTES FROM CCD-OWNED OR CONTROLLED PROPERTY OR FACILITIES TO THE DENVER ARAPAHOE DISPOSAL SITE (DADS) LANDFILL FOR DISPOSAL, FOLLOWING THE REQUIREMENT AND PROCEDURAL GUIDANCE OUTLINED IN CCD EXECUTIVE ORDER 115.
- 5. NOISE CONTROL. EXEMPTED HOURS FOR CONSTRUCTION IN THE CITY AND COUNTY OF DENVER ARE FROM 7 A.M. TO 9 P.M. MONDAY THROUGH FRIDAY AND 8 A.M. TO 5 P.M. ON SATURDAYS AND SUNDAYS PER SECTIONS 36-6.(B)(7) AND 36-7.(5)A., B. AND C. OF DENVER'S NOISE ORDINANCE, CHAPTER 36 "NOISE CONTROL," DENVER REVISED MUNICIPAL CODE (DRMC). IF THERE IS AN ANTICIPATED NEED TO WORK OUTSIDE OF THE EXEMPTED HOURS FOR CONSTRUCTION: 1) THE CONTRACTOR WILL NEED TO MAKE A REQUEST FOR A NIGHTTIME NOISE VARIANCE AS ALLOWED FOR IN SECTION 36-7.(5)C. OF THE DRMC AND 2) THE VARIANCE PROCESS NEEDS TO BE STARTED A MINIMUM OF THREE MONTHS PRIOR TO THE DESIRED START DATE OF ANY WORK NEEDING TO OCCUR OUTSIDE OF EXEMPTED HOURS, ANY NOISE VARIANCE QUESTIONS SHOULD BE DIRECTED TO PAUL RIEDESEL, DEPARTMENT OF ENVIRONMENTAL HEALTH, DENVER COMMUNITY NOISE PROGRAM, (PHONE 720-865-5410; FAX 720-865-5532) A MINIMUM OF THREE MONTHS PRIOR TO THE START OF THE PROJECT.
- 6. ANY WORK BELOW THE DECK OF THE BRIDGE MUST TAKE PLACE AFTER AUGUST 31 TO ENSURE MOST MIGRATORY BIRDS HAVE FLEDGED. IN COLORADO, MOST NESTING AND REARING ACTIVITITES OCCUR BETWEEN APRIL 1 AND AUGUST 31. ANY EXISTING NESTS ON OR ADJACENT TO THE BRIDGE STRUCTURE MUST BE REMOVED PRIOR TO MARCH 15 OF 2019 TO ENSURE NO NESTING OCCURS WHILE CONSTRUCTION IS BEING COMPLETED. REMOVAL OF NESTS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.

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DEPARTMENT OF PUBLIC WORKS

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SUMMARY OF QUANTITIES

DESCRIPTION	UNIT	TOTAL	AS CONSTR.
Removal of Bearing Device	EA	43	
	FA.	47	
Bridge Jacking and Shoring	EA	43	
Erosion Log Type I (12-Inch)	LF	1162	
Vehicle Tracking Pad	EA	1	
Erosion Control Management	DAY	15	
Concrete Washout Structure	EA	1	
Cement Grout	CY	11	
Bearing Device (Type II)	EA	43	
Epoxy Resin (Injection)	LF	84	
Concrete Class D (Bridge)	CY	22	
Galvanic Anodes	EA	396	
Reinforcing Steel (Epoxy Coated)	LB	8104	
Sanitary Facility	EA	1	
Mobilization	LS	1	
	Removal of Bearing Device Bridge Jacking and Shoring Erosion Log Type I (12-Inch) Vehicle Tracking Pad Erosion Control Management Concrete Washout Structure Cement Grout Bearing Device (Type II) Epoxy Resin (Injection) Concrete Class D (Bridge) Galvanic Anodes Reinforcing Steel (Epoxy Coated) Sanitary Facility	Removal of Bearing Device EA Bridge Jacking and Shoring EA Erosion Log Type I (12-Inch) LF Vehicle Tracking Pad EA Erosion Control Management DAY Concrete Washout Structure EA Cement Grout CY Bearing Device (Type II) EA Epoxy Resin (Injection) LF Concrete Class D (Bridge) CY Galvanic Anodes EA Reinforcing Steel (Epoxy Coated) LB Sanitary Facility EA	Removal of Bearing Device EA 43 Bridge Jacking and Shoring EA 43 Erosion Log Type I (12-Inch) LF 1162 Vehicle Tracking Pad EA 1 Erosion Control Management DAY 15 Concrete Washout Structure EA 1 Cement Grout CY 11 Bearing Device (Type II) EA 43 Epoxy Resin (Injection) LF 84 Concrete Class D (Bridge) CY 22 Galvanic Anodes EA 396 Reinforcing Steel (Epoxy Coated) LB 8104 Sanitary Facility EA 1

SUMMARY OF QUANTITIES (CONT.)

ITEM	DESCRIPTION	UNIT	TOTAL	AS CONSTR.
626-01103	Public Information Services (Tier III)	LS	1	
630-00007	Traffic Control Inspection	DAY	18	
630-00012	Traffic Control Management	DAY	36	
630-00018	Traffic Control (Special) LS	LS	1	
631	Railroad Coordination	HR	20	
632	RTD Coordination	HR	40	
700	F/A Railroad Coordination Fees	LS	1	
700	F/A Railroad Contractor Orientation Course	LS	1	
700	F/A Railroad Inspector Coordinator	LS	1	
			_	
700-70042	F/A Railroad Flagging	LS	1	
700	RTD/DTO Training	LS	1	
700	RTD/DTO Rail Shutdowns	LS	1	
/00-/0380	A/A Erosion Control	LS	1	
700-70589	A/A Environmental Health and Safety Management	LS	1	
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DEPARTMENT OF PUBLIC WORKS

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GENERAL NOTES

ALL WORK SHALL BE COMPLETED PER THE CURRENT COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE NOTED.

THE FOLLOWING STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 36 (ASTM A709), UNLESS OTHERWISE NOTED:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE AND ADJACENT STRUCTURES DURING CONSTRUCTION.

THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL CONTACT THE UTILITIES NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 AT LEAST 2 DAYS (NOT INCLUDING THE DAY OF NOTIFICATION) PRIOR TO ANY EXCAVATION OR OTHER EARTHWORK.

GRADE 60 REINFORCING STEEL IS REQUIRED.

ALL REINFORCING STEEL SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED.

(N) DENOTES NON-EPOXY COATED REINFORCING STEEL.

THE CONTRACTOR SHALL SURVEY THE WAFFLE SLAB AND ADJACENT VIADUCTS BY SOUNDING METHODS IN ACCORDANCE WITH ASTM-D4580 TO VERIFY LOCATIONS OF SPALLS, DELAMINATION AND DECK REPAIR AS SHOWN ON THE PLANS AND TO LOCATE ADDITIONAL AREAS NEEDING REPAIR, ADDITIONAL LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR CONCURRENCE BEFORE WORK COMMENCES. QUANTITIES ARE APPROXIMATE. PAYMENT WILL BE FOR THE ACTUAL AREA REPAIRED AND MATERIAL USED AS APPROVED BY THE ENGINEER. SOUNDING SHALL BE INCLUDED IN THE COST OF THE WORK AND WILL NOT BE PAID FOR SEPARATELY.

IF POST-TENSIONING DUCT IS EXPOSED, OR THE CONTRACTOR DISCOVERS LOOSE AND DETERIORATED CONCRETE BELOW THE REMOVAL LIMITS FOR CLASS 2 REPAIRS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

FALSEWORK MAY BE REQUIRED. ALL FALSEWORK SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 601.11.

AFTER REMOVAL OF CONCRETE, ALL EXPOSED REBAR SHALL BE CLEANED OF ALL LOOSE CONCRETE, BY CHIPPING, WATER BLASTING, AND/OR SANDBLASTING. THIS SHALL BE INCLUDED IN THE COST OF THE WORK. SANDBLASTING SHALL NOT BE PERMITTED IF EPOXY REINFORCING IS PRESENT.

AS DIRECTED BY THE ENGINEER, DETERIORATED OR CORRODED REBAR EXPOSED DURING CONCRETE REMOVAL SHALL BE REPLACED BY THE CONTRACTOR AND PAID FOR AS ITEM 602 REINFORCING STEEL (EPOXY COATED). REINFORCEMENT DAMAGED DURING THE DECK REMOVAL OPERATIONS SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE

ALL SAW WATER, CORING WASTE, CONCRETE WASHOUT AND ANY OTHER CONSTRUCTION DEBRIS SHALL BE CONTAINED, COLLECTED AND DISPOSED OF OFF SITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS AT NO ADDITIONAL COST TO THE PROJECT, UNDER NO CIRCUMSTANCE SHALL SUCH MATERIAL BE ALLOWED TO ENTER ANY NATURAL OR MANMADE WATERWAY OR STORM DRAIN.

THE CONTRACTOR SHALL PROTECT PEDESTRIANS, TRAVELING PUBLIC AND ALL PROPERTY BELOW THE STRUCTURE FROM ANY FALLING DEBRIS DURING THE CONSTRUCTION WORK. CONTAINMENT SYSTEMS MAY INCLUDE CANVAS, WOOD, AND STEEL. STEEL MUST BE GROUNDED TO PREVENT ELECTRICAL SHOCK. ANY DEBRIS WHICH FALLS ON PATHS, ROADWAYS, AND PROPERTY BELOW THE STRUCTURE SHALL BE REMOVED IMMEDIATELY. THIS WORK WILL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE WORK

STATIONS, ELEVATIONS, AND DIMENSIONS CONTAINED IN THESE PLANS ARE CALCULATED FROM THE "AS CONSTRUCTED PLANS". THESE STATIONS, ELEVATIONS, AND DIMENSIONS MAY BE ADJUSTED TO MEET THE EXISTING STRUCTURE. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.

ALL LONGITUDINAL AND TRANSVERSE DIMENSIONS ARE MEASURED HORIZONTALLY AND INCLUDE NO CORRECTION FOR

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR EPOXY COATED REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06. THESE SPLICE LENGTHS SHALL BE INCREASED BY 25% FOR BARS SPACED AT LESS THAN 6" ON CENTER OR LESS THAN 3" OF LATERAL COVER

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BAR SIZE	#4	#5	#6	# 7	#8	#9	#10	#11
SPLICE LENGTH FOR CLASS D CONCRETE	1'-3"	1'-7"	2'-5"	2'-10"	3'-8"	4'-8"	5'-11"	7'-3"

WHEN THE CONTRACTOR ELECTS TO SUBSTITUTE EPOXY COATED REINFORCEMENT FOR BLACK REINFORCING BARS, THE MINIMUM LAP SPLICE SHALL BE AS DESCRIBED ABOVE.

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR BLACK REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06. THESE SPLICE LENGTHS SHALL BE INCREASED BY 25% FOR BARS SPACED AT LESS THAN 6" ON CENTER OR LESS THAN 3" OF LATERAL COVER.

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
SPLICE LENGTH FOR CLASS D CONCRETE	1'-1"	1'-4"	1'-7"	1'-11"	2'-6"	3'-1"	3'-11"	4'-10"

WORK DESCRIPTION

REPLACE WAFFLE SLAB EXPANSION BEARINGS. ALL BEARINGS SHALL BE CDOT TYPE II.

PERFORM CONCRETE REHABILITATION OF UNSOUND CONCRETE AS SHOWN IN THE PLANS AND DETERMINED IN THE FIELD THROUGH CONTRACTOR'S SURVEY AND AGREED UPON BY THE ENGINEER.

BRIDGE DESCRIPTION

D-03-V-030A UNIT 2: 3 SPANS CONCRETE WAFFLE SLAB (29'-0", 140'-0", 29'-0") ALONG PARK AVENUE WEST; 3 SPANS CONCRETE WAFFLE SLAB (15'-6", 170'-0", 15'-6") ALONG WEWATTA-DELGANY; INTERSECTION STRUCTURE, ROADWAY WIDTH VARIES, SKEW VARIES

D-03-V-030A UNIT 3: 4 SPANS STEEL GIRDER (144'-2 3/8", 171'-9 5/8", 180'-0", 142'-0"); 140'-0" OUT-TO-OUT WITH 1'-6" BRIDGE RAIL 12'-6" SIDEWALK, 48'-0" TRAVEL WAY, VARYING MEDIAN, 48'-0" TRAVEL WAY, 12'-6" SIDEWALK, 1'-6" BRIDGE RAIL; 85'22'48" SKEW AT UNIT 2

D-03-V-032A UNIT 1N: 4 SPANS STEEL GIRDER (137'-0", 171'-6", 171'-6", 128'-9 5/8"); 77'-0" (MAX) OUT-TO-OUT WITH 1'-6" BRIDGE RAIL, 12'-6" SIDEWALK, 61'-0" TRAVEL WAY, 2'-0" BRIDGE RAIL; 90'00'00"

D-03-V-034A UNIT 1S: 5 SPANS STEEL GIRDER (122'-0", 163'-0", 158'-9", 158'-6", 118'-7 ½"); 66'-0" OUT-TO-OUT WITH 2'-0" BRIDGE RAIL, 50'-0" TRAVEL WAY, 12'-6" SIDEWALK, 1'-6" BRIDGE RAIL; 87'21'53"

D-03-V-036A UNIT 2EW: 2 SPANS STEEL GIRDER (149'-6", 150'-0"); 96'-0" OUT-TO-OUT WITH 1'-6" BRIDGE RAIL, 12'-6" SIDEWALK, 26'-0" TRAVEL WAY, 5'-0" MEDIAN, 37'-0" TRAVEL WAY, 12'-6" SIDEWALK, 1'-6" BRIDGE RAIL: 88'46'40" SKEW AT UNIT 2

D-03-V-038A UNIT 1EW: 5 SPANS STEEL GIRDER (100'-0", 124'-0", 142'-0", 137'-0", 110'-9 3/8"); 96'-0" OUT-TO-OUT WITH 1'-6" BRIDGE RAIL, 12'-6" SIDEWALK, 37'-0" TRAVEL WAY, 5'-0" MEDIAN, 26'-0" TRAVEL WAY, 12'-6" SIDEWALK, 1'-6" BRIDGE RAIL; 90'00'00" SKEW AT UNIT 2

RAILROAD NOTES

REFER TO PROJECT SPECIAL PROVISION 631 RAILROAD COORDINATION.

BNSF - CALL BEFORE YOU DIG # 1-800-533-2891.

REFER TO TRACK PLANS FOR TRACK IDENTIFICATION AND CLEARANCE REQUIREMENTS.

DESIGN DATA

REHABILITATION DESIGNS

AASHTO, SEVENTH EDITION LRFD WITH CURRENT INTERIMS DESIGN METHOD: LOAD AND RESISTANCE FACTOR DESIGN

LIVE LOAD: HI -93: DESIGN TRUCK OR TANDEM AND DESIGN LANE

DEAD LOAD: ASSUMES 25 LBS. PER SQ. FT. FOR BRIDGE DECK OVERLAY

ORIGINAL DESIGN:

AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (14TH EDITION THROUGH 1991 INTERIMS)

AASHTO GUIDE SPECIFICATIONS FOR HORIZONTALLY CURVED BRIDGES (1980 THROUGH 1986 INTERIMS)

DESIGN METHOD: ALLOWABLE STRESS DESIGN AND LOAD FACTOR DESIGN

LIVE LOAD: HS 20-44 AND INTERSTATE ALTERNATE

DEAD LOAD: ASSUMES 25 LBS. PER SQ. FT. FOR BRIDGE DECK OVERLAY

STRUCTURAL STEEL:

AASHTO M270 (ASTM A709) GRADE 36 fy = 36,000 PSIAASHTO M270 (ASTM A709) GRADE 50 fy = 50,000 PSI

REINFORCED CONCRETE:

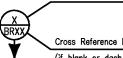
CLASS D (BRIDGE) f'c = 4.500 PSI (BOTTOM OF

SPANDREL BEAM (CORBEL) REPAIR)

REINFORCING STEEL fy = 60,000 PSI

LEGEND:

Section or Detail Identification



Cross Reference Drawing Number

(if blank or dash, reference is to same sheet)

SUMMARY OF QUANTITIES

	ITEM	DESCRIPTION	UNIT	D-03-V-030A UNIT 2 & 3	D-03-V-032A UNIT 1N	D-03-V-034A UNIT 1S	D-03-V-036A UNIT 2EW	D-03-V-038A UNIT 1EW	TOTAL	AS CONSTR.
	202	Removal of Bearing Device	EA	12	7	6	9	9	43	
	204	Bridge Jacking and Shoring	EA	12	7	6	9	9	43	
	211	Cement Grout	CY	11						
	512	Bearing Device (Type II)	EA	12	7	6	9	9	43	
	519	Epoxy Resin (Injection)	LF	84						
	601	Concrete Class D (Bridge)	CY	22						
ົໄ	601	Galvanic Anodes	EA	396						
	602	Reinforcing Steel (Epoxy Coated)	LB	8104						

INDEX OF DRAWINGS

BR01 BRIDGE GENERAL NOTES AND SUMMARY OF QUANTITIES GENERAL LAYOUT WAFFLE SLAB BR02

WAFFLE SLAB UNDERSIDE RR03

BR04 TYPICAL SECTION WAFFLE SLAB (1 OF 2)

BR05 TYPICAL SECTION WAFFLE SLAB (2 OF 2)

BEARING DEVICE (TYPE II) BR06 BR07 JACKING DETAILS

BR08 WAFFLE SLAB REPAIRS

BR09 CORBEL REPAIRS

(1) Assumes 5 Anodes/SY of Class 2 Removal

BR01

Bridge Subset Sheets:

Know what's below. **Call** before you diq.

Number

6

	THE ABOVE SPL	ICE LENGTHS SHALL BE INCI	REASED E	3Y 20% FOR 3	BAR BUNDLES	AND 33% FOR	4 BAR BUNDLES.	
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	A=COM	6200 South Quebec Street	t		0			
	AECOM	Greenwood Village, CO 801 PHONE: 303-694-2770	111		0			



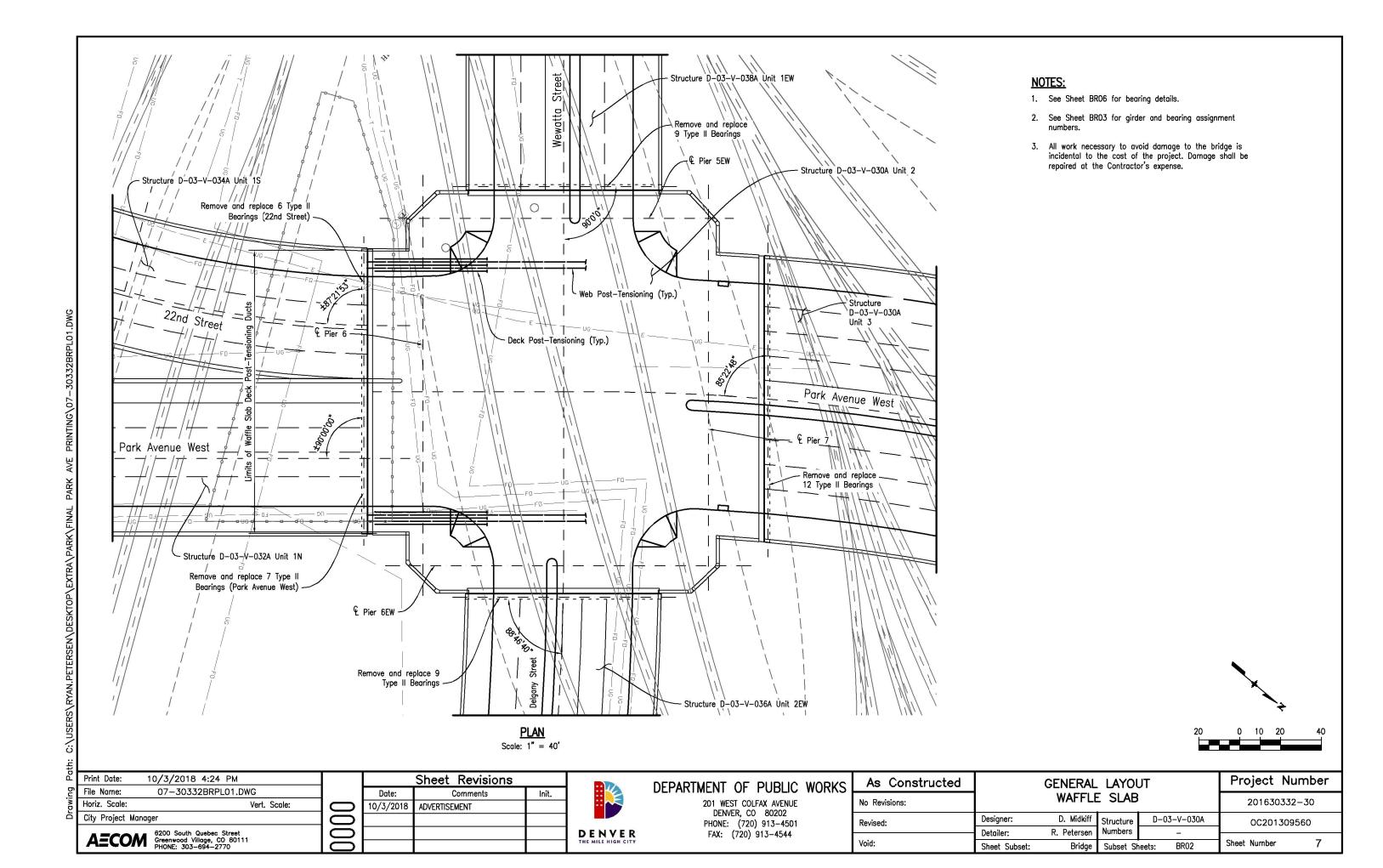
DEPARTMENT OF PUBLIC WORKS

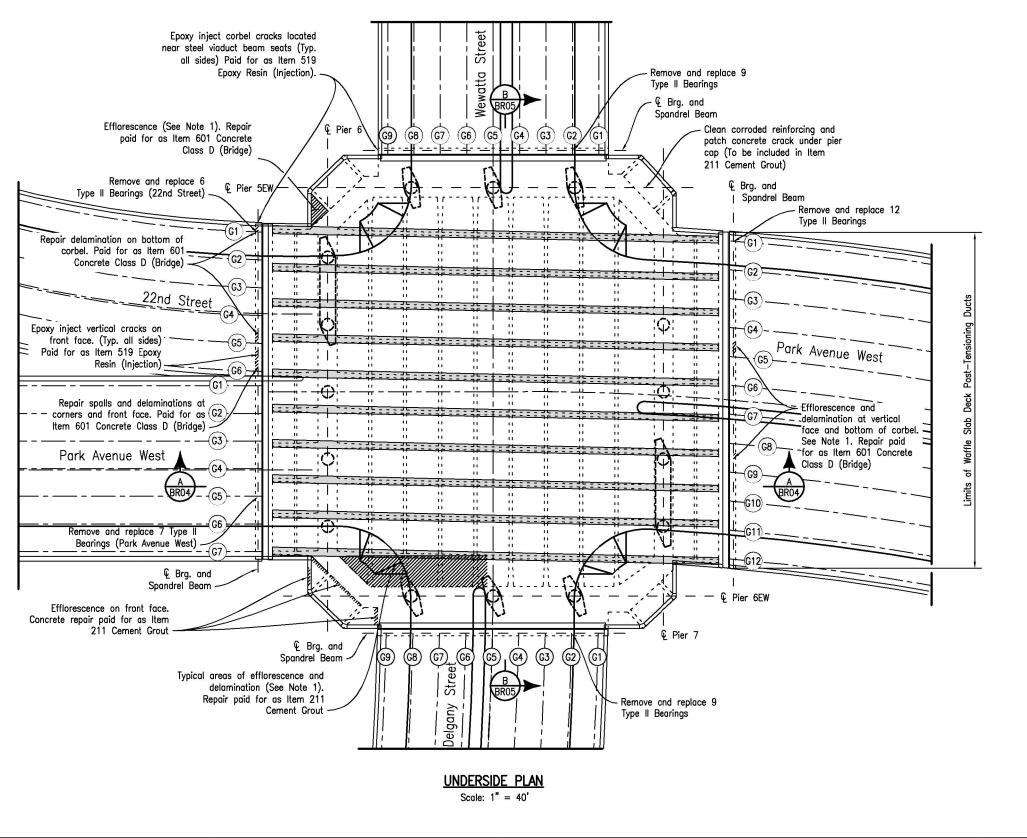
201 WEST COLFAX AVENUE DENVER, CO 80202 PHONE: (720) 913-4501 FAX: (720) 913-4544

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As Constructed	BRIDG	E GENER	Project Numbe		
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Revised:	Designer:	D. Midkiff	Structure	-	0C201309560
	Detailer:	R. Petersen	Numbers	_	
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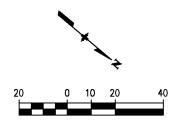
NOTES:

- 1. Concrete repair areas (cracks, spalls, and delamination) shall be determined during the Contractor's inspection and agreed upon by the Engineer prior to performing
- 2. Unless otherwise noted, defects shown are on Bottom Face.
- Apply Concrete Sealer a minimum width of 6" outside the limits of repaired areas which shall not be paid for separately but included in the cost of the work.
- 4. Refer to Shts. BR08-BR09 for waffle slab and spandrel beam (corbel) repair details.
- 5. See Sheet BR06 for Bearing Details.
- 6. All work necessary to avoid damage to the ducts is incidental to the cost of the project. Care shall be taken to not expose post-tension ducts when performing deck repairs. The Contractor is responsible for locating post-tension duct from the as-built plans, and non-destructive testing. Damage to post-tension ducts shall be repaired at the Contractor's expense. All work necessary to avoid damage to the ducts is incidental to the cost of the project.

LEGEND:

Efflorescence and delamination (moderate to severe)

Waffle Slab Webs containing Post-Tensioning Ducts

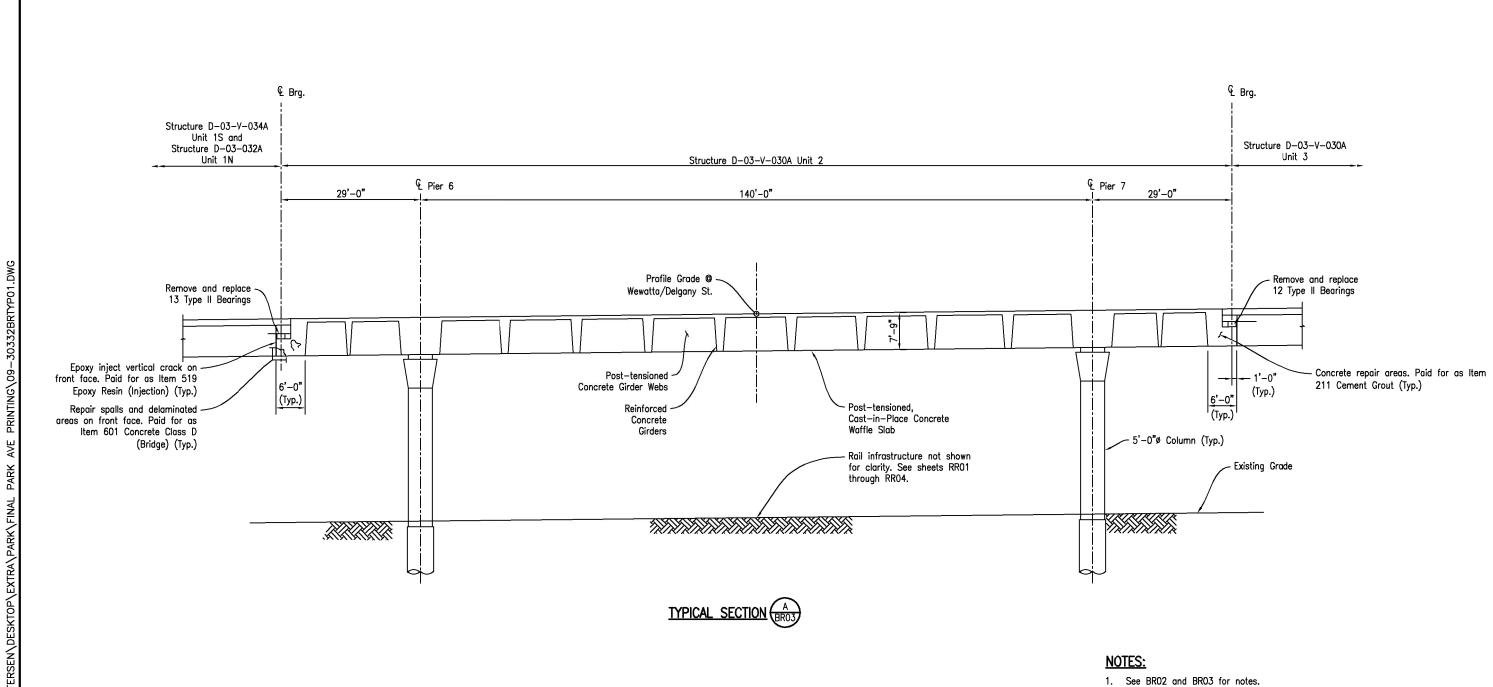


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	Revised:	Designer:	D. Midkiff	Structure	D-03-V-030A	0C201309560	
ı		Detailer:	R. Petersen	Numbers	_		
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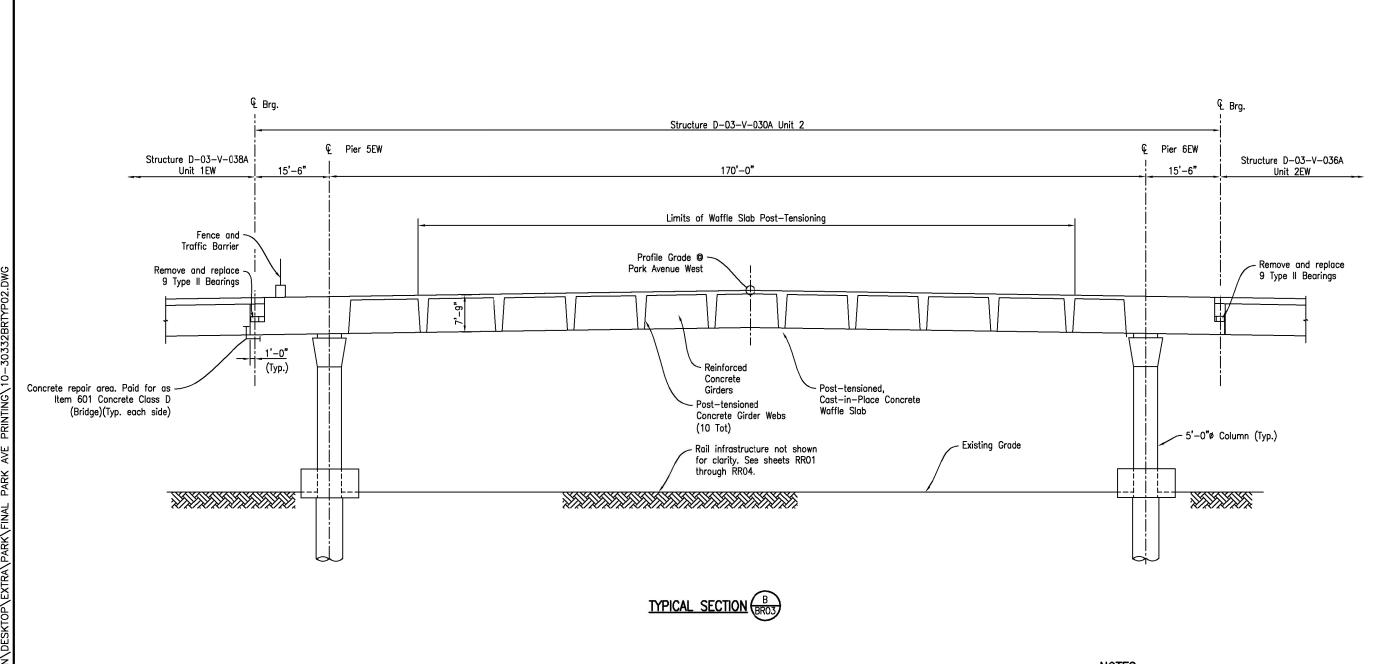
- 2. Refer to Shts. BR08—BR09 for waffle slab and spandrel beam (corbel) repair details.

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ß	As Constructed	TYPICAL SECTION				Project Number		
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NOTES:

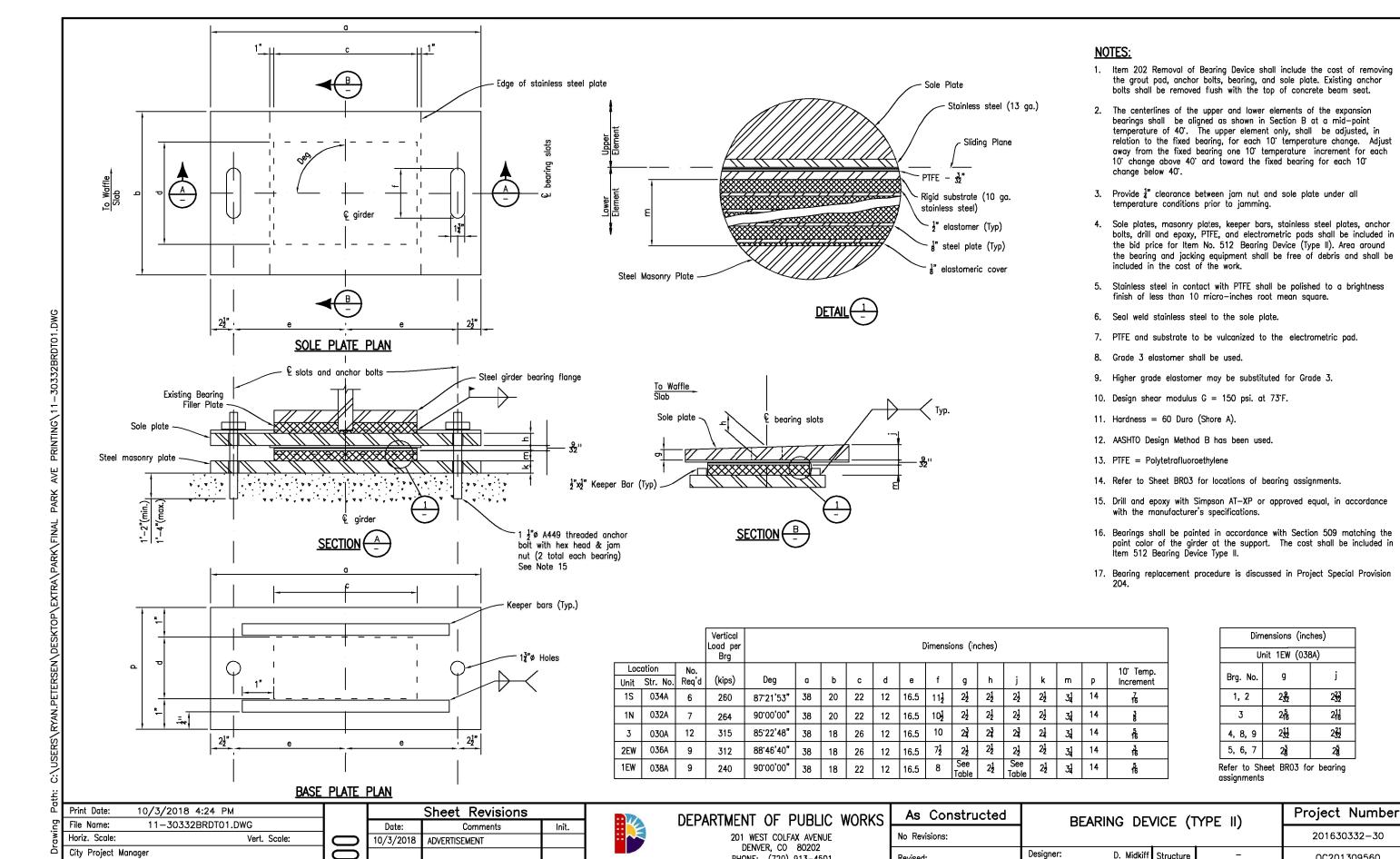
- 1. See BR02 and BR03 for notes.
- 2. Refer to Shts. BR08—BR09 for waffle slab and spandrel beam (corbel) repair details.

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ı		Detailer:	D. Strong	Numbers	1			
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Dimensions (inches)

Unit 1EW (038A)

23

25

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2

BR06

Structure

Numbers

Subset Sheets:

R. Peterse

Bridge

Revised:

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Detailer:

Sheet Subset:

PHONE: (720) 913-4501

FAX: (720) 913-4544

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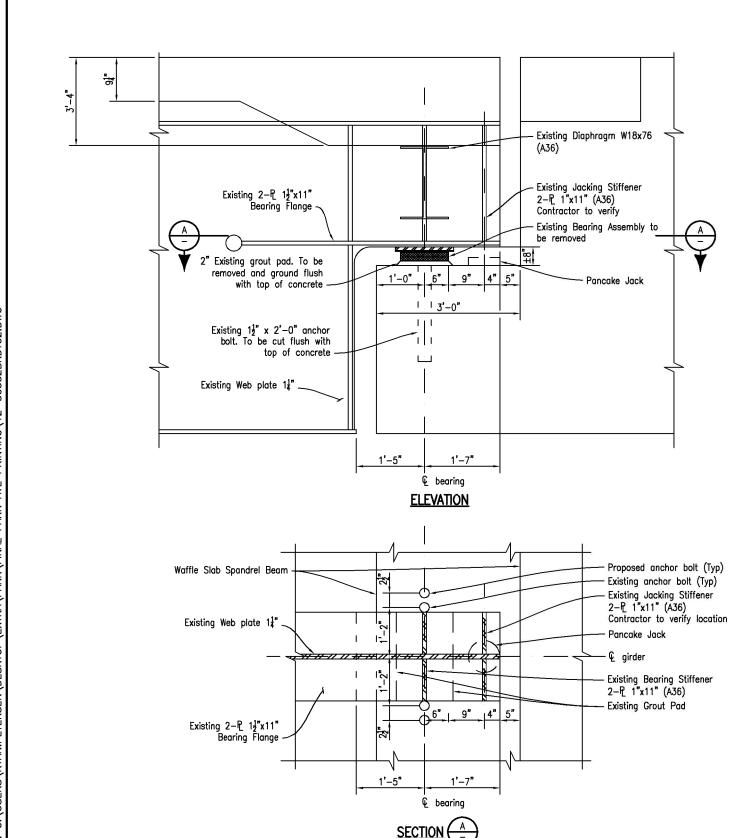
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11



NOTES:

- 1. The cost for Item 204 Bridge Jacking and Shoring includes installation of blocking, steel shims, hydraulic jack systems and raising and lowering the bridge superstructure in accordance with the Project Special Provisions. In addition, Item 204 includes minor painting to areas such as the end diaphragms and girder ends damaged during bridge jacking and shoring as well as bearing installation. Paint system shall be in accordance with Project Special Provision 509 Painting Existing Structure.
- Dimensions and details are taken from the as—built drawings. The Contractor shall verify and report any discrepancies to the Engineer.
- Shim jacks as necessary to provide a level jacking surface and to limit bearing stresses on the concrete in accordance with the Specifications.
- 4. The Contractor shall close the necessary lanes to traffic during jacking operations. Refer to the Specifications and the Traffic Control plans for details.
- Jacking height shall be limited to the minimum amount required to relieve the load on the existing bearings but shall not exceed g^{1*} above the rebound height of the bearing.
- Jacks shall be equipped with a locking ring to prevent movement in the event hydraulic pressure is lost. Jacks shall be locked off prior to bearing replacement.
- 7. The Contractor shall submit jacking plans, procedure & calculations to the Engineer for approval. Refer to Specifications for additional information.
- The dead loads and live loads provided in the table below are unfactored loads. For design loads, the Contractor shall apply a 1.3 and 1.75 factor to the dead load and live load, respectively, in accordance with AASHTO LRFD Bridge Design Specifications.
- 9. See Sht. BR06 for bearing assembly details.
- Bridge Jacking and Bearing Replacement procedure is discussed in Project Special Provision 204.

	036A Unit 2EW	032A Unit 1N	034A Unit 1S	038A Unit 1EW	030A Unit 3
Joint No.	Joint 6	Joint 4	Joint 3	Joint 5	Joint 7
Jack Type	Pancake	Pancake	Pancake	Pancake	Pancake
Dead Load (tons)	101	78	78	70	99
Live Load (tons)	56	54	53	50	59
Stroke Req'd	1"	1″	1″	1"	1"

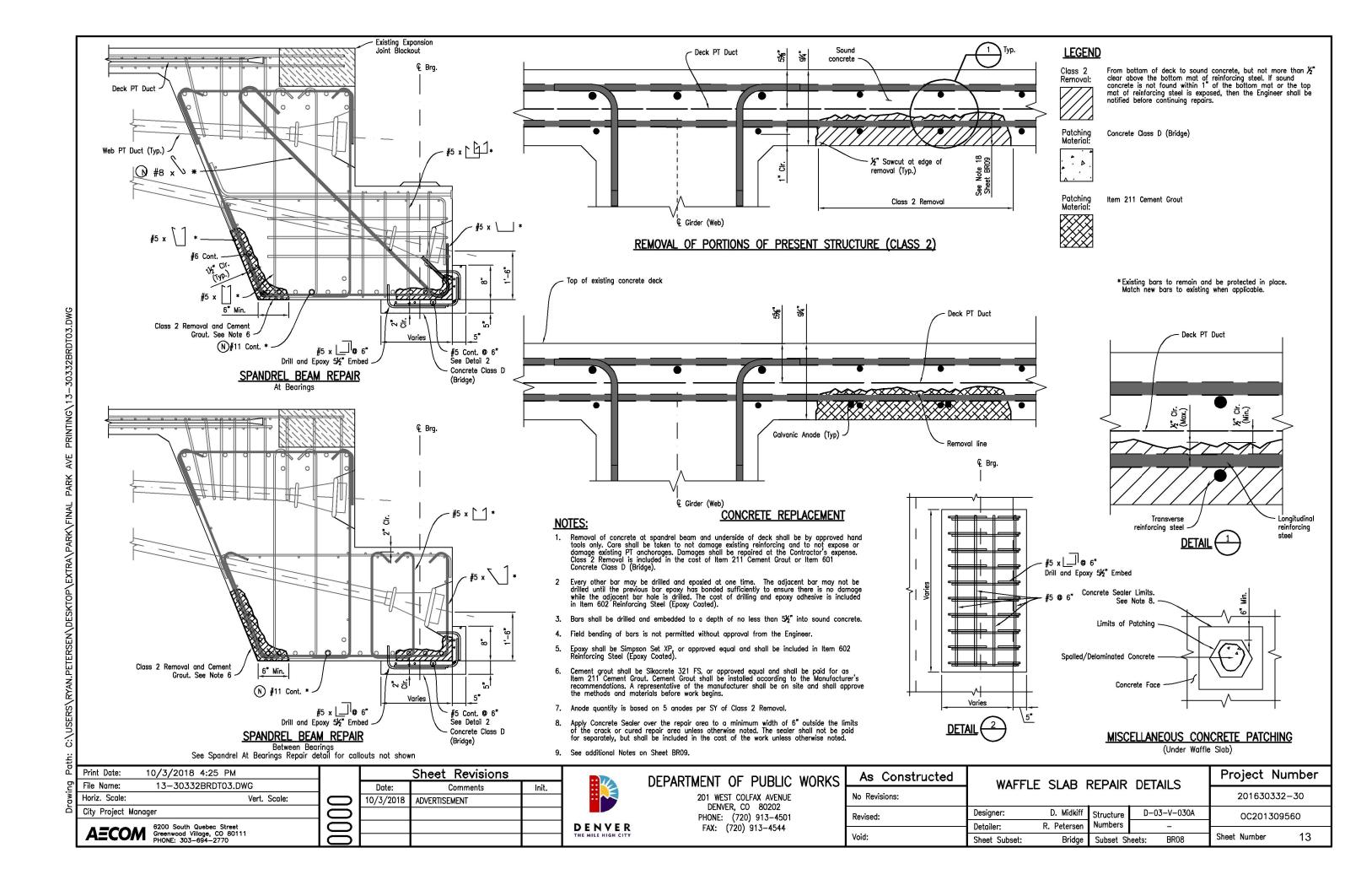
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	As Constructed	JACKING DETAILS Project N		Project Numb	er			
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	Revised:	Designer:	D. Midkiff	Structure		-	OC201309560	
ı		Detailer:	R. Petersen	Numbers		_		
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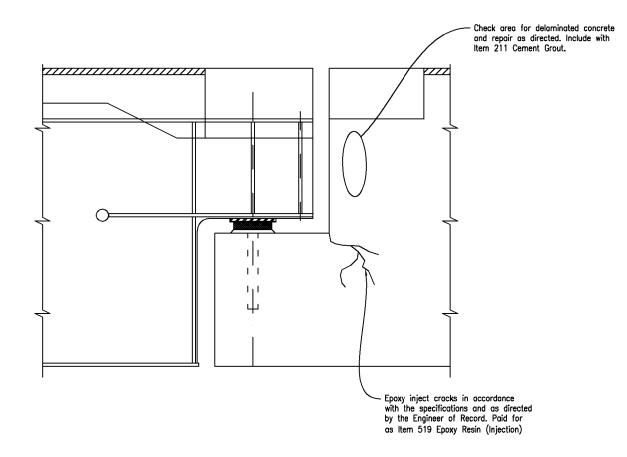


NOTES (CONT.):

- Details on this sheet and BRO8 reflect the scope and the nature of the work. They are not intended to represent the actual structure.
- Plan quantities are estimates. Actual concrete removal and replacement shall be as needed to reach sound concrete or as directed by the Engineer.
- Removal operations shall be coordinated with the Engineer and performed in a manner as required to ensure the structural integrity of the bridge.
- 13. If falsework is required, the falsework load capacity required to support the girders shall be determined by the Contractor and approved by the Engineer unless specified otherwise on the plans. Falsework will not be paid far separately, but shall be included in the cost of the work.
- 14. Care shall be taken in removing concrete from around structural steel elements and reinforcing steel to prevent damage to the steel. Damage done to the existing reinforcing steel shall be repaired or replaced as approved by the Engineer at the Contractor's expense.
- 15. All damaged or corroded epoxy coated reinforcing steel requires new epoxy coated reinforcing steel to be added per Revision of Section 202 Removal of Portions of Present Structure. Unless otherwise approved, reinforcing shall not be paid for separately, but shall be included in the cost of work. All exposed epoxy coated reinforcing steel shall be cleaned by hand tools of any loose concrete and rust and the cleaned area epoxy coated prior to placing concrete. Sandblasting shall not be performed on any exposed epoxy coated reinforcing steel, unless approved by the Engineer. The Contractor shall verify all reinforcing in the deck is epoxy coated. Cleaning steel will not be paid for separately, but shall be included in the cost of the work.
- 16. Any exposed reinforcing and concrete shall be primed with Sika Armatec 110 Epocem, or approved equal, in accordance with Manufacturer's specifications. The cost shall be included with Item 601 Concrete Class D (Bridge) or Item 211 Cement Grout.
- 17. Galvanic Anode corrosion protection is required on all areas of corroded epoxy coated reinforcing prior to placing concrete. Galvanic Anodes shall be installed per the manufacturer's recommendations in accordance with the Specifications.
- Removal operations shall be coordinated with the Engineer and performed in a manner as required to ensure structural integrity of the bridge.

CONCRETE REPAIR GENERAL CONSTRUCTION SEQUENCE

- Identify delaminated/spalled concrete areas. Sawcut concrete to a depth less than existing cover to reinforcement. Remove delaminated concrete within these limits without damaging existing reinforcing.
- 2. If corroded bars are found, continue concrete removal laterally as noted in Step 1 until
- Clean exposed concrete and reinforcing by use of high pressure water or sandblasting, if non-epoxy coated.
- 4. Apply Sika Armatec 110 Epocem, or approved equal, to exposed concrete and reinforcing as a bonding agent. The bonding agent shall be applied per Manufacturer's specifications.
- 5. Place reinforcing steel, concrete formwork and concrete per Project Specifications.



TYPICAL SPANDREL BEAM (CORBEL) REPAIR DETAIL

CORBEL REPAIR NOTES:

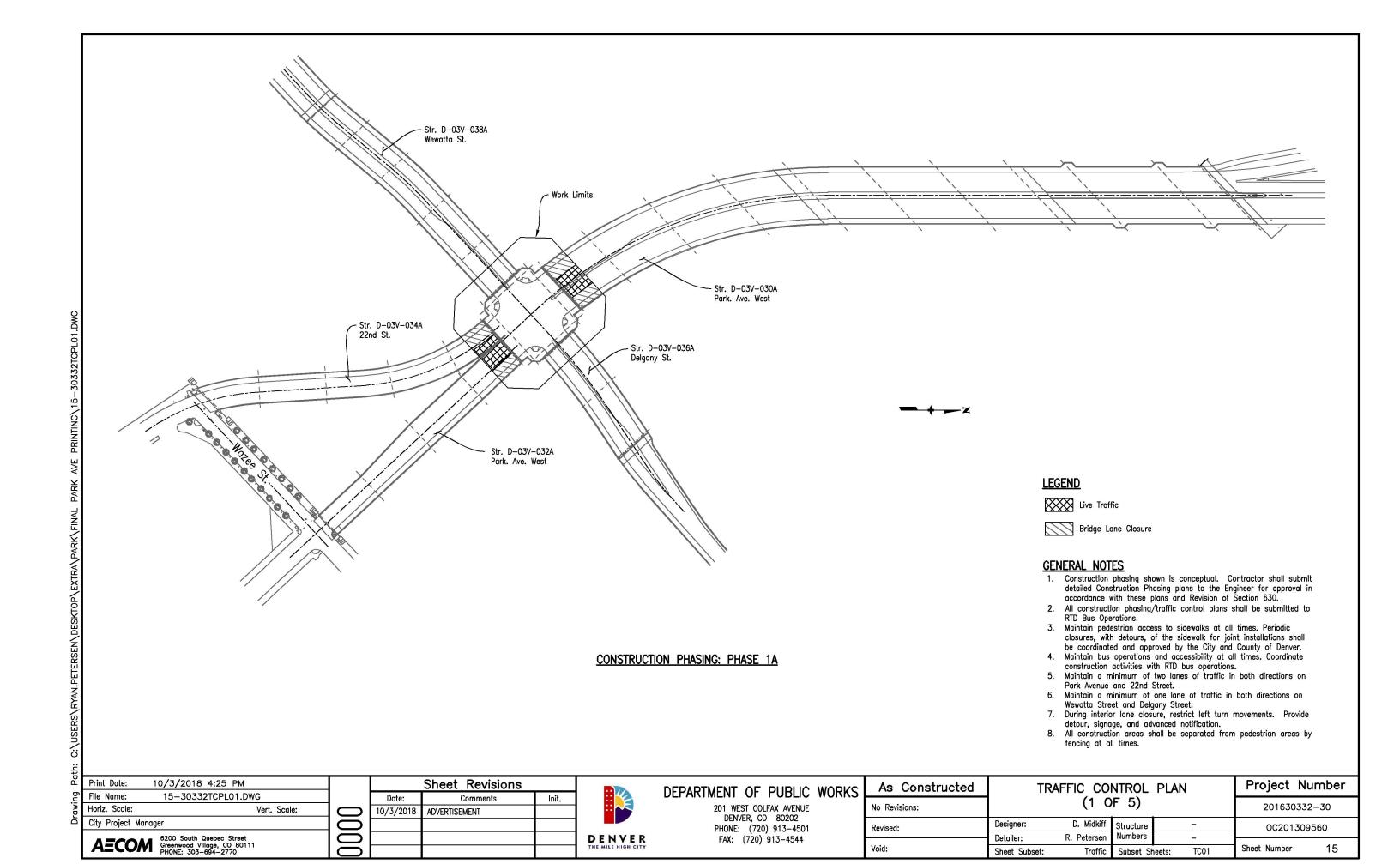
- Concrete repair areas including cracks, spalls, and delamination, shall be determined during the contractor's inspection and agreed upon by the Engineer prior to performing the work.
- Apply a Concrete sealer a minimum width of 6" outside the limits of the crack or repair area unless otherwise noted. The sealer shall not be paid for separately but shall be included in the cost of work unless otherwise noted.

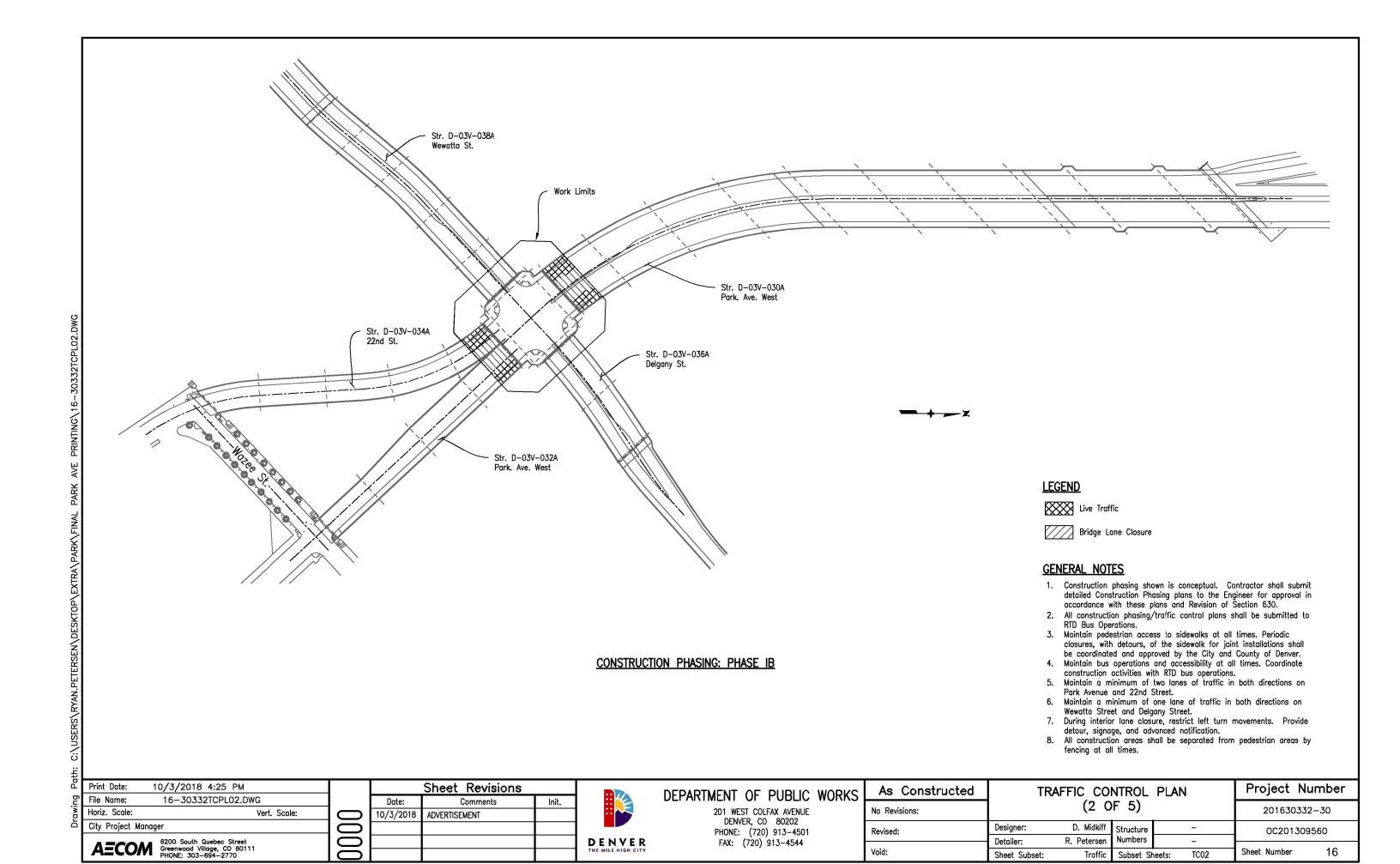
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City Project Manager				
6200 South Quebec Street Greenwood Village, CO 80111	0			
A=COM Greenwood Village, CO 80111 PHONE: 303-694-2770	0			

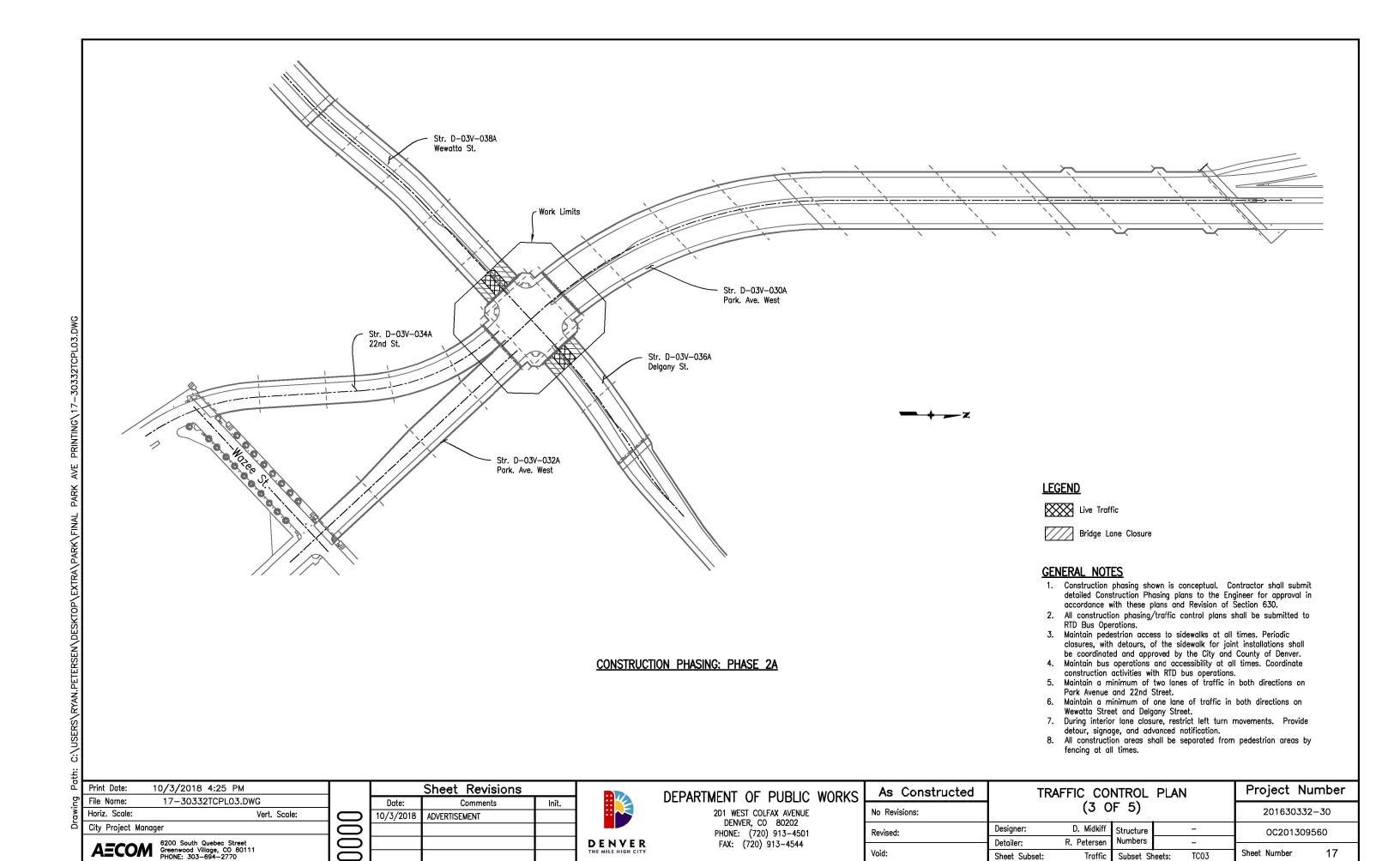


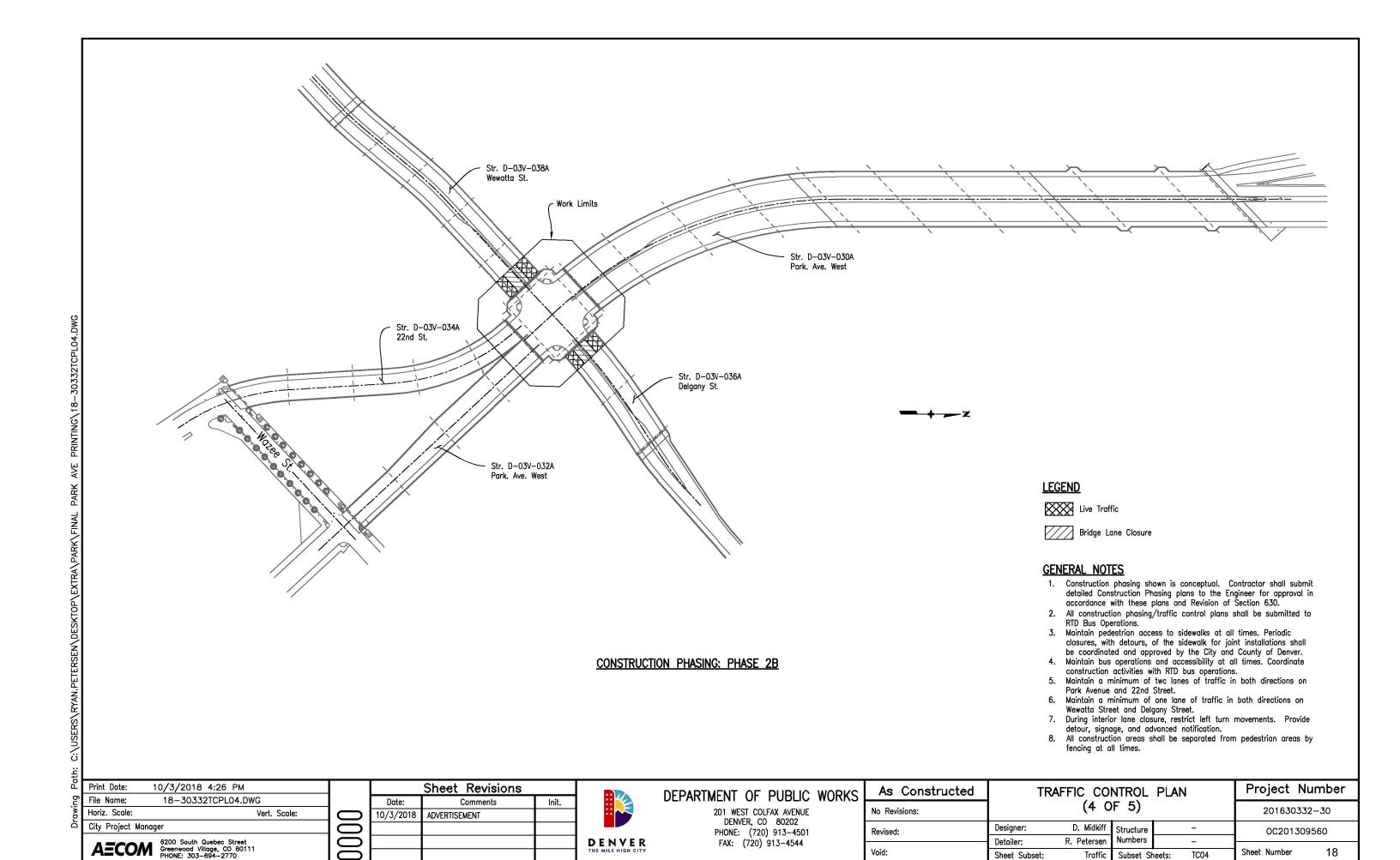
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ı		Detailer:	R. Petersen	Numbers	-		
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Void:

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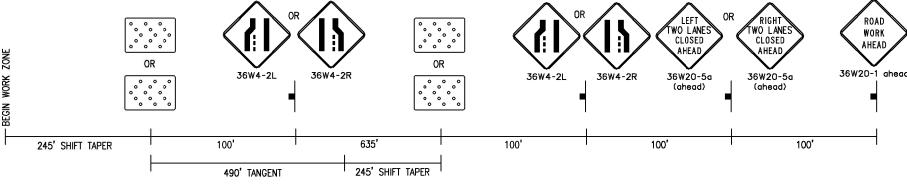
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R. Petersen

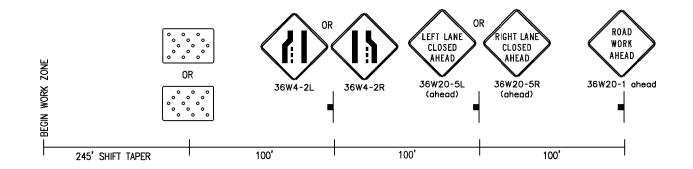
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ADVANCED SIGN SEQUENCE NORTH & SOUTHBOUND PARK AVE.



ADVANCED SIGN SEQUENCE EAST & WESTBOUND WEWATTA ST.

END ROAD WORK 36G20-2

TO BE PLACED 100' DOWNSTREAM OF WORK ZONE LIMITS

NOTES

- 1. ALL SIGNS SHALL BE DOUBLE POSTED WHEN POSSIBLE.
- 2. TAPER LENGTH "L" IS ASSUMED TO BE 245 FT.
- 3. CHANNELIZING DEVICES SHALL BE USED TO SHIFT TRAFFIC THROUGH TAPERS AND DELINEATE THE WORK ZONE FROM THE TRAVEL WAY.
- 4. ALL SIDEWALKS SHALL REMAIN OPEN UNLESS ADA COMPLIANT ALTERNATIVE IS PROVIDED. PEDESTRIAN DETOURS WILL NOT BE ALLOWED.
- 5. ACCESS TO ALL RTD BUS STOPS WITHIN PROJECT LIMITS SHALL REMAIN OPEN. TEMPORARY BUS STOPS MAY BE CREATED IF EXISTING BUS STOP CANNOT BE MAINTAINED. CONTRACTOR SHALL COORDINATE THE NEED FOR TEMPORARY BUS STOPS WITH RTD AND CCD.
- 6. A 36W20-1 AHEAD SIGN SHALL BE PLACED ON ALL PUBLIC ROADWAYS WITH ACCESS TO PARK AVE OR WEWATTA ST WITHIN THE BEGIN SIGN SEQUENCING LIMITS. SIGN SHALL BE PLACED 100' IN ADVANCE.
- 7. ALL CONSTRUCTION PHASING/TRAFFIC CONTROL PLANS SHALL BE SUBMITTED TO RTD BUS OPERATIONS.

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AECOM Greenwood Village, CO 80111 PHONE: 303-694-2770	0			



LEGEND

WORK ZONE

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	Detailer:	M. Heugh	Numbers	_		
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EROSION CONTROL(2018-EC-0000019)/BEST MANAGEMENT PRACTICES NOTES:

- 1. When work is to be completed below the Waffle Slab structure, the Contractor shall install perimeter control in the form of erosion control logs surrounding the work site as directed by CCD.
- 2. Contractor shall install inlet protection at inlets in the vicinity of the staging area as directed by CCD.
- When work is to be completed below the Waffle Slab structure, the Contractor shall install a vehicle tracking pad, as required, at the interface with paved roadway.
- 4. The owner, site developer, contractor and/or their authorized agents shall ensure that all potential pollutants generated during demolition or construction work associated with this project, be prevented from discharge to streams, wetlands or any water body in the vicinity of this project site in accordance with the following:
- 4.1. The owner, site developer, contractor and/or their authorized agents shall prevent sediment, debris and all other pollutants from entering the waterway during all demolition, excavation, trenching, boring, grading, or other construction operations that are part of this project. The owner, site developer, contractor and/or their authorized agents shall be held responsible for remediation of any adverse impacts to the municipal separate storm sewer system, receiving waters, waterways, wetlands, and or other public or private properties, resulting from work done as part of this project.
- 4.2. The owner, site developer, 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—way 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.
- 4.3. The owner, site developer, contractor and/or their authorized agents shall ensure that all loads of cut and fill material imported to or exported from this site shall be properly covered to prevent loss of the material during transport on public rights of way. (Sec.49– 552; Revised Municipal Code)
- .4. The use of rebar to anchor best management practices, other than portable toilets, is prohibited.
- 4.5. The owner, site developer, contractor and/or their authorized agents shall implement the fallowing best management practices (BMPs) on site during construction:
- 4.5.1. Vehicle tracking pad: this BMP is required at all access points for ingress/egress from off-site impervious surfaces to construction site pervious areas that are used by vehicular traffic or construction equipment. Location is to be determined by the contractor and Storm Water Management Plan (SWMP) administrator for construction.
- 4.5.2. 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.
- 4.5.3. Interim site stabilization: this BMP is required to provide a measure for preventing the discharge of sediment from construction sites where overlot grading or 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 wmd approval)
- 4.5.4. Waste management/containment: this BMP requires that all construction wastes, fuels, lubricants, chemical wastes, trash, sanitary wastes, contaminated sails 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.
- 4.5.5. 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.
- 4.5.6. Chute washout containment: water used in the cleaning of cement 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 completely contained. Wash water discharged into the containment area shall be properly disposed. Dried cement waste is removed from the containment area and properly disposed of.
- 4.5.7. The direct or indirect discharge of water containing waste cement to the storm sewer system is prohibited (Sec.56-102a, c; Revised Municipal Code, City and County of Denver).
- 4.5.8. Sweeping: this BMP requires that impervious surfaces which are adjacent to or contained within construction sites be sweep on a daily basis or as needed during the day 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.

- 4.5.9. 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.
- 4.5.10. 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 receiving 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 re-vegetation operations, chemical soil stabilizer application (requires Denver Public Wworks approval), or erosion control matting/geotextiles. If stockpiles are located within 100 feet of receiving waters, a drainageway or the site perimeter, additional sediment controls shall be required.
- 4.5.11. 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 take place. 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)
- 4.5.12. Structural controls: development sites that are required to provide detention and water quality enhancement facilities for storm runoff need to install the detention facilities early in the construction build—out of the site. Projects that are using underground detention are required to install a pretreatment structure(s) or sedimentation basin(s) as a means of treating potentially polluted storm water prior to entering the detention structure. Use of these structures is required for entrapping sediment and construction debris during the active construction phase of the project. A narrative section of a management plan should address operation and maintenance of the structural controls being used as an active construction BMP.
- 4.6. Operating condition for the duration of this project. All necessary maintenance and repair shall be completed immediately upon discovery of any deficiency or defect. BMPs shall be maintained and kept effective.
- Contractor must complete and submit a Spill Prevention, Control and Countermeasure (SPCC) document.
- 6. Erosion control logs are not to scale and placement is approximate.
- For erosion control log installation, see Sheet SW03.

TABULATION OF SWMP QUANTITIES									
LOCATION (STRUCTURE NUMBER)		EROSION LOG TYPE I (12 INCH)		CONCRETE WASHOUT STRUCTURE		VEHICLE TRACKING PAD		EROSION CONTROL MANAGEMENT	
	ITEM	208-0	00002	208-00045		208-00070		208-00207	
	UNIT	L	.F	EA		EA		DAY	
		PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST	PLAN	AS CONST
WAFFLE SLAB (D-03-V-030A)		1162		1		1		15	
PROJECT TOTALS		1162		1		1		15	
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City Project Manager			0			
AECOM 6200 South Quebec Street Greenwood Village, CO 80111 PHONE: 303-694-2770			00			



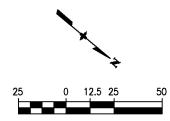
DEPARTMENT OF PUBLIC WORKS

201 WEST COLFAX AVENUE

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	Revised:	Designer:	J. Rodriguez	Structure		_	OC201309560	
		Detailer:	R. Petersen	Numbers	-			
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NOTES:

- 1. See sheet SW01 for Erosion Control/Best Management Practices Notes.
- 2. See sheets BR03-BR05 for approximate locations of bridge work.
- 3. Erosion control logs are not to be placed across rails.
- 4. See sheets RR01-RR04 for rail track identification.
- 5. Contractor shall determine location of concrete washout structure.

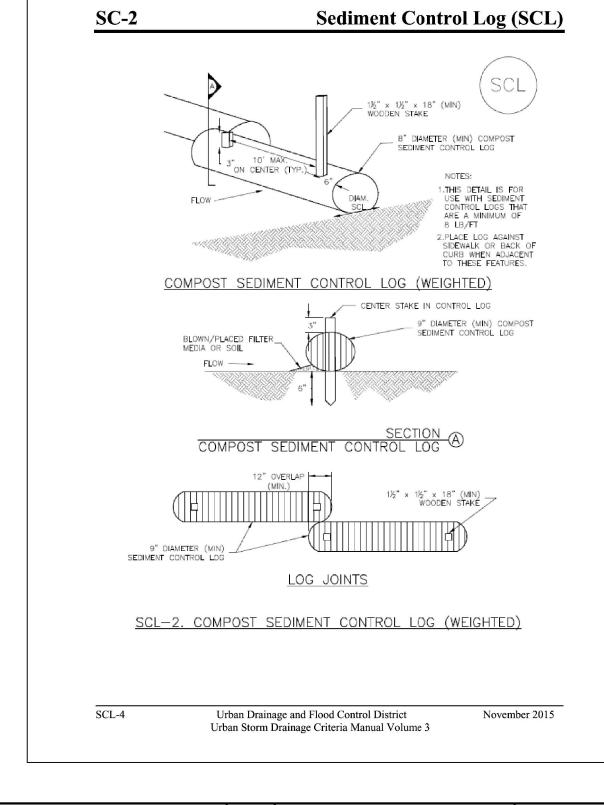


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Revised:	Designer:	J. Rodriguez	Structure Numbers	_	0C201309560
	Detailer:	Detailer: R. Petersen		-	
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SC-2

Sediment Control Log (SCL)

SEDIMENT CONTROL LOG INSTALLATION NOTES

- 1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
- 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.
- 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
- 4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.
- 5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ½ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.
- 6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS, THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.
- 7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

- 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- 4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
- 5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SCL-6 Urban

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2015

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DEPARTMENT OF PUBLIC WORKS

S	As Constructed	STORMWATER MANAGEMENT PLAN					Project Number		
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	Revised:	Designer:	J. Rodriguez	Structure		j.—	OC201309560		
ŀ		Detailer:	R. Petersen	Numbers _		7 <u>—</u>			
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