CITY AND COUNTY OF DENVER STATE OF COLORADO



Department of Public Works

Contract Documents

Contract Number: 201628023

Castro Roof June 6, 2016

Denver Public Works

Engineering Division

Capital Projects Management - Dept. 506

Right-of-Way Services - Dept. 507

Traffic Engineering Services - Dept. 508

Policy and Planning - Dept. 509

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

NOTICE OF APPARENT LOW BIDDER

Alpine Roofing Co., Inc. 4780 York Street Denver, Colorado 80216

The EXECUTIVE DIRECTOR OF PUBLIC WORKS has considered the Bids submitted on **July 7, 2016**, for work to be done and materials to be furnished in and for:

CONTRACT NO. 201628023 CASTRO ROOF

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: Lump Sum + two alternates, the total estimated cost thereof being: \$604,838.43.

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 B1.12.2 of the Charter of the City and County of Denver.

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

NOTICE OF APPARENT LOW BIDDER

CONTRACT NO. <u>201628023</u> 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.

CITY AND COUNTY OF DENVER

Ву

Jose M. Cornejo, P.E.

Executive Director of Public Works

cc: Jeffrey Garcia (AUD), Doug Schellinger (Treasury/Tax Compliance), Steve Martinez, David Brown, Rob Merritt (PW-Aud), File.

CITY AND COUNTY OF DENVER STATE OF COLORADO



Department of Public Works Bid Form

Contract Number: 201628023

Castro Roof
June 6, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS

Engineering Division

TABLE OF CONTENTS FOR BID FORM AND SUBMITTAL PACKAGE SBE Defined Pool

Table of Contents	BF-1
Bidder's Checklist	BF-2 through BF-3
Bid Form and Submittal Package Acknowledgment Form	BF-4 through BF-5
Bid Form	BF-6 through BF-9
List of Proposed Small Business Enterprise(s)	BF-10 through BF-13
Commitment to Small Business Enterprise Participation	BF-14
Small Business Enterprise Letter(s) of Intent & Checklist	BF-15 through BF-16
Joint Venture Affidavit	BF-17
Joint Venture Eligibility Form	BF-18 through BF-20
Bid Bond	BF-21
Diversity and Inclusiveness in City Solicitations Form	BF-22 through BF-25



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. <u>BIDDER'S CHECKLIST</u>

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

FORM/ PAGE NO.	COMMENTS	COMPLETE
BF-4 – BF-5	a.) 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 % and fee in the space provided 	
BF-8	a.) List all subcontractors who are performing work on this project	
BF-9 – BF-10	a.) Fully complete List of Proposed Minority /Woman Business Enterprise Bidders, Subcontractors, Suppliers, Manufacturers, or Brokers – check appropriate boxes.	
BF-11	a.) Complete all blanksb.) If Addenda have been issued, complete bottom section.	
BF-12	a.) Complete appropriate sections - signature(s) required.b.) If corporation, then corporate seal required.	
BF-13	a.) Fully complete Commitment to Participation	
BF-16	a.) If applicable, fully complete Joint Venture Affidavit (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 <u>complete</u> , <u>sign</u> , <u>and return</u> the "Diversity and Inclusiveness in City Solicitations Information Request Form" with their Bid.	

Textura ® Construction Payment Management System (CPM System)

Contractor recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (CPM System) for this Project. All fees associated with the CPM System are to be paid by the Contractor for billings for work performed. Bidders are required, when preparing a bid, to enter the price of the CPM service on the line provided for the service. The fee is all inclusive of all subcontractor, project and subscription fees associated with the CPM system. The bidder will calculate the fee based on a percentage of their overall base bid, and then should include it on the line item provided in the bid form labeled "Textura® Construction Payment Management System Fee". This expense becomes part of the contract and billable to the City. Textura will invoice the awarded contractor directly.

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

For more information:

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

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Engineering Division

BID FORM AND SUBMITTAL PACKAGE ACKNOWLEDGMENT

CONTRACT NO. 201628023

Castro Roof

BIDDER:	Alpine Roofing Co., Inc. (Legal Name per Colorado Secretary of State)
ADDRESS:	4780 York Street, Denver CO 80216

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. 201628023, Castro Roof, made available to the undersigned bidder pursuant to Notice of Invitation for Bids dated June 6, 2016.

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

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

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

Bid Form and Submittal Package Acknowledgment Form
Bid Form
SBE Commitment Form and List of Proposed Participants
Joint Venture Affidavit (if applicable)
Joint Venture Eligibility Form (if applicable)
Bid Bond
Certificate of Insurance

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

Notice of Invitation for Bids Instructions to Bidders Addenda (as applicable) Equal Employment Opportunity Provisions (Appendix A and Appendix F) Contract Form General Contract Conditions **Special Contract Conditions** Performance and Payment Bond Notice to Apparent Low Bidder Notice to Proceed Contractor's Certification of Payment Form Final/Partial Lien Release Form Final Receipt Change Orders (as applicable) Federal Requirements (as applicable) Prevailing Wage Rate Schedule(s) **Technical Specifications**

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: Alpine Roofing Co., Inc.

Contract Drawings

Robin J. Tichy

Title: President

ATTEST:

Robert D. Tichy, Vice President

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Engineering Division

BID FORM

CONTRACT NO. 201628023 Castro Roof

BIDDER Alpine Roofing Co., 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 June 6, 2016, to furnish all required materials, tools, appliances, equipment and plant; to perform all necessary labor and to undertake and complete: CONTRACT NO. 201628023, Castro Roof, 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 SBE Participation/List of Proposed Participants/Letters of Intent

Article VII 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 Drawings

Lump Sum Total Amount		<u>\$495,196.00</u>
Textura ® Fee from table on Page BF-3_2	22% of Lump Sum	§ 1,089.43
Total Lump Sum Amount plus Textura ®	Fee equals Total Bid	\$496,285.43
Total Bid Amount equals the Sub-total Bid Amount		
Four Hundred Ninety Six Thousand Two Hundred		nd Forty Three Cents
Dollars (\$496	,285.43)
Add Alternate #1 Reroof Decks 2 & 3 Amount of	-	
Forty Nine Thousand Fourteen		Dollars
(\$49,014.00		
Add Alternate #2		
Reroof Decks 4 & 5		
Amount of		
Fifty Nine Thousand Five Hundred Thirty Nine		Dollars
(\$59,539.00)		
<u>CASTRO ROOF</u> SUPPLEMENTAL PRICING DISCLOSUI	RE – UNIT PRICES	
Fiberglass faced isocyanurate foam \$	3 100.00	/100 bd ft.

after the date of the Notice: (i) execute the attached	e with the Contract Documents, be ready to, and shall, within five (5) days form of Contract in conformity with this bid; (ii) furnish the required proofs bonds in the sum of the full amount of this bid, executed by a surety company
The Suretec Insurance Company, a componed. If such surety is not approved by the Manage	corporation of the State of <u>Texas</u> , is hereby offered as Surety on said ter, another and satisfactory surety company shall be furnished.
5% of bid . The Undersigned and become the property of the City as liquidated the City; (ii) the City notifies the Undersigned Bidd	s defined in the attached Instructions to Bidders, in the amount of d Bidder agrees that the entire amount of this bid guarantee is to be paid to damages, and not as a penalty, if: (i) the bid is considered to be the best by ler that it is the Apparent Low Bidder; and (iii) the Undersigned Bidder fails furnish the required bond and proofs of insurance, within five (5) days after terested with the Undersigned Bidder in this bid:
Name:	Name:
Address:	Address:
If there are no such persons, firms, or corporations,	•
There are no such persons firms or	COLDOLATIOUS

If the Manager mails a written Notice of Apparent Low Bidder, addressed to the Bidder's business address stated on this Bid

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; Work	Proposed Subcontractor and Address
Mechanical	1%	Legacy Mechanical Inc., 1455 S Platte River Dr, Denver CO 80233
Crane	1%	RMS Cranes, 1600 W 66th Ave, Denver CO 80229
	hapter 100 miles (100 miles 100 mile	
- Control of the cont		
	-	
para antina di antina	Approximate on the second of t	

	. Management of the second (<u></u>
	-	

(Copy this page if additional room is required.)



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

Office of Economic Development
Division of Small Business Opportunity
Compliance Unit
201 West Coffax Avenue, Dept. 907
Denver, CO 60202
Phone: 720-913-1999
Fax: 720-913-1803
DSBO@denvergov.org

City and County of Denver Contract No.: 201628023

The undersigned Bidder proposes to utilize the following SBE for the project. All listed firms are CURRENTLY certified by the City and County of Denver. Only the level of SBE participation listed at the bid opening will count toward satisfaction of the project goal. Only bona fide commissions may be counted for Brokers. SBE prime bidders must detail their bid information below. Please copy and attaach this page to list additional SBE.

		te commisions may be counted se copy and attaach this page			
	Prime Bio	dder			
Business Name:					
Address:		Contact Person:			
Type of Service:		Dollar Amount: \$:	Percent of Project:		
	SBE Prime	Bidder			
Business Name: Alpine Roofi	ng Co., Inc.				
Address: 4780 York Stree	t, Denver CO 80216	Contact Person: Robi	in J. Tichy		
Type of Service: Roofing	•	Dollar Amount: \$: \$486,360.00	Percent of Project: 98%		
Subcontract	ors, Suppliers Manufact	turers or Brokers (check on	e box)		
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name: N/A					
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (√)		
Business Name:					
Address:		Type of Service:	Type of Service:		
Contact Person:		Dollar Amount: \$:	Percent of Project:		
Subcontractor (v)	Supplier (√)	Manufacturer (v)	Broker (√)		
Business Name:					
Address:		Type of Service:			
Contact Person:		Dollar Amount: \$:	Percent of Project:		

Subcontra	ctors, Suppliers Manufac	turers or Brokers (check o	ne box)
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)
Business Name:			
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:
Subcontractor (√)	Supplier (√)	Manufacturer (√)	Broker (√)
Business Name:			
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (v)
Business Name:			
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (√)
Business Name:			
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:
Subcontractor (√)	Supplier (v)	Manufacturer (√)	Broker (√)
Business Name:			
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (√)
Business Name:		-	
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:
Subcontractor (v)	Supplier (√)	Manufacturer (√)	Broker (√)
Business Name:			
Address:		Type of Service:	
Contact Person:		Dollar Amount: \$:	Percent of Project:

List of Proposed SBE rev 011411 JG

The undersigned Bidder hereby certifies that the information provide above regarding its performance on the Project is true and correct and that the undersigned Bidder is a currently certified SBE or qualifying Joint Venture.

Further, 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 SBEs 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 SBE "Letter of Intent" in three (3) working days on a SBE project on each of its SBE subcontractors. The "Letter of Intent" form is contained in the Contract Documents.

The undersigned Bidder acknowledges the right of the City to reject any or all bids submitted, to waive informalities in bids and to re-advertise this Project for bids based on any failure to comply with the SBE program requirements set forth herein...

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

4700 Vaul. Otra -4

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.

Busines	s Address of Bidder: 4/80 YORK Street		
City, Sta	ate, Zip Code: Denver CO 80216		
Telepho	ne Number of Bidder: 303-295-7769	Fax No. 303-296-6803	
Contact	Name for this Project: Robin J. Tichy		_
Social S	ecurity or Federal Employer ID Number of Bidder:	84-0738377	
Name ar	nd location of the last work of this kind herein conte	emplated upon which the Bidder was engage	d:
Wildern	ness Construction, City & County of Denver, G	Cook Park Recreation Center	
For info	rmation relative thereto, please refer to:		
Name:	Robin J. Tichy		
Title:	President		
Address:	4780 York Street, Denver CO 80216	***	
The und Docume	ersigned acknowledges receipt, understanding, annts:	d full consideration of the following add	enda to the Contract
	Addenda Number_1	_Date_6/30/16	
	Addenda Number	Date	
	Addenda Number	Date	
Dated thi	s_7thday of _July	, 20_16	

ure of Blader:			
If an Individual:			doing busin
	as		
If a Partnership:			
	by:		,General Partner.
If a Corporation:	Alpine Roofing Co., Ir	nc.	
	a Colorado		, Corporation
	by:	Ulin QU	Juchy, its Presiden
Attest:	Robin J.		7
17/		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Secretary Robert D	O. Tichy (Corporate Seal)	JUNO FING	One.
		EW: CORPORATE	
nt Venture, signature	of all Joint Venture particips	ME CHAL	:Z=
Firm:	nership () or () Limited Liabi		<u>:</u>
			0 3
Corporation (), Partn	ership () or () Limited Liabi	lity Company	, illing
By:		(If a Corporat	tion)
Title:		Secretary	(Corporate Seal)
		Societary	(corporate sear)
Firm:			
Corporation (), Partne	ership () or () Limited Liabil	lity Company	
			ion)
	ership () or () Limited Liabil		ion)
Ву:		_ (If a Corporat	ion) (Corporate Seal)
Ву:		_ (If a Corporat	
By: Title:		(If a Corporat Attest: Secretary	
By: Title: Firm: Corporation (), Partner	ership () or () Limited Liabil	(If a Corporat Attest: Secretary	(Corporate Seal)
By: Title: Firm: Corporation (), Partne		(If a Corporat Attest: Secretary	(Corporate Seal)
By: Title: Firm: Corporation (), Partner By:	ership () or () Limited Liabil	(If a Corporat Attest: Secretary	(Corporate Seal)



COMMITMENT TO SBE PARTICIPATION

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

The undersigned has satisfied the (Please check the appropriate both		quirements	s in the	following manner	
☐ The Bidder/Proposer is committed to the minimum advertised project goal for SBE 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: With the proposal when due					
☐ The Bidder/Proposer is unable to m of% SBE utilization on the prostatement of their good faith effort in acmust submit Letters of Intent for each sopening or at time proposal is submitted.	ject. The Bidder/Proposi cordance with DRMC So SBE listed in the Bid Forr	er understan ection 28-62	ds that t and 28-	they must submit a detailed 67 of Ordinance 85 and	
☑ The Bidder/Proposer is a certified \$ minimum of 98% % of the work on the work of the work on the work of the work on the work of the wo		n the City an	d is con	nmitted to self-perform a	
Bidder/Proposer (Name of Firm): Alpii	ne Roofing Co., Inc.				
Firm's Representative (Please print):	Robin J. Tichy				
Signature (Firm's Representative):					
Title: President					
Address: 4780 York Street, Denver CO 80216					
City: Denver State: CO Zip: 80216					
Phone: 303-295-7769	Fax: 303-296-6803		Email	ichy@alpineroofingco.com	



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

LETTER OF INTENT (LOI)

INSTRUCTIONS FOR COMPLETION & SUBMISSION:

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

WWBE, SBE, EBE or DBE or Self-Performing Jucky Date: 7/7/16	Contract No.: 201628023	Project No	ame:	Castro Ro	of				
Name of Bidder/Consultant Alpine Roofing Co., Inc. Pess No. Phone: 303-295-7769	A. The Follow This Letter of Intent Mus	ving Section	Is To	Be Complete Bidder/Con	ed by the Bid	der/C	onsultant E. SBE. EB	E or I	OBE
Address: 4780 York Street B. The Following Section is To Be Completed by the M/WBE, SBE, EBE or DBE, at any Tier This Letter of Intent Must be Signed by the M/WBE, SBE, EBE or DBE and Bidder/Consultant Name of Certified Firm: Alpine Roofing Co., Inc. Contact Person: Robin J. Tichy Email: //lichy@alpineroofingco.com Fax: 303-295-7769 Email: //lichy@alpineroofingco.com Fax: 303-295-7769 Email: //lichy@alpineroofingco.com Fax: 303-295-7769 Fax	Name of Bidder/Consultant:			Sel	-Performing:				
Address: 4780 York Street B. The Following Section is To Be Completed by the M/WBE, SBE, EBE or DBE, at any Tier This Letter of Intent Must be Signed by the M/WBE, SBE, EBE or DBE and Bidder/Consultant Name of Certified Firm: Alpine Roofing Co., Inc. Contact Person: Robin J. Tichy Address: 4780 York Street City: Denver State: CO Zip: 80216 Fax: 303-295-7769 Fax: 303-296-6803 Address: 4780 York Street City: Denver State: CO Zip: 80216 Filease check the designation of this firm: WWWBE, SBE, EBE or DBE is not a direct first tier subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker which is utilizing the participation of this firm: A Copy of the M/WBE, SBE, EBE or DBE Letter of Certification must be Attached Identify the scope of the work to be performed or supply item that will be provided by the M/WBE/SBE/DBE. On unit price bids only, identify which bid line items the M/WBE/SBE/DBEs scope of work or supply corresponds to. Roofing and sheet metal Subcontractor/Subconsultant (1) Supplier (1) Broker (1) Broker (1) Broker (1) Broker (2) Broker (3) Broker (4) Broker (4) Broker (5) 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 subconsultant intends to be utilize the aforementioned M/WBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant M/WBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant M/WBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant M/WBE, SBE, EBE or DBE will perform is: If the fee amount of the work to be performed is requested, the fee amount, is: Bidder/Consultant M/WBE, SBE, EBE or DBE err DBE fo						om	Fax: 303	-296	-6803
This Letter of Intent Must be Signed by the MWBE, SBE, EBE or DBE and Bidder/Consultant Name of Certified Firm: Alpine Roofing Co., Inc. Phone: 303-295-7769 Phone: 303-295-7769 Email: fitchy@alpineroofingco.com Fax: 303-296-6803 Address: 4780 York Street City: Denver State: Co Zip: 80216 Piease check the designation which applies to the certified firm. X MWBE X SBE EBE X DBE X Performing (*) Indirect Utilization: If this MWBE, SBE, EBE or DBE is not a direct first fier subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker which is utilizing the participation of this firm: A Copy of the M/WBE, SBE, EBE or DBE Letter of Certification must be Attached Identify the scope of the work to be performed or supply item that will be provided by the M/WBE/SBE/DBE. On unit price bids only, identify which bid line items the M/WBE/SBE/EBE/DBEs scope of work or supply corresponds to. Roofing and sheet metal Subcontractor/Subconsultant (*) Supplier (*) Bidder intends to utilize the aforementioned M/WBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor M/WBE, SBE, EBE or DBE for he Work/Supply described above. The percentage of the work of the total subconsultant M/WBE, SBE, EBE or DBE for he work of the vork to be performed is requested, the fee amount, is: Sidder/Consultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for he work of the vork to be performed is requested, the fee amount, is: Sidder/Consultant Signature. Robin J. Tichy Date: 7/7/16				City: Denve	er		State: CO	Zip:	80216
Contact Person: Robin J. Tichy Address: 4780 York Street City: Denver State: CO Zip: 80216 Please check the designation which applies to the certified firm. X MWBE X SBE EBE X DBE X Performing (*) Indirect Utilization: If this MWBE, SBE, EBE or DBE is not a direct first tier subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker which is utilizing the participation of this firm: A Copy of the M/WBE, SBE, EBE or DBE Letter of Certification must be Attached Identify the scope of the work to be performed or supply item that will be provided by the MWBE/SBE/DBE. On unit price bids only, identify which bid line items the M/WBE/SBE/EBE/DBEs scope of work or supply corresponds to. Roofing and sheet metal Subcontractor/Subconsultant (*) Supplier (*) Bidder intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor M/WBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant MWBE, SBE, EBE or DBE for the work of the total subconsultant MWBE, SBE, EBE or DBE will perform is: 6 Consultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the work of the total subconsultant MWBE, SBE, EBE or DBE will perform is: 8 Consultant MWBE, SBE, EBE or DBE will perform is: 9 Consultant MWBE, SBE, EBE or DBE will perform is: 10 A Copy of the MWBE, SBE, EBE or DBE or BE or DBE or BE o							THE STATE OF STREET		
Address: 4780 York Street City: Denver State: CO Zip: 80216 Please check the designation which applies to the certified firm. X MWBE X SBE (s) EBE X DBE X DBE X DBE X Self-Performing (v) Indirect Utilization: If this MWBE, SBE, EBE or DBE is not a direct first tier subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker which is utilizing the participation of this firm: A Copy of the MWBE, SBE, EBE or DBE Letter of Certification must be Attached Identify the scope of the work to be performed or supply item that will be provided by the MWBE/SBE/DBE. On unit price bids only, identify which bid line items the M/WBE/SBE/EBE/DBEs scope of work or supply corresponds to. Roofing and sheet metal Subcontractor/Subconsultant (v) Supplier (v) Broker	Name of Certified Firm: Alpine Roo	ofing Co.,	Inc.				Phone: 30	3-29	95-7769
Please check the designation which applies to the certified firm. X MWBE X SBE (N) BBE X DBE X	Contact Person: Robin J. Tichy		Ema	rjtichy@alp	ineroofingco.co	m	Fax: 303-	296-	6803
Please check the designation which applies to the certified firm. X MWBE X SBE (V) Indirect Utilization: If this MWBE, SBE, EBE or DBE is not a direct first tier subcontractor/subconsultant, supplier or broker to the Bidder/ Consultant, please indicate the name of the subcontractor/subconsultant, supplier or broker which is utilizing the participation of this firm: A Copy of the MWBE, SBE, EBE or DBE Letter of Certification must be Attached Identify the scope of the work to be performed or supply item that will be provided by the MWBE/SBE/DBE. On unit price bids only, identify which bid line items the MWBE/SBE/EBE/DBEs scope of work or supply corresponds to. Roofing and sheet metal Subcontractor/Subconsultant (V) Supplier (V) Bridger intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor MWBE, SBE, EBE or DBE bid amount is: Consultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant MWBE, SBE, EBE or DBE work of the total subconsultant MWBE, SBE, EBE or DBE work of the total subconsultant MWBE, SBE, EBE or DBE work of the total subconsultant Signature: Robin J. Tichy Date: 7/7/16 Title: President WWBE, SBE, EBE or DBE or DBE or Self-Performing, Date: 7/7/16	Address: 4780 York Street		City	Denver			State: CO	Zip:	80216
A Copy of the M/WBE, SBE, EBE or DBE Letter of Certification must be Attached Identify the scope of the work to be performed or supply item that will be provided by the M/WBE/SBE/DBE. On unit price bids only, identify which bid line items the M/WBE/SBE/EBE/DBEs scope of work or supply corresponds to. Roofing and sheet metal Subcontractor/Subconsultant (1) Supplier (1) Broker (1) Broker (1) Broker (1) Broker (2) Broker (3) Broker (3) Broker (4) Broker (4) Broker (5) Broker (5) Broker (6) Broker (7) Broker (7) Broker (8) Supplier intends to utilize the aforementioned M/WBE, SBE, EBE or DBE for the Work/Supply described above. The cost of the work and percentage of the total subcontractor M/WBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant 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 subconsultant M/WBE, SBE, EBE or DBE will perform is: If the fee amount of the work to be performed is requested, the fee amount, is: Bidder/Consultant's Signature: WWBE, SBE, EBE or DBE or Self-Performing Broker (1) Broker	Please check the designation which applies to the certified firm.		х	SBE	EBE	X		х	Performing
Subcontractor/Subconsultant (1) Bidder intends to utilize the aforementioned M/WBE, SBE, EBE or DBE for the World/Supply described above. The cost of the work and percentage of the total subcontractor M/WBE, SBE, EBE or DBE bid amount is: **Consultant intends to utilize the aforementioned M/WBE, SBE, EBE or DBE for the World/Supply described above. The percentage of the work of the total subconsultant M/WBE, SBE, EBE or DBE will perform is: **If the fee amount of the work to be performed is requested, the fee amount, is: **Bidder/Consultant's Signature:** **WWBE, SBE, EBE or DBE or Self-Performing	price bids only, identify which bid li								
Bidder intends to utilize the aforementioned M/WBE, SBE, EBE or DBE for the World/Supply described above. The cost of the work and percentage of the total subcontractor M/WBE, SBE, EBE or DBE bid amount is: % Consultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the World/Supply described above. The percentage of the work of the total subconsultant M/WBE, SBE, EBE or DBE will perform is: f the fee amount of the work to be performed is requested, the fee amount, is: Bidder/Consultant's Signature: WWBE, SBE, EBE or DBE or Self-Performing WWBE, SBE, EBE or DBE or Self-Performing Date: 7/7/16	RESIDENCE OF THE PROPERTY OF T	(4)	Su	upplier (v)		9	Bro	ker	(v)
% Consultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant MWBE, SBE, EBE or DBE will perform is: ### MWBE, SBE, EBE or DBE will performed is requested, the fee amount, is: Bidder/Consultant's Signature:	Bidder intends to utilize the aforement	tioned M/WB	E, SBI	E, EBE or DB	E for the Work	/Supp	ply describe	d abo	ve. The cost
Consultant intends to utilize the aforementioned MWBE, SBE, EBE or DBE for the Work/Supply described above. The percentage of the work of the total subconsultant MWBE, SBE, EBE or DBE will perform is: ### The fee amount of the work to be performed is requested, the fee amount, is: ### Robin J. Tichy Date: 7/7/16		subcontract	or M/V	VBE, SBE, EE	E or DBE bid	amou	unt is:		0/
the Work/Supply described above. The percentage of the work of the total sub- consultant MWBE, SBE, EBE or DBE will perform is: ### Robin J. Tichy Date: 7/7/16									70
Bidder/Consultant's Signature: Juny Juny Robin J. Tichy Date: 7/7/16 Title: President WWBE, SBE, EBE or DBE or Self-Performing Juny Date: 7/7/16	the Work/Supply described above. Th	e percentage	of the						%
WWBE, SBE, EBE or DBE or Self-Performing Jucky Date: 7/7/16	If the fee amount of the work to be per	formed is red	uestec	d, the fee amo	ount, is: S				
WWBE, SBE, EBE or DBE or Self-Performing Jucky Date: 7/7/16	Bidden/Consultant's Signature	in Dal	ich	Robin J. T	ichy	Da	ate: 7/7/16	6	
Firm's Signature: Rule of William Signature: Date: 111110	Title: President	0		0					
Robin J. Yichy	M/WBE, SBE, EBE or DBE or Self-Per Firm's Signature:	hill	ici	hy	0.000	Da	ate: 7/7/16	3	
the above named Bidder/Consultant is not determined to be the successful Bidder/Consultant, this Letter of Intent shall be null and void.	Title: President								

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.

1	Submit the attached completed checklist with this letter.
Completed ✓	
	Project Number & Project Name
V	Section A: Name of Bidder/Consultant, Contact Person, Address, City, State, Zip, Phone, Email
V	Section B: Name of Certified Firm, Contact Person, Address, City, State, Zip, Phone, Email
V	Designation checked for MBE/WBE, SBE, EBE or DBE
□ _{N/A}	Indirect Utilization: Name of subcontractor/subconsultant, supplier or broker is indicated if using the participation of a 2 nd fier subcontractor/subconsultant, supplier or broker.
	Scope of work performed or item supplied by M/WBE, SBE, EBE or DBE
□ N/A	Line items performed, if line-item bid.
	Copy of M/WBE, SBE, EBE or DBE Letter of Certification Attached
☐ N/A	Designation checked for Subcontractor/Subconsultant, Supplier or Broker
	If project is a hard bid
□ _{N/A}	Bidder has indicated dollar amount for value of work going to Subcontractor/ Subconsultant, Supplier or Broker
□ _{N/A}	Bidder has indicated percentage for value of work going to Subcontractor/ Subconsultant, Supplier or Broker
	If project is an RFP/RFQ
□ _{N/A}	Consultant has indicated percentage for value of work going to Subcontractor/ Subconsultant, Supplier or Broker Name & contact name for MWBE.
□ _{N/A}	Fee amount if fee amount of work to be performed is requested.
Ø	Bidder/Consultant's Signature, Title & Date
	M/WBE, SBE, EBE or DBE Firm's Signature, Title and Date

Select One ✓	SUBMITTED VIA For Construction Hard Bids, Bidders are strongly urged to deliver the LOI via one of the methods below. (The preferred method is to scan/email completed forms to email address below. Delivery to any other point cannot be guaranteed timely delivery.)
□ N/A	Email to DSBO@denvergov.org
□ N/A	Fax to 720-913-1803

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

COMP-FRM-012 Revised 9-8-14



JOINT VENTURE AFFIDAVIT

Office of Economic Development Division of Small Business Opportunity Compliance Unit
201 West Colfax Avenue, Dept. 907
Denver, CO 80202
Phone: 720-913-1899
Fax: 720-913-1803
DSBO@denvergov.org

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

concerning false statements.						
Name of Firm:						
Print Name:		Title				
Signature:				Date:		
	Notary Pub	lic				
County of	State of		ommiss	ion Expires:		
Subscribed and sworn before me this				•		
day of	, 20					
Notary Signature:				Notary Seal		
Address:						
Name of Firm:						
Print Name:		Title				
Signature:				Date:		
Notary Public						
County of	State of	My C	ommiss	ion Expires:		
Subscribed and sworn before me this						
day of	, 20					
Notary Signature:				Notary Seal		
Address:						
Name of Firm:						
Print Name:		Title				
Signature:				Date:		
Notary Public						
County of	State of	My C	ommiss	ion Expires:		
Subscribed and sworn before me this						
day of	, 20					
Notary Signature:				Notary Seal		
Address:						

Rev 122910 JG



JOINT VENTURE ELIGIBILITY FORM

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

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

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

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

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

ii you have questions regarding this process, please contact bobbo at 720-310-1333.						
Joint Venture Information						
Name:				Contact Per	rson:	
Address:						
City:		State:	Zip:		Phone:	
		Joint Venture Pa	articipants	s		
Name:				Contact Per	rson:	
Address:						
City:		State:	Zip:		Phone:	
% Ownership:	Certifying Entity:				pe Certification & Date: /M/W or DBE)	
Type of Work for which Cert	ification was granted	d:				
Name:				Contact Per	rson:	
Address:						
City:	City:		Zip:		Phone:	
% Ownership:	Certifying Entity:			Type Certification & Date: (S/M/W or DBE)		
Type of Work for which Cert	ification was granted	d:				
		General Info	rmation			
SBE/MBE/WBE/DBE Initial	Capital Contributions	s: \$			%	
Future capital contributions	(explain requirement	ts) (attach addition	al sheets if	necessary):		
Source of Funds for the SBE	-/MBE/WBE/DBE Ca	apital Contributions	S:			
Describe the portion of the work or elements of the business controlled by the SBE/MBE/WBE or DBE: (attach additional sheets if necessary)						
Describe the portion of the visheets if necessary)	vork or elements of t	the business contro	olled by non	n-SBE/MBE/V	VBE or DBE: (attach additional	

	JOINT VENTURE ELIGIBILITY FORM							
General information								
Describe the SBE/MBE/WBE or DBE's involvement in the overall management of the joint venture (e.g., participation on a management committee or managing board voting rights, etc.) (attach additional sheets if necessary)								
Describe the SBE/MBE/WBE or DBE's share in the profits of the joint venture:								
Describe the SBE/MBE/WBE or DBE's share in the risks of the joint venture:								
Describe the SBE/MBE/V	VDE OF DDE'S SHALE III THE FISKS OF THE JOI	nii venture.						
Describe there roles and additional sheets if neces	Describe there roles and responsibilities of each joint venture participant with respect to managing the joint venture (use additional sheets if necessary):							
a. SBE/MBE/WBE or DB	E joint venture participant:							
b. Non- SBE/MBE/WBE	or DBE joint venture participant:							
additional sheets if neces		pant with respect to operation of the	joint venture (use					
a. SBE/MBE/WBE of DB	E joint venture participant:							
b Non CREMBEAMER	or DRE joint venture participant:							
D. NON- SBE/MBE/WBE	or DBE joint venture participant:							
Which firm will be respons	sible for accounting functions relative to	the joint venture's business?						
	ch party will have to commit or obligate to ocontractors, and/or other parties?	he other to insurance and bonding co	ompanies, financing					
Please provide information relating to the approximate <u>number</u> of management, administrative, support and non-management employees that will be required to operate the business and indicate whether they will be employees of the SMWBE, non-SMWBE or joint venture:								
	Non- SBE/MBE/WBE/DBE	SBE/MBE/WBE/DBE	Joint Venture					
Management								
Administrative								
Support								
Hourly Employees								

JOINT VENTURE ELIGIBILITY FORM								
		General I	nformation					
Please provide the	name of the	person who will be responsible for	hiring employees for the joint ve	enture.				
Who will they be er	mployed by?							
Are any of the prop partners?	osed joint ver	nture employees currently employe	ees of any of the joint venture	Yes No (√)				
If yes, please list the necessary)	ne number and	d positions and indicate which firm	currently employs the individual	l(s), (use additional sheets if				
Number of employees		Position	Position Employed By					
Attach a copy of the agreements between		int venture agreement, promissory enture partners.	note or loan agreement (if appl	icable), and any and all written				
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 Small Business Op		ges in or pertaining to this submitta	al, the joint venture members mu	st immediately notify the Division of				

COMP-FRM-015

Revised 032211 JG

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

Engineering Division

BID BOND

KNOW ALL MEN BY THESE PRESENTS:
THAT ALPINE ROOFING CO., INC. , as Principal,
and SURETEC INSURANCE COMPANY , a corporation organized and existing under
and by virtue of the laws of the State of Texas, and authorized to do business within the State of Colorado, as
Surety, are held and firmly bound unto the City and County of Denver, Colorado, as Obligee, in full and just sum of
Five Percent (5%) of the Total Amount of the Bid Dollars, (\$5%********), lawful money of the
United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators,
successors and assigns, jointly and severally, firmly by these presents:
WHEREAS, the said Principal is herewith submitting its bid, dated
Signed, sealed and delivered this 7th day of July, 2016.
ALPINE ROOFING CO., INC. Principal By Robin J. Tichy Title President
SURETEC INSURANCE COMPANY
1
Surety By Longer Gellier
Seal if Bidder is Corporation Gregory Hettinger

SureTec Insurance Company LIMITED POWER OF ATTORNEY

Know All Men by These Presents, That SURETEC INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

Gregory Hettinger

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include waivers to the conditions of contracts and consents of surety for:

Five Million and 00/100 Dollars (\$5,000,000.00)

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

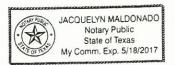
Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. (Adopted at a meeting held on 20th of April, 1999.)

In Witness Whereof, SURETEC INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 21st day of March, A.D. 2013.

State of Texas County of Harris SURETEC INSURANCE COMPANY

John Knox Jr., Presiden

On this 21st day of March, A.D. 2013 before me personally came John Knox Jr., to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of SURETEC INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.



Jacquelyn Maldonado, Notary Public My commission expires May 18, 2017

I, M. Brent Beaty, Assistant Secretary of SURETEC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; and furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

Given under my hand and the seal of said Company at Houston, Texas this 7th

<u>July 2016</u>, A.D.

M. Brent Beaty, Assistant Secretar

Any instrument issued in excess of the penalty stated above is totally void and without any validity. For verification of the authority of this power you may call (713) 812-0800 any business day between 8:00 am and 5:00 pm CST.



Office of Economic Development DWsion of Small Business Opportunity 201 W. Colfex Ave, Dept. 807 Denver, CD 80202 p: 720.913.1.999 f: 720.913.1.809 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: sale	es@alpineroofingco.com	
Please include the Email addre City and County of Denver: rit	ess of the contact person facilitatichy@alpineroofingco.com	ting this solicitation for the
Agency Name:Arts and VenueAuditor OfficeCommunity PlanningDenver International AirportEnvironmental HealthFire Department	X_Purchasing DivisionHuman ServicesEconomic DevelopmentParks and RecreationPolice DepartmentPublic Works	_Sheriff Department _Technology Services _Other
Project Name: Castro Roof BID / RFP No.: 201628023 Name of Contractor/Consultan What industry is your business Address: 4780 York Street, Denver Co	Roofing Contractor	
Business Phone No.: 303-295- Business Facsimile No.: 303-2		

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

1. How man	ny employees do	es your cor	mpany employ	?		
	1-10 11-50	51 ove	-100 er 100			
1.1. How m	any of your com	pany's emp	oloyees are:			
Fu	II-time All	. Pa	rt-Time	-		
2. Do you h	ave a Diversity a	nd Inclusiv	eness Prograr	n? Yes	№ No	
	d your company e and sign the fo		than 10 empl	oyees continue	to question 1	.1.
2.1 Empl 2.2 Procu	pes it address; byment and rete prement and sup primer service?		ctivities?	Yes Yes Yes	No No No	
programs programs for workp	detailed narrati . This may inclu , equal opportu lace diversity; o customer service	de, for exar nity policies r (ii) diversit	nple, (i) divers , and the bud	ity and inclusiv get amount sp	eness employ ent on an anni	ee training ual basis
N/A						
employee If Ye	company regula s? s, how does you usiveness policie	ir company	regularly com	municate its d	•	ies to
	Employee Trai Pamphlets Public EEO pos Other Not Applicable	stings				

N/A	Otherenerally participate? Not Applicable upply and procurement activities. ograms, equal opportunity policies oring and outreach programs, and
Monthly Quarterly Not Applicable 5.1 What percentage of the total number of employees get 0 − 25%	Otherenerally participate? Not Applicable upply and procurement activities. ograms, equal opportunity policies oring and outreach programs, and
Quarterly Not Applicable 5.1 What percentage of the total number of employees get 0 - 25% 26 - 50% 7. State how you achieve diversity and inclusiveness in surthis may include, for example, narratives of training prodiversity or inclusiveness partnership programs, mento the amount and description of budget spent on an ann supplier diversity and inclusiveness.	enerally participate? Not Applicable upply and procurement activities. ograms, equal opportunity policies oring and outreach programs, and
0 - 25%	Not Applicable upply and procurement activities. ograms, equal opportunity policies oring and outreach programs, and
26 – 50% 76 – 100% State how you achieve diversity and inclusiveness in su. This may include, for example, narratives of training prodiversity or inclusiveness partnership programs, mento the amount and description of budget spent on an ann supplier diversity and inclusiveness.	upply and procurement activities. ograms, equal opportunity policies oring and outreach programs, and
This may include, for example, narratives of training prodiversity or inclusiveness partnership programs, mento the amount and description of budget spent on an ann supplier diversity and inclusiveness.	ograms, equal opportunity policies oring and outreach programs, and
Do you have a diversity and inclusiveness committee?	☐ Yes 🗹 No
1 If Yes, how often does it meet?	
Monthly Annually Quarterly Other	No Committee
2 If you responded that you do not have a diversity and i any plans your company may have to establish such a c	
we develop a program, a committee will be established	

9. Do you have	a budget for dive	ersity and inclusivene	ess efforts?	Yes	✓ No
		e diversity and inclu formance evaluation		encies Yes	№ No
11. Would you I program?	ike information o	letailing how to impl	ement a Dive	ersity and Incl	lusiveness
If yes, please er	mail <u>XO101@den</u>	vergov.org.			
I attest that the my knowledge.	information repr	esented herein is tro	ue, correct ar	nd complete,	to the best of
Louis	va, le	chi	7/7/16		
Signature of Pe	rson Completing	Form	Date		
Robin J. Tichy, I	President				
	f Person Complet	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 STATE OF COLORADO



Department of Public Works

Bid Documents Package

Contract Number: 201628023

Castro Roof
June 6, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS Engineering Division

Engineering Division SBE Defined Pool

TABLE OF CONTENTS FOR CONTRACT DOCUMENTS

BID FORM AND SUBMITTAL PACKAGE	<u>PAGE</u>
Table of Contents Bidder's Checklist Bid Form and Submittal Package Acknowledgment Form Bid Form List of Proposed Small Business Enterprise(s) Commitment to Small Business Enterprise Participation SBE Letter(s) of Intent & Checklist Joint Venture Affidavit Joint Venture Eligibility Form Bid Bond Diversity and Inclusiveness in City Solicitations Form	BF-1 BF-2 through BF-3 BF-4 through BF-5 BF-6 through BF-9 BF-10 through BF-13 BF-14 BF-15 through BF-16 BF-17 BF-18 through BF-20 BF-21 BF-22 through BF-25
BID DOCUMENTS	
Table of Contents	BDP-1
Notice of Invitation for Bids	BDP-2 through BDP-3
Instructions to Bidders	BDP-4 through BDP-14
Equal Employment Opportunity Provisions Appendix A Appendix F	BDP-15 through BDP-24
Contract Form	BDP-25 through BDP-29
Index of the General Contract Conditions	BDP-30 through BDP-34
Special Contract Conditions	BDP-35 through BDP-44
Final/Partial Release and Certificate of Payment Forms (Samples)	BDP-38 through BDP-40
Performance and Payment Bond Form	BDP-45 through BDP-46
Performance and Payment Bond Surety Authorization letter (Sample)	BDP-47
Notice to Apparent Low Bidder (Sample)	BDP-48 through BDP-49
Notice To Proceed (Sample)	BDP-50
Final Receipt (Sample)	BDP-51
Prevailing Wage Rate Schedule	6 pages
Technical Specifications	122 pages
Contract Drawings	5 pages

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS Engineering Division

NOTICE FOR INVITATION FOR BIDS FOR CONTRACT NO. 201628023

Castro Roof

BID SCHEDULE: 11:00 AM, LOCAL TIME JULY 7, 2016

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

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

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

GENERAL STATEMENT OF WORK:

Remove and replace fully adhered EPDM roof on main roof deck and two penthouse roofs. Alternates for replacing roofing on lower roof decks.

PRE-BID CONFERENCE:

A pre-bid conference will be held for this Project at 2:00 p.m., local time, on June 15, 2016. This meeting will take place at: Webb Building, 201 W. Colfax Avenue, Room 4.I.5, Denver, Colorado 80202

SITE VISIT

The project manager David Brown will be conducting a site visit of the Castro Roof immediately following the prebid meeting at 3:00 p.m. on June 15, 2016. All plan holders are encouraged to attend. The address for the Castro Building is 1200 Federal Blvd Denver, CO.

ESTIMATED CONSTRUCTION COST:

The estimated cost of construction for this project is between \$396,000.00 and \$484,000.00.

TEXTURA CONSTRUCTION PAYMENT MANAGEMENT:

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

DOCUMENTS AND BID INFORMATION AVAILABLE:

Contract Documents complete with Technical Specifications and, 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 \$10.00 per download, reference eBid Document Number #4480438. Contact QuestCDN at 952-233-1632 or info@questcdn.com for assistance.

DEADLINE TO SUBMIT QUESTIONS: June 23, 2016, 2:00 p.m. local time.

PREQUALIFICATION REQUIREMENTS: None.

Contract No. 201628023 BDP - 2 June 6, 2016

DEFINED POOL SELECTION REQUIREMENTS:

\

This construction contract solicitation is subject to the defined pool selection requirements of Article VII, Chapter 28 of the Denver Revised Municipal Code (D.R.M.C.) (the "SBE Ordinance") and, as such, this contract is excluded from the coverage of Article III, Chapter 28 of the D.R.M.C.

Section 28-207, D.R.M.C. of Article VII authorizes the Director of the Division of Small Business Opportunity (DSBO) to designate selected design and construction services contracts as restricted for award only to Small Business Enterprises (SBEs) participating in the defined pool selection program. The Director has designated this project solicitation as a defined pool project, and in accordance with the SBE ordinance, award will be strictly limited to currently certified SBE bidders/joint venturers who comply with the requirements of Article VII. Proper SBE certification in accordance Section 28-206, D.R.M.C. shall be a condition of responsiveness and award will only be made to the lowest, total, responsive, qualified **SBE bidder.** Under Section 28-208, D.R.M.C., compliance with this defined pool selection requirement shall be mandatory for all bidders and shall require a demonstration that each bidder is either: (1) a certified SBE contractor or (2) a qualified joint venture that includes a certified SBE contractor. In addition, each bidder must establish that such SBE will perform a commercially useful function.

Section 28-209, D.R.M.C. direct the Director of the Division of Small Business Opportunity to establish a mandatory SBE sub contractor participation requirement for selected projects. The mandatory SBE participation requirement for this project is:

1% Small Business Enterprise (SBE) Participation

This mandatory subcontractor participation requirement is in addition to the defined pool prime contractor selection requirement described above and, as such, must be met only with certified subcontractors, suppliers and other participants as set forth in Sections 28-209 and 28-210, D.R.M.C. A bidder cannot meet this additional participation requirement through self performance.

Each bidder shall submit, at the time of bid opening, the completed forms and other information required by DSBO to demonstrate compliance with the requirements of Article VII under § 28-212, D.R.M.C. A determination by DSBO that a bidder has failed to comply with these defined pool selection requirements, as specified herein and set forth in Chapter VII, and as such, is non-responsive shall result in no further consideration of the bid by the Manager of Public Works.

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

MISCELLANEOUS:

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

As its best interest may appear, the Manager of Public Works, 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.gov

Publication Dates: June 6, 7, 8, 2016

Published In: The Daily Journal

Contract No. 201628023 BDP - 3 June 6, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS Engineering Division

INSTRUCTIONS TO BIDDERS

IB-1 INSTRUCTION TO BIDDERS

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

IB-2 BIDDING

The bound 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 printed and distributed in hard copy 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 printed and distributed in hard copy 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.

Contract No. 201628023 BDP - 4 June 6, 2016

IB-5 UNACCEPTABLE BIDS

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

IB-6 INFORMAL AND UNBALANCED BIDS

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

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

Bids 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 proper bid guarantee, satisfying all of the requirements specified herein and on the form provided herein shall render the bid nonresponsive and may constitute cause for rejection.

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

IB-9 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. 201628023 BDP - 5 June 6, 2016

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-4, 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.

Contract No. 201628023 BDP - 6 June 6, 2016

IB-15 BID OPENING

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

IB-16 EVALUATION OF BIDS AND BASIS OF BID SELECTION

Bids will be evaluated after being read in open meeting at the place designated for such bid opening. 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 contract documents are ready for execution the Apparent Low Bidder shall execute the contract documents. At this time, the successful bidder shall also provide certain supplemental documents for incorporation into the Contract Documents. These supplemental documents shall include: 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;

Contract No. 201628023 BDP - 7 June 6, 2016

and documentation of compliance with any other conditions precedent to execution of the Contract by the City set forth in the Contract Documents. The insurance and bond forms contained in the Contract Special Conditions Section of the Contract Documents must be used in satisfying these supplemental document requirements.

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

IB-19 BONDING REQUIREMENTS

In accordance with the provisions of General Contract Conditions, Title 15, PERFORMANCE AND PAYMENT BONDS, the minimum bonding requirements for this Contract are set forth in the form **CITY AND COUNTY OF DENVER PERFORMANCE AND PAYMENT BOND** contained in the Special Conditions Section of the Contract Documents. Upon receipt of Notice to Apparent Low Bidder, the apparent low bidder must cause this form bond to be purchased, executed and furnished, along with appropriate Powers of Attorney <u>and</u> a surety authorization letter (in form similar to the one attached), to the City 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 Administrator. The Contractor must either include all subcontractors performing work hereunder as insureds under each required policy or furnish a separate certificate for each subcontractor. In either case, the Contractor shall insure that each subcontractor complies with all of the coverage requirements.

IB-21 PERMITS AND LICENSES

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

IB-22 WAGE RATE REQUIREMENTS

In preparing any bid hereunder, the Contractor must comply with and should carefully consider all requirements and conditions of the City's Payment of Prevailing Wages Ordinance, Division 3 of Article IV D.R.M.C. and any determinations made by the City pursuant thereto.

At the time of the preparation of the Contract Documents, the then-current prevailing wage rates applicable to this Project shall be bound within the Contract Documents made available to potential bidders for the Project. If, more than ten (10) days prior to the actual date of bid opening, the Career Service Board determines that prevailing wages rates different from those bound in the Contract Documents are applicable to one or more of the various classes of laborers, mechanics and workers encompassed by this Project, such

Contract No. 201628023 BDP - 8 June 6, 2016

different prevailing wage rates shall be provided in an addendum. If different prevailing wage rates are determined by the Career Service Board ten (10) or less days prior to the actual date of bid opening, the City will determine on a case by case basis in its sole discretion whether such different prevailing wage rates are to be included in an addendum. In conjunction with such determination, the City may elect, in its sole discretion, to postpone the date of bid opening on the Project. In any event, the bidder will be held, at the actual date of bid opening, to those prevailing wage rates incorporated into the Contract Documents and as modified by any such addenda.

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

IB-23 TAX REQUIREMENTS

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

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

It is the responsibility of the Contractor and its subcontractors to apply to the Colorado Department of Revenue ("CDOR") for a certificate, or certificates, of exemption indicating that their purchase of construction or building materials is for a public project, and to deliver to the City copies of such applications as soon as possible after approval by the CDOR. Bidders shall not include in their bid amounts the exempt state, RTD, and Cultural Facilities District Sales and Use Taxes.

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

IB-24 DIVERSITY AND INCLUSIVENESS IN CITY SOLICITATIONS

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

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

Diversity and Inclusiveness information provided by City contractors in response to City solicitations for services or goods will be collated, analyzed, and made available in reports consistent with City Executive

Contract No. 201628023 BDP - 9 June 6, 2016

Order No. 101. However, no personally identifiable provided by or obtained from contractor's will be in such reports.

IB-25 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-26 GENERAL BIDDING INFORMATION

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

IB-27 DEFINED POOL SMALL BUSINESS ENTERPRISE (SBE) REQUIREMENTS

Article VII of Chapter 28 of the Revised Municipal Code (Section 28-201 et.seq., D.R.M.C.) (the "SBE Ordinance or Ordinance") applies to this Project and is incorporated into this Contract by reference and this contract is excluded from the coverage of Article III, Chapter 28 of the D.R.M.C. As such, each bidder must comply with the terms and conditions of the Ordinance in making its bid and, if awarded the Contract, in performing all Work thereunder. A bidder's failure to comply with the Ordinance, any Rules or Regulations promulgated pursuant thereto, or any additional requirements contained herein shall render the bid non-responsive and shall constitute cause for rejection. Failure by the contractor awarded the contract to comply with Ordinance requirements during the performance of the contract is a material breach of the contract, and may result in the termination of this contract, sanctions or such other remedy, as deemed appropriate by DSBO. Copies of the Ordinance and its accompanying Rules and Regulations are available for the use and review of bidders from DSBO.

Section 28-207, D.R.M.C. of Article VII authorizes the Director of the Division of Small Business Opportunity (DSBO) to designate selected design and construction services contracts as restricted for award only to Small Business Enterprises (SBEs) participating in the defined pool selection program. The Director has designated this project solicitation as a defined pool project and, in accordance with the SBE ordinance; award will be strictly limited to currently certified SBE bidders/joint venturers who comply with the requirements of Article VII. Proper SBE certification in accordance Section 28-206, D.R.M.C. shall be a condition of responsiveness and award will only be made to the lowest, total, responsive, qualified SBE bidder. Under Section 28-208, D.R.M.C., compliance with this defined pool selection requirement shall be mandatory for all bidders and shall require a demonstration that each bidder is either: (1) a certified SBE contractor or (2) a qualified joint venture that includes a certified SBE contractor. In addition, each bidder must establish that such SBE will perform a commercially useful function. Each bidder shall submit, at the time of bid opening, the completed forms and other information required by DSBO to demonstrate compliance with the requirements of this Article VII. A determination by DSBO that a bidder has failed to comply with this defined pool selection requirement, as specified herein and set forth in Chapter VII, and, as such, is non-responsive; shall result in no further consideration of the bid by the Manager of Public Works.

In addition, Section 28-209, D.R.M.C. directs the Director of the Division of Small Business Opportunity to establish a mandatory SBE subcontractor participation requirement for selected projects. The mandatory SBE participation requirement for this Project is:

1% Small Business Enterprise (SBE) Participation

This mandatory subcontractor participation requirement is in addition to the defined pool prime contractor selection requirement described above and, as such, must be met only with certified subcontractor, supplier and other participants as set forth in Sections 28-209 and 28-210, D.R.M.C. A bidder cannot meet this additional participation requirement through self performance.

Meeting Established Goal

In preparing a bid to meet the mandatory SBE participation requirement of the Ordinance, the bidder should carefully consider the following instructions relating to compliance with the Ordinance:

In preparing its bid, each bidder shall list on the Bid Form pages entitled "List of Proposed Small Business Enterprise Subcontractors, Suppliers, Manufacturers, Manufacturers' Representatives or Brokers" the name, address, work description/supply, committed level of participation and other required information for each SBE of any tier which the bidder intends to use in performing the work on this Project. Only the SBE Subcontractors, Suppliers, Manufacturers, Manufacturers' Representatives or Brokers 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 mandatory participation requirement. Additional, revised or corrected participation submitted after bid opening will not be considered. SBE bidders may NOT count self-performance or joint venture activity in meeting the mandatory participation requirement for the project. SBE bidders may count joint venture activity in meeting the mandatory participation requirement for the project, but only for the scope of work performed as a commercially useful function and at a percentage level the SBE participant will be performing itself.

All SBE Subcontractors, Suppliers, Manufacturers, Manufacturers' Representatives or Brokers 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 requirement. DSBO maintains an SBE Directory ("Directory"), which is a current listing of SBE's that have been certified by the City. A copy of the Directory is located at DSBO's web site at: https://www.denvergov.org/content/denvergov/en/denver-office-of-economic-development/dobusiness-with-denver.html

- 2. Bidders are encouraged to use the Directory to assist in locating SBEs 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 SBE program and a current copy of the Directory must always be used in preparing a bid. SBE certification or listing in the Directory is not a representation or warranty by the City as to the qualifications of any listed SBE.
- 3. In accordance with the provisions of the Ordinance, DSBO will evaluate each bid to determine the responsiveness of the bid to the requirements of the Ordinance. In determining whether a bidder's committed level of participation meets or exceeds the stated SBE requirement, 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 SBE percentage established for the project to determine the exact dollar amount of required SBE participation for the Project. This amount will then be compared against the exact dollar amounts for the SBEs committed for participation by the bidder. If the total dollar amount of participation listed meets or exceeds the established SBE dollar amount requirement listed, then DSBO will determine that the goal has been met.
 - b. In addition, DSBO will determine the exact commitment percentage for each listed SBE by dividing the dollar amount listed for each SBE by the total base bid dollar amount submitted by the bidder. These individual percentages, when totaled for all listed SBEs, will establish the total committed percentage level of SBE participation that the bidder must comply with during the life of the contract. In all cases, the committed percentage level of SBE participation must equal or exceed the assigned SBE goal for the Project.

- c. In providing the exact dollar amount of participation for each listed SBE, 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 mandatory requirement 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 SBE mandatory participation requirement.
- d. As previously mentioned, compliance with the SBE mandatory participation requirement 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 SBE mandatory participation requirement. However, should any designated alternate be selected by the City for inclusion in the contract ultimately awarded, the SBE requirement 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.
- e. On projects where force account or allowance bid items have been included, bidders must meet the SBE mandatory participation requirement 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 SBE goal on the remaining reduced amount.
- f. 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 SBE suppliers shall count toward satisfaction of the SBE mandatory participation requirement. On Projects under Five Million (\$5,000,000.00) the value of the commercially useful function of SBE 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.
- g. To utilize the SBE 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 SBE mandatory participation requirement. 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 requirement.
- 4. On or before the third (3) working day after bid opening, all of the Bidders are required to submit an executed "SBE Letter of Intent" for each SBE listed on the Bid Form as a subcontractor, supplier, manufacturer, manufacturers' representative or broker of any tier. An SBE bidder is not required to submit a Letter of Intent on themselves. Each Letter of Intent shall be submitted only for the SBEs listed at the time of bid opening, since this is the only participation that will be counted toward satisfaction of the SBE mandatory participation requirement. A form for the SBE Letter of Intent is included with the Bid Form. The SBE 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 SBE or that its subcontractor(s) and supplier(s), manufacturer(s), manufacturers' representative(s) and broker(s) will do so. Each SBE Letter of Intent shall be accompanied by a copy of the City and County of Denver's SBE certification letter for each proposed SBE 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.
- 5. In accordance with the provisions of the Ordinance, the bidder agrees that it is committed to meeting the SBE mandatory participation requirement. This commitment must be expressly indicated on the "Commitment to Small Business Enterprise Participation" form included with the Bid Form. This commitment includes acceptance of the following understandings:
 - a. The bidder understands it must maintain the committed SBE mandatory participation level throughout the performance of the Contract as required by D.R.M.C. 28-222.

- b. 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 committed SBE mandatory participation level.
- c. 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 28-223 of the Ordinance, regardless of whether such increase or decrease in scope of work has been reduced to writing at the time of notification.
- d. 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 SBE 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 SBEs equal to the original SBE mandatory participation commitment. The contractor shall satisfy such SBE mandatory participation requirement with respect to such changed scope of work by soliciting new SBEs in accordance with Section 28-206 of the Ordinance, as applicable, or the contractor must show each element of modified good faith set out in Section 28-221(c) of the Ordinance. The contractor shall supply to the Director the documentation described in Section 28-221(c) of the Ordinance with respect to the increased dollar value of the contract.
- 6. Section 29-212, D.R.M.C. requires each bidder to list, at the time of bid opening, the SBE prime contractor all subcontractors that meet the mandatory defined pool requirements for the bid. The bidder shall fully complete and execute the following forms to address the defined pool program requirements for this solicitation:
 - a. SBE Participation List
 - b. SBE Commitment Page
 - c. SBE Letters of Intent (to be submitted 3 days after bid)
- 7. If a bidder/proposer is participating in a joint venture with a certified SBE 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.
- 8. DSBO will evaluate only the completed and fully executed forms provided with the bid or as otherwise specified and determine whether or not the bid is responsive under Section 28-213, D.R.M.C. If a bidder has failed to comply with the defined pool selection requirement process outlined in this section and the referenced forms, a bid may be found non-responsive and shall result in no further consideration of the bid by the Manager of Public Works.
- 9. All bidders are charged with knowledge of and are solely responsible for complying with each and every provision of the 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 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 Ordinance or contact the Project's designated DSBO representative at (720) 913-1999.

IB 28 PAYMENT PROCEDURE REQUIREMENTS

Contractor recognizes and agrees that it shall be required to use the Textura® Construction Payment Management System (CPM System) for this Project. All fees associated with the CPM System are to be paid

Contract No. 201628023 BDP - 13 June 6, 2016

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

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

For more information:

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

.

RULES AND REGULATIONS REGARDING EQUAL EMPLOYMENT OPPORTUNITY

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

RULE I - DEFINITIONS

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

RULE II - NOTICE OF HEARING

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

Contract No. 201628023 BDP - 15 June 6, 2016

Castro Roof

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.

Contract No. 201628023 BDP - 16 June 6, 2016

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.

Contract No. 201628023 BDP - 17 June 6, 2016

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS Engineering Division

APPENDIX A

CITY AND COUNTY OF DENVER EQUAL OPPORTUNITY CLAUSE - ALL CONTRACTS

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

The applicant further agrees to be bound by the above equal opportunity clauses with respect to its own employment practices when it participates in City contracts. The Contractor agrees to assist and cooperate actively with the Manager and the Director in obtaining compliance of subcontractors and suppliers with the equal opportunity clause and the rules, regulations and relevant orders of the Manager, and will furnish the

Contract No. 201628023 BDP - 18 June 6, 2016

Castro Roof

Manager and the Director such information as they may require for the supervision of compliance, and will otherwise assist the Manager and Director in the discharge of the City's primary responsibility for securing compliance. The Contractor further agrees to refrain from entering into any contract or contract modification subject to Article III, Division 2 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 Engineering Division

APPENDIX F

AFFIRMATIVE ACTION REQUIREMENTS

EQUAL EMPLOYMENT OPPORTUNITY

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

NOTICE

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

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

/s/

Manager of Public Works City and County of Denver

A. REQUIREMENTS - AN AFFIRMATIVE ACTION PLAN:

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

1. GOALS AND TIMETABLES:

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

COALCEOD
GOALS FOR
MINORITY PARTICIPATION
FOR EACH TRADE

From January 1, 1982 to Until Further Notice

21.7% - 23.5%

GOALS FOR FEMALE PARTICIPATION FOR EACH TRADE

From January 1, 1982 to Until Further Notice

6.9%

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

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

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

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

2. SPECIFIC AFFIRMATIVE ACTION STEPS:

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

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

Contract No. 201628023 BDP - 21 June 6, 2016

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.
- i. The Contractor should have made certain that all facilities are not segregated by race.
- j. The Contractor should have continually monitored all personnel activities to ensure that its EEO policy was being carried out including the evaluation of minority and female employees for promotional opportunities on a quarterly basis and the encouragement of such employees to seek those opportunities.
- k. The Contractor should have solicited bids for subcontracts from available minority and female subcontractors engaged in the trades covered by these Bid Conditions, including circulation of minority and female contractor associations.

NOTE:

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

3. NON - DISCRIMINATION:

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

4. COMPLIANCE AND ENFORCEMENT:

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

B. CONTRACTORS SUBJECT TO THESE BID CONDITIONS:

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

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

C. OBLIGATIONS APPLICABLE TO CONTRACTORS:

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

D. GENERAL REQUIREMENTS:

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

Contract No. 201628023 BDP - 23 June 6, 2016

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

CONTRACT NO. 201628023

Castro Roof

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,

Alpine Roofing Co., Inc. 4780 York Street Denver, Colorado 80216

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

WITNESSETH, Commencing on June 6, 2016, and for at least three (3) days the City advertised that sealed bids would be received for furnishing all labor, tools, supplies, equipment, materials, and everything necessary and required for the following:

CONTRACT NO. 201628023

Castro Roof

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
SBE Commitment Form and List of Participants
Article VII, Chapter 28, D.R.M.C.
Bid Bond
Addenda (as applicable)
Equal Employment Opportunity Provisions (Appendix A and Appendix F)
Bid Form

Contract No. 201628023 BDP - 25 June 6, 2016 Castro Roof 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

2. SCOPE OF WORK

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

3. TERMS OF PERFORMANCE

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 **60** (Sixty Days) 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 <u>Lump Sum +2 alternates</u>, the total estimated cost thereof being Six Hundred Four Thousand Eight Hundred Thirty Eight Dollars and Forty Three Cents (<u>\$604,838.43</u>). 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 the Work under this Contract, the Contractor agrees not to refuse to hire, discharge, promote or demote, or to discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, marital status, or physical or mental disability; and the Contractor further agrees to insert the foregoing provision in all subcontracts hereunder.

6. DEFINED POOL SELECTION REQUIREMENTS:

This construction contract is subject to the defined pool program requirements of Article VII, Chapter 28 of the Denver Revised Municipal Code (D.R.M.C.) (the "SBE Ordinance") and, as such, this contract is excluded from the coverage of Article III, Chapter 28 of the D.R.M.C. Section 28-222, D.R.M.C. of Article VII requires that all Contractors participating in the defined pool solicitation program comply with all Small Business Enterprise (SBE) utilization commitments upon which an award was made.

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.

Contract No. 201628023 BDP - 26 June 6, 2016

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 Small Business Enterprise disputes. The Contractor expressly agrees that this dispute resolution process is the only dispute resolution mechanism that will be recognized by the parties for any claims put forward by the Contractor, notwithstanding any other claimed theory of entitlement on the part of the Contractor or its subcontractors or suppliers.

13. CONTRACT BINDING

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

14. PARAGRAPH HEADINGS

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

Contract No. 201628023 BDP - 27 June 6, 2016

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.

REMAINDER OF PAGE LEFT INTENTIONALLY BLANK

Castro Roof

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

Contract Control Number: 201628023

Vendor Name:

Alpine Roofing Co., Inc.

Name: ROBIN J. TICHY
(please print)

ATTEST: [if required]

Name: ROBERT D, TICHY
(please print)

Title: ORPORATE SECRET ARY
(please print)



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



CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

General Contract Conditions

INDEX

TITLE 1		
DEFINITION	NS	1
101	CITY	1
102	CONTRACT	1
103	CONTRACT AMOUNT	1
104	CONTRACT DOCUMENTS	1
105	CONTRACT TIME	1
106	CONTRACTOR	
107	CONTRACTOR PERSONNEL	2
108	DAYS	2
109	DEPUTY MANAGER	2
110	DESIGNER	2
111	FINAL COMPLETION	2
112	MANAGER	3
113	PRODUCT DATA	3
114	PROJECT	3
115	PROJECT MANAGER	3
116	SAMPLES	3
117	SHOP DRAWINGS	3
118	SUBCONTRACTOR	
119	SUBSTANTIAL COMPLETION	3
120	SUPPLIER	4
121	WORK	4
TITLE 2		
CITY ADMI	NISTRATIVE ORGANIZATIONS; LINE OF AUTHORITY	5
201	DEPARTMENT OF AVIATION	5
202	MANAGER OF AVIATION	5
203	DEPARTMENT OF PUBLIC WORKS	
204	MANAGER OF PUBLIC WORKS	5
205	BUILDING INSPECTION	5
206	ZONING	5
207	DIVISION OF SMALL BUSINESS OPPORTUNITY	6
208	CITY AUDITOR	6
209	MANAGER OF FINANCE	6
210	CITY ATTORNEY	.6
211	OFFICE OF RISK MANAGEMENT	6
212	CITY'S CONTRACT ADMINISTRATION LINE OF AUTHORITY	6
213	CITY'S COMMUNICATION WITH THE CONTRACTOR	7

TITLE 3 CONTRACTOR PERFORMANCE AND SERVICES...... 8 CONSIDERATION 302 303 304 305 WORK PERFORMED UNDER ADVERSE 306 WORKING HOURS AND SCHEDULE 9 307 308 309 CONTRACTOR SUBMITTALS AND OTHER WRITTEN COMMUNICATIONS TO THE CITY...... 10 310 COMPETENCE OF CONTRACTOR'S WORK FORCE 11 NO EMPLOYMENT OF ILLEGAL ALIENS TO PERFORM WORK UNDER THE 311 **CONTRACT** CONDUCT OF CONTRACTOR'S PERSONNEL 12 312 313 WORK FORCE 12 314 315 316 317 318 319 PRESERVATION OF PERMANENT LAND SURVEY CONTROL MARKERS 14 TRADEMARKS, COPYRIGHTS AND PATENTED DEVICES, 320 321 322 323 324 325 326 POWER, LIGHTING, HEATING, VENTILATING. TITLE 4 OWNERSHIP OF CONTRACT DRAWINGS CONTRACT DRAWINGS AND TECHNICAL SPECIFICATIONS 403 404 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES 21 TITLE 524 **SUBCONTRACTS** SUBCONTRACTOR ACCEPTANCE 24 TITLE 6 LIQUIDATED DAMAGES; ADMINISTRATIVE COSTS;

	603	DELAY DAMAGES	28
	,		
TITLE 7		ION COODDINATION AND DATE OF BROCKERS	20
	KA 1 1	ON, COORDINATION AND RATE OF PROGRESS	
	701	COORDINATION OF THE WORK	
	702	COORDINATION OF THE WORK	
	703 704	RATE OF PROGRESS	
	/04	RATE OF PROGRESS	30
TITLE 8	3		
PROTE	CTIO	N OF PERSONS AND PROPERTY	32
	801	SAFETY OF PERSONS	32
	802	PROTECTIVE DEVICES AND SAFETY PRECAUTIONS	33
	803	PROTECTION OF PROPERTY AND WORK IN PROGRESS	33
	804	PROTECTION OF MUNICIPAL, PUBLIC SERVICE	
		OR PUBLIC UTILITY SYSTEMS	34
	805	PROTECTION OF STREET AND ROAD SYSTEM	35
	806	PROTECTION OF DRAINAGE WAYS	36
	807	PROTECTION OF THE ENVIRONMENT	36
	808	HAZARDOUS AND EXPLOSIVE MATERIALS OR SUBSTANCES	
	809	ARCHAEOLOGICAL AND HISTORICAL DISCOVERIES	
TITLE 9			
COMPE			
	901	CONSIDERATION (CITY'S PROMISE TO PAY)	
	902	PAYMENT PROCEDURE	
	903	SCHEDULE OF VALUES IN LUMP SUM CONTRACTS	
	904	UNIT PRICE CONTRACTS	
	905	PROGRESS PERIOD	
	906	APPLICATIONS FOR PAYMENT	40
	907	RELEASES AND CONTRACTORS	
		CERTIFICATIONS OF PAYMENT	
	908	RETAINAGE	
	909	ADDITIONAL WITHHOLDING OF PROGRESS PAYMENTS	
	910	FINAL ESTIMATE AND PAYMENT	
	911	ACCOUNTING OF COSTS AND AUDIT	43
TITLE 1	10		
WAGE			45
	1001	PREVAILING WAGE ORDINANCE	45
	1002	POSTING OF THE APPLICABLE WAGE RATES	45
	1003	RATE AND FREQUENCY OF WAGES PAID	45
		REPORTING WAGES PAID	
	1005	FAILURE TO PAY PREVAILING WAGES	46
TITLE 1		A TOWNER WORK CONVERNACIE PRICE OR CONVERNACIO TENACE	45
		N THE WORK, CONTRACT PRICE OR CONTRACT TIME CHANGE ORDER	
		CITY INITIATED CHANGES	
		CONTRACTOR CHANGE REQUEST	
		ADJUSTMENT TO CONTRACT AMOUNT	
	1105	TIME EXTENSIONS	54
TITLE 1	12		
		OR CLAIMS FOR ADJUSTMENT AND DISPUTES	56
		NOTICE OF INTENT TO CLAIM	
	1202	SUBMITTAL OF CLAIMS	56
	1203	WAIVER OF CLAIMS	58

TITLE 13		
DISPUTES		59
1301	DISPUTES	
TITLE 14		
	ITIONS	60
	DIFFERING SITE CONDITIONS	
	SITE INSPECTIONS AND INVESTIGATIONS	
TITLE 15		
	ANCE AND PAYMENT BONDS	62
	SURETY BONDS	
1502	PERFORMANCE BOND	62
1503	PAYMENT BOND	62
TITLE 16		
INSURANCI	E AND INDEMNIFICATION	63
	INSURANCE	
1602	DEFENSE AND INDEMNIFICATION	63
TITLE 17		
	N AND DEFECTS	
	CONSTRUCTION INSPECTION BY THE CITY	
	2 AUTHORITY OF INSPECTORS	
	OBSERVABLE DEFECTS	
	DEFECTS - UNCOVERING WORK	
	LATENT DEFECTS	
1706	5 REMOVAL OF DEFECTIVE MATERIALS AND WORK	65
TITLE 18		
	IES, GUARANTEES AND CORRECTIVE WORK	66
1801	CONTRACTOR'S WARRANTIES, GUARANTEES	
1002	AND CORRECTION OF WORK	66
1802	PERFORMANCE DURING WARRANTY PERIOD	67
TITLE 19	ALL COMPLETION OF THE WORK	(0)
	AL COMPLETION OF THE WORK	
	CONTRACTOR'S NOTICE OF SUBSTANTIAL COMPLETION	
	2 INSPECTION AND PUNCH LIST	
	CERTIFICATE OF SUBSTANTIAL COMPLETION RIGHT OF EARLY OCCUPANCY OR USE	
1904	RIGHT OF EARLY OCCUPANCY OR USE	09
TITLE 20	IPLETION AND ACCEPTANCE OF THE WORK	71
	CLEAN-UP UPON COMPLETION	
	FINAL COMPLETION AND ACCEPTANCE OF THE WORK	
	FINAL SETTLEMENT	
TITLE 21		
	N OF WORK	74
	SUSPENSION OF WORK	
	SUSPENSION OF THE WORK FOR THE	
2102	CITY'S CONVENIENCE	74
2103	SUSPENSION BECAUSE OF ORDER OF CITY, STATE	,
2103	OR FEDERAL COURT OR AGENCY	75
2104	SUSPENSION RESULTING FROM CONTRACTOR'S	
	EARLIDE TO DEDEODM	75

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

CITY AND COUNTY OF DENVER

DEPARTMENT OF PUBLIC WORKS Engineering Division

SPECIAL CONTRACT CONDITIONS

SC-1 CONSTRUCTION SPECIFICATIONS

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

City and County of Denver:

Standard Specifications for Construction, GENERAL CONTRACT CONDITIONS, ((2011 Edition)

Transportation Standards and Details for the Engineering Division

City and County of Denver Traffic Standard Drawings

Wastewater Management Division

- Standard Detail Drawings
- Storm Drainage and Sanitary Sewer Construction Detail and Technical Specifications

Colorado Department of Transportation:

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

Federal Highway Administration:

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

Building & Fire Codes:

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

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

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

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

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

Contract No. 201628023 BDP - 35 June 6, 2016

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:

<u>Project Manager</u> <u>Telephone</u> City Project Manager David Brown (720) 865-3039

<u>Consultant</u> <u>Name</u> <u>Telephone</u>

Design Consultant Contact

Page Southerland Page John Schmitt (720) 390-3018

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 \$500.00 for each Day that the Contractor exceeds the time limits herein specified, all in accordance with provisions of General Contract Condition 602, LIQUIDATED DAMAGES; ADMINISTRATIVE COSTS; ACTUAL DAMAGES.

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

Contract No. 201628023 BDP - 36 June 6, 2016

SC-7 SUBCONTRACTS

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

SC-8 RESERVED

SC-9 PAYMENTS TO CONTRACTORS

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

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

<u>Agency/Firm</u> <u>Name</u> <u>Telephone</u> Public Works/Engineering Division David Brown (720) 865-3039

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

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

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

Contract No. 201628023 BDP - 37 June 6, 2016

DEPARTMENT OF PUBLIC WORKS Engineering Division

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

		Date:	, 20
(CITY PROJECT NAME ANI	NUMBER)		
(NAME OF CONTRAC	TOR)	Subcontract #:	_
(NIME of Convitate	,1010)	Subcontract Value: \$	
		Last Progress Paymer	nt: \$
(NAME OF SUBCONTRACTO	R/SUPPLIER)	Date:	
		Total Paid to Date: \$_	
		Date of Last Work: _	
The Undersigned hereby certifies that all cost undersigned for any work, labor or services pabove referenced Project or used in connection duly paid in full.	erformed and for any	materials, supplies or equip	ment provided on the
The Undersigned further certifies that each of to be incurred, on their behalf, costs, charges above referenced Project have been duly paid	or expenses in conne		
In consideration of \$ representing the first 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, right paid of every nature arising out of or in connection	ve, and other good and , 20, the Un referenced City Proje ights, liabilities, dema	d valuable consideration recondersigned hereby releases and etc, the City's premises and punds and obligations, whethe	eived and accepted by nd discharges the City roperty and the above
As additional consideration for the payments rand hold harmless the City, its officers, emplo against all costs, losses, damages, causes of acconnection with any claim or claims against performance of the Work Effort and which may of any tier or any of their representatives, office	yees, agents and assign tion, judgments unde st the City or the C y be asserted by the Un	gns and the above-referenced r the subcontract and expension contractor which arise out indersigned or any of its supp	d Contractor from and ses arising out of or in of the Undersigned's
It is acknowledged that this release is for the Contractor.	e benefit of and may	y be relied upon by the Cit	ty and the referenced
The foregoing shall not relieve the undersisubcontract, as the subcontract may have Undersigned's work effort including, with indemnities.	been amended, whi	ch by their nature survive	e completion of the
STATE OF COLORADO) ss. CITY OF)			
		(Name of Subcontractor)	
Signed and sworn before me this day of, 20	By:		
	-		
Notary Public/Commissioner of Oaths My Commission Expires	Title:		

June 6, 2016

::		City and County of Denver						Office of Economic Development Compliance Unit		
	<u> </u>		City	and County or	201 W. Colfax Ave., Dept. 907					
		Divi	ision	of Small Business	Oppor	tunity	Denver, CO 80202			
DENVER"							Phone: 720.913.1999			
THE MILE NICH CITY		Contra	actor's/(Cons	ultant's Certificat	tion of	Payment (CCP)		Fax: 72	20.913.1803
Prime Contractor or Consultant:				Phone: Project Manager:						
Pay Application #:		Pay Period:		Amount Requested: \$						
Project #:		Project Nam	e:							
Current Completion Date:		Percent Con	nplete:				Prepared By:			
(I) - Original Contract Amount: \$						(II) - Curr	ent Contract Amount: \$			
		/	١	В	С	D	E	F	G	н
Prime/Subcontractor/Supplier Name	M/W/S/ DBE/ NON	Original Amo	Contract	% Bld (A/I)	Current Contract Amount Including Amendments	% Revised (C/II)	Requested Amount of this Pay Application	Amount Paid on the Previous Pay Application #	Net Paid To Date	Paid % Achieved (G/II)
				_		<u> </u>				
	_									
				_						
	_			_		_				
	_					_				
Totals										
The undersigned certifies that the info and listed herein. Please use an add					rue, accurate and that the	e paymen	ts shown have been made	to all subcontractors a	and suppliers used on th	nis project
Prepared By (Signature):							Date:			
					Page	of				
COMP-FRM-027 rev 022311										



Instructions for Completing the Contractor/Consultant Certification of Payment Form

Office of Economic Development Division of Small Business Opportunity

Compliance Unit 201 W. Colfax Ave., Dept. 907 Denver, CO 80202

Phone: 720-913-1999 Fax: 720-913-1803 dsbo@denvergov.org

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

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

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/DBEs use the exact name listed in the DSBO Directory.

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

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

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

should equal the estimated amount requested for this pay application.

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

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

amount of each check issued.

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

or supplier.

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

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

COMP-REF-031

Rev 032211 JG

SC-10 GENERAL CONTRACT CONDITION REVISION

General Contract Condition 210 is hereby deleted in its entirety.

SC-11 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)

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-12 CONSTRUCTION INSPECTION BY THE CITY

General Condition 1702, AUTHORITY OF INSPECTORS, is modified as follows:

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

SC-13 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.

Contract No. 201628023 BDP - 41 June 6, 2016

SC-14 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- 15 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-16 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-17 INSURANCE

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

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

- (5) <u>Subcontractors and Subconsultants:</u> All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.
- 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 with limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement

(9) Additional Provisions:

- (a) For Commercial General Liability, the policies must provide the following:
 - (i) That this Agreement is an Insured Contract under the policy;
 - (ii) Defense costs in excess of policy limits;
 - (iii) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and
 - (iv) A provision that coverage is primary and non-contributory with other coverage or 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.
- (10) <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.

SC-18 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-13.

Contract No. 201628023 BDP - 43 June 6, 2016

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. 4406426

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned Alpine Roofing Co., Inc., 4780 York Street, Denver, Colorado, 80216, a corporation organized and existing under and by virtue of the laws of the State of Colorado, hereafter referred to as the "Contractor", and Suretec Insurance Company, a corporation organized and existing under and by virtue of the laws of the State of Texas, 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 Six Hundred Four Thousand Eight Hundred Thirty Eight Dollars and Forty Three Cents (\$604,838.43), 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. 201628023 CASTRO ROOF, Denver, Colorado, and has bound itself to complete the project within the time or times specified or pay liquidated damages, all as designated, defined and described in the said Contract and Conditions thereof, and in accordance with the Plans and Technical Specifications therefore, a copy of said Contract being made a part hereof;

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

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

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

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

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

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

Attest:

Secretary / Robert D. Tichy

Alpine Roofing Co., Inc.
Contractor

By:
President / Robin J. Tichy

Surety SURETEC INSURANCE COMPANY

By:
Gregory Bettinger

(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:

By:

MAYOR

Denvir Denvir And County OF Denver

By:

MAYOR

Denvir Denver

By:

MAYOR

Denvir Denver

By:

MAYOR

Denver

By:

Denver

By:

MAYOR

Denver

By:

DIRECTOR OF PUBLIC WORKS

Assistant City Attorney

POA #: 610003

BOND NO. 4406426

SureTec Insurance Company LIMITED POWER OF ATTORNEY

Know All Men by These Presents, That SURETEC INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Texas, and having its principal office in Houston, Harris County, Texas, does by these presents make, constitute and appoint

Gregory Hettinger

its true and lawful Attorney-in-fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include waivers to the conditions of contracts and consents of surety for:

Five Million and 00/100 Dollars (\$5,000,000.00)

and to bind the Company thereby as fully and to the same extent as if such bond were signed by the President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney-in-Fact may do in the premises. Said appointment shall continue in force until _______ and is made under and by authority of the following resolutions of the Board of Directors of the SureTec Insurance Company:

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and of behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached. (Adopted at a meeting held on 20th of April, 1999.)

In Witness Whereof, SURETEC INSURANCE COMPANY has caused these presents to be signed by its President, and its corporate seal to be hereto affixed this 21st day of March, A.D. 2013.

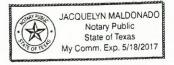
State of Texas County of Harris

ss:

SURETEC HISURANCE COMP AN

John Knox Jr., President

On this 21st day of March, A.D. 2013 before me personally came John Knox Jr., to me known, who, being by me duly sworn, did depose and say, that he resides in Houston, Texas, that he is President of SURETEC INSURANCE COMPANY, the company described in and which executed the above instrument; that he knows the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said Company; and that he signed his name thereto by like order.



Jacquelyn Maldonado, Notary Public My commission expires May 18, 2017

I, M. Brent Beaty, Assistant Secretary of SURETEC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Company, which is still in full force and effect; and furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

Given under my hand and the seal of said Company at Houston, Texas this 29th

M. Brent Beaty, Assistant Secretary

A.D.

Any instrument issued in excess of the penalty stated above is totally void and without any validity.

For verification of the authority of this power you may call (713) 812-0800 any business day between 8:00 am and 5:00 pm CST.

Surety Bonds For Construction Contractors

Gregory Hettinger, AFSB

President

CO License # 325518 CA License # OB52655

August 18, 2016

PERFORMANCE -&- PAYMENT BOND SURETY AUTHORIZATION

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

RE:

ALPINE ROOFING CO., INC.

Contract No.: 201628023 Project Name: Castro Roof Contract Amount: \$604,838.43

Performance -&- Payment Bond No.: 4406426

Assistant City Attorney,

The Performance and Payment Bonds covering the above-referenced project were issued by this Agency, through SureTec Insurance Company, on August 18, 2016.

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 contact me at 303.705.9887 or greg@bondplacementsltd.net.

Thanks you.

Sincerely,

Gregory Hettinger, AFSB

President -&- Attorney-In-Fact for SureTec Insurance Company

GH/gh



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 8/22/2016

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

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to

	he terms and conditions of the policertificate holder in lieu of such endo						itement on the	his certificate does r	not confer	rights to the
The Buckner Company of Colorado dba Keller-Lowry 1777 S. Harrison St. STE 700					CONTACT Heather Wilt PHONE [A/C, No, Ext): 303756.9909 E-MAIL ADDRESS: icanhelp@kellerlowry.com					
Dei	nver CO 80210				INSURER(S) AFFORDING COVERAGE				NAIC#	
					INSURE	RA:Cincinn	The second secon			10677
INS	JRED	ALP	IRO	7-02	INSURER B : Pinnacol Assurance				41190	
	ine Roofing Co., Inc.	, ,,,,			INSURER C : Knight Specialty Ins Co			15366		
478	80 York Street				INSURER D :					
Dei	nver CO 80216-2235				INSURER E :					
					INSURE					
CO	VERAGES CE	RTIF	CAT	E NUMBER: 1613956479				REVISION NUMBER	R:	
E I	HIS IS TO CERTIFY THAT THE POLICIE IDICATED. NOTWITHSTANDING ANY F ERTIFICATE MAY BE ISSUED OR MAY XCLUSIONS AND CONDITIONS OF SUCH	S OF EQUII PERT H POLI	INSU REME TAIN, CIES	RANCE LISTED BELOW HAVENT, TERM OR CONDITION OF THE INSURANCE AFFORDE LIMITS SHOWN MAY HAVE I	/E BEE OF AN' ED BY	Y CONTRACT THE POLICIE REDUCED BY	OR OTHER S DESCRIBE PAID CLAIMS	DOCUMENT WITH RES D HEREIN IS SUBJEC	SPECT TO	WHICH THIS
INSR LTR	TYPE OF INSURANCE	INSD	SUBF	POLICY NUMBER		(MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)		LIMITS	
Α	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR	Y	Y	EPP0378774		4/1/2016	4/1/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence	\$1,000	
	CLAIMS-MADE X OCCUR							MED EXP (Any one person	7	
								PERSONAL & ADV INJUR		
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$2,000	
	POLICY X PRO- LOC							PRODUCTS - COMP/OP A		
	OTHER:								s	
Α	AUTOMOBILE LIABILITY	Y	Y	EPP0378774		4/1/2016	4/1/2017	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,	000
	X ANY AUTO							BODILY INJURY (Per person	on) \$	
	ALL OWNED SCHEDULED AUTOS							BODILY INJURY (Per accid	lent) \$	
	X HIRED AUTOS X NON-OWNED AUTOS							PROPERTY DAMAGE (Per accident)	\$	
									\$	
С	X UMBRELLA LIAB X OCCUR			KSVENX162266701		4/1/2016	4/1/2017	EACH OCCURRENCE	\$4,000,	000
	EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$	
	DED RETENTION\$								\$	
В	WORKERS COMPENSATION		Y	4079273		4/1/2016	4/1/2017	X PER OTH	H-	
	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE N	N/A						E.L. EACH ACCIDENT	\$1,000,0	000
	(Mandatory in NH)	N/A						E.L. DISEASE - EA EMPLO	YEE \$1,000,0	000
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIN	VIT \$1,000,0	000
s re	RIPTION OF OPERATIONS / LOCATIONS / VEHIC equired by written contract, The Cit dditional insured for the commercia	v and	Cou	inty of Denver. It's electe	d and	Appointed	Officials, En	nployees and Volun	iteers are i	ncluded

Project number: 201628023 Project: Castro Roof

CERTIFICATE HOLDER	CANCELLATION		
City and County of Denver Department of Public Works 201 W Colfax Ave	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.		
Dept 614 Denver CO 80202	AUTHORIZED REPRESENTATIVE		

Denver Public Works



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

201 West Colfax Ave, Dept 614

Denver, CO 80202

www.work4denver.com

Policy and Planning - Dept. 509

PERFORMANCE AND PAYMENT BOND SURETY AUTHORIZATION (SAMPLE)

FAX NUMBER:	720-913-3183
TELEPHONE NUMBER:	720-913-3267
Assistant City Attorney	
201 W. Colfax Ave. Dept 1207 Denver, Colorado 80202	
Deliver, Colorado 80202	
RE: (Company name)	
Contract	No: 201628023
Project Na	
Contract Amo	
Performance and Payment Bond	No.:
Dear Assistant City Attorney,	
•	nds covering the above captioned project were executed by this agency, through insurance company,
on	
We hereby authorize the City and Cattorney to coincide with the date o	County of Denver, Department of Public Works, to date all bonds and powers of f the contract.
If you should have any additional q	uestions or concerns, please don't hesitate to give me a call at
Thank you.	
Sincerely,	



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

Denver Public Works



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

June 6, 2016

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

NOTICE OF APPARENT LOW BIDDER (SAMPLE)

(SAMPLE)	

Current Date

To:

Gentlemen:

The MANAGER OF PUBLIC WORKS has considered the Bids submitted on <u>July 07, 2016</u> for work to be done and materials to be furnished in and for:

PROJECT No. 201628023 CASTRO ROOF

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

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

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

- a. Insurance Certificates: General Liability and Automotive Liability, Workman's Compensation and Employer Liability; or any other coverage required by the contract; and
- 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).

Castro Roof

NOTICE OF APPARENT LOW BIDDER (SAMPLE)

Manager of Public Works

PROJECT	NO.	201628023
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 day of	of20
	CITY AND COUNTY OF DENVER
	By



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

Denver Public Works



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

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

Current Date

NOTICE TO PROCEED (SAMPLE)

Name Company Street City/State/Zip

CONTRACT NO. 201628023, CASTRO ROOF

Contract Conditions, 2011 Edition, you are hereby	302 of the Standard Specifications for Construction, General authorized and directed to proceed on with the as set forth in detail in the contract documents for the City and
With a contract time of calendar days, t	he project must be complete on or before
Contract Condition 306.2.B, to the Project Manage exempt certificate, and copies of your subcontract	your construction schedule, in accordance with General er within 10 days. Additionally, you must submit your tax ors' certificates, in accordance with General Contract s possible. Failure to submit these certificates will delay
Sincerely,	
Lesley B. Thomas City Engineer	
cc:	
DenverGov.org 311	Protecting the Present & Building the Future Accountability, Innovation, Empowerment, Performance, Integrity, Diversity, Teamwork, Respect, Excellence, Safety

Diversity, Teamwork, Respect, Excellence, Safety

Denver Public Works



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

201 West Colfax Ave, Dept 614

Denver, CO 80202

www.work4denver.com

Certificate of Contract Release (SAMPLE)

Date Name Company Street City/State/Zip RE: Certificate of Contract Release for **201628023, CASTRO ROOF** Received this date of the City and County of Denver, as full and final payment of the cost of the improvements provided for in the foregoing contract, dollars and in cash, being the remainder of the full amount accruing to the undersigned by virtue of said contract; said cash also covering and including full payment for the cost of all extra work and material furnished by the undersigned in the construction of said improvements, and all incidentals thereto, and the undersigned hereby releases said City and County of Denver from any and all claims or demands whatsoever, regardless of how denominated, growing out of said contract. And these presents are to certify that all persons performing work upon or furnishing materials for said improvements under the foregoing contract have been paid in full and this payment to be made is the last or final payment. Contractor's Signature Date Signed If there are any questions, please contact me by telephone at (720) 913-XXXX. Please return this document via

DenverGov.org 311

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

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

CITY AND COUNTY OF DENVER STATE OF COLORADO



Department of Public Works Addenda

Contract Number: 201628023

Castro Roof
June 6, 2016

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

CONTRACT NO.: 201628023 PROJECT NAME: Castro Roof
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:
BID DOCUMENT PACKAGE

Prevailing Wage

1. Replace existing Prevailing Wage section in the BDP, dated March 21, 2016, pages 1-6, with the attached Prevailing Wage section, dated June 6, 2016, pages 1-6.

TECHNICAL SPECIFICATION & DRAWINGS

The attached Drawings and Specifications (sheets R1.0 & R2.1 and sections 01 01 00 & 07 53 23) replace the corresponding material in the bid documents dated 4/11/16. The attached sheet R2.2 is added to the drawings dated 4/11/16.

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

	Lesley B. Thomas City Engineer
The undersigned hidder acknowledges receipt of	6.5016 Date
with the stipulations set forth herein.	f this Addendum. The Proposal submitted herewith is in accordance Contractor
ADDENDUM NO. 1	DATE:

Office of Human Resources

Denver's Human Resource Agency

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



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

FROM: Alena Duran, Associate Human Resources Professional

DATE: Monday, June 6 2016

SUBJECT: Latest Change to Prevailing Wage Schedules

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

The attached Prevailing Wage Schedule is effective as of **Friday June 3**, **2016** and applies to the City and County of Denver for **BUILDING CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO160030 Superseded General Decision No. CO20150030 Modification No. 4 Publication Date: 06/03/2016 (4 pages)

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

For questions call (720) 913-5018

Attachments as listed above.



General Decision Number: CO160030 06/03/2016 CO30

Superseded General Decision Number: CO20150030

State: Colorado

Construction Type: Building

County: Denver County in Colorado.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

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

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	02/26/2016
3	03/18/2016
4	06/03/2016

ASBE0028-002 10/01/2012

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation)	.\$ 28.98	13.03
CARP0055-002 05/01/2015		
	Rates	Fringes
CARPENTER (Drywall Hanging Only)	.\$ 25.00	6.19
CARP1607-001 06/01/2015		
	Rates	Fringes
MILLWRIGHT	.\$ 31.00	11.88

* ELEC0068-012 06/01/2016

	Rates	Fringes
ELECTRICIAN (Includes Low Voltage Wiring)	.\$ 33.85	13.99
ELEV0025-001 01/01/2016		
	Rates	Fringes
ELEVATOR MECHANIC	.\$ 41.47	30.285+a+b
FOOTNOTE: a.Vacation: 6%/under 5 years be all hours worked. 8%/over 5 ye rate for all hours worked. b. PAID HOLIDAYS: New Year's I Day; Labor Day; Veterans' Day; after Thanksgiving Day; and Chrometer Thanksgiving Day; an	ears based on Day; Memorial Day; Thanksgiving	regular hourly Day; Independence
ENGI0009-017 10/23/2013		
	Rates	Fringes
POWER EQUIPMENT OPERATOR (Crane) 141 tons and over	.\$ 24.88 .\$ 25.04	9.15 9.15 9.15 9.15
IRON0024-009 06/01/2015		
	Rates	Fringes
IRONWORKER, ORNAMENTAL	.\$ 25.05	11.14
IRON0024-010 06/01/2015		
	Rates	Fringes
IRONWORKER, STRUCTURAL	.\$ 25.05	11.14
PAIN0079-006 02/22/2016		
	Rates	Fringes
PAINTER (Brush, Roller and Spray; Excludes Drywall Finishing/Taping)		6.91
	Rates	Fringes

DRYWALL FINISHER/TAPER	\$ 21.05	6.91
PAIN0419-001 07/01/2015		
	Rates	Fringes
SOFT FLOOR LAYER (Vinyl and Carpet)		10.09
PAIN0930-002 07/01/2015		
	Rates	Fringes
GLAZIER	\$ 30.52	8.12
* PLUM0003-009 06/01/2016		
	Rates	Fringes
PLUMBER (Excludes HVAC Duct, Pipe and Unit Installation)	\$ 38.43	15.19
PLUM0208-008 06/01/2015		
	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe and Unit Installation; Excludes HVAC Duct Installation)	ė 25 25	13.39
		13.39
SFC00669-002 01/01/2016	.	
	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)	\$ 34.43	19.50
SHEE0009-004 07/01/2015		
	Rates	Fringes
SHEET METAL WORKER (Includes HVAC Duct Installation; Excludes HVAC Pipe and Unit		
Installation)	•	14.63
SUCO2013-006 07/31/2015		
	Rates	Fringes
BRICKLAYER	\$ 21.96	0.00
CARPENTER (Acoustical Ceiling Installation Only)	\$ 22.40	4.85
CARPENTER (Metal Stud		

Installation Only)\$ 17.68	0.00
CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud	
Installation\$ 21.09	6.31
CEMENT MASON/CONCRETE FINISHER\$ 20.09	7.03
LABORER: Common or General\$ 14.49	5.22
LABORER: Mason Tender - Brick\$ 15.99	0.00
LABORER: Mason Tender - Cement/Concrete\$ 16.00	0.00
LABORER: Pipelayer \$ 16.96	3.68
OPERATOR: Backhoe/Excavator/Trackhoe\$ 20.78	5.78
OPERATOR: Bobcat/Skid Steer/Skid Loader\$ 19.10	3.89
OPERATOR: Grader/Blade\$ 21.50	0.00
ROOFER\$ 16.56	0.00
TRUCK DRIVER: Dump Truck\$ 17.34	0.00
WATERPROOFER\$ 12.71	0.00

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

Office of Human Resources

Supplemental rates (Specific to the Denver projects) Supp #101, Date: 11-19-2015

Classification		<u>Base</u>	<u>Fringe</u>
Boilermakers		\$30.97	\$21.45
Iron Worker, Reinforcing		\$18.49	\$3.87
Paper Hanger		\$20.15	\$6.91
Power Equipment Operators (Concrete Mixers):			
	Less than 1 yd	\$23.67	\$10.67
	1 yd and over	\$23.82	\$10.68
	Drillers	\$23.97	\$10.70
	Loaders over 6 cu yd	\$23.82	\$10.68
	Oilers	\$22.97	\$10.70
Mechanic		\$18.48	
Plasters		\$24.60	\$12.11
Plaster Tenders		\$10.79	-
Laborers: Concrete Saw		\$13.89	-
Tile Setter-Tile Finisher-Floor Grinder-Base Grinder		\$20.24	\$8.14
Power Equipment Operators:			
	Loader up to and incl 6 cu	\$23.67	\$10.67
	Motor Grader	\$23.97	\$10.70
	Roller	\$23.67	\$10.67
Truck Drivers	Flatbed	\$19.14	\$10.07
	Semi	\$19.48	\$10.11

- Caulkers—Receive rate prescribed for craft performing operation to which caulking is incidental .i.e. glazier, painter, brick layer, cement mason.
- Use the "Carpenters, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud Installation" rates published by the Federal Davis-Bacon rates for batt insulation, pre-stress concrete and tilt up concrete walls.
- Use the "Laborer—Common", for General Housekeeping, Demolition, Final Cleanup and Indoor Fence Installer.
- Cleanup incidental to the craft performing work can't be classified as Laborer-Common.
- See Denver City Auditor's Office Prevailing Wage Clarification of Determinations 2015 Prevailing Wage Section Clarification of Determinations for list of complete classification uses at Denvergov.org/Auditor.

SECTION 07 53 23 – ADHERED EPDM SINGLE-PLY ROOFING

PART 1 - GENERAL

- 1.1 DESCRIPTION: Furnish the labor, administration, materials and equipment to integrate the work into the overall building system so as to provide a leak free, EPDM (Ethylene Propylene Diene Monomer) elastomeric roof system. The system is an assembly of components including the insulation, roofing membrane, metal flashings, and all related parts necessary to complete the assembly.
- 1.2 A brief description of the major base bid work items follows:
 - A) Single-Ply Roofing: On the low slope areas shown on the Drawings, remove the existing roof membranes and install a new fully adhered insulated EPDM recover roofing system.

1.3 APPLICATOR'S QUALIFICATIONS

A) Prior to the Notice of Award, the Contractor shall submit evidence that his company is an approved roofer for the membrane material manufacturer providing the membrane and has five years continuous successful experience in applying EPDM roofing systems.

1.4 QUALITY ASSURANCE

- A) A roofing consultant has been engaged to provide part time inspection of materials and workmanship. The Contractor shall provide a minimum of one weeks notice to the County Project Manager or representative/Engineer prior to the start of roofing operations so that such services can be scheduled.
- B) Except as modified and supplemented herein, follow the published requirements and written recommendations of the EPDM membrane and other material manufacturers. Concerning methods of application industry standards apply only when this contract does not address the matter. Industry Standards shall be predefined in the "NRCA (National Roofing Contractors Association) Manual of Roofing and Waterproofing".

1.5 SUBMITTALS

- A) When submitting manufacturer's literature, highlight all items pertaining to this project. See Division 1 for other items.
- B) Submit to the County Project Manager or representative/Engineer the items listed in the Submittal Register found in Division 1, and any other pertinent items not listed but necessary to complete the construction.
- C) Submit current manufacturer's literature for all items shown above. Also submit

literature for any other items which may have a direct bearing on the quality of the finished roofing.

D) Provide certification that materials meet the ASTM and Federal Specifications.

1.6 MATERIAL STORAGE AND HANDLING

- A) Where applicable, the Contractor shall store material in accordance with the material manufacturer's recommendation as to temperature.
- B) All insulation and water sensitive products shall be protected from the elements at all times. Such materials are to be stored in an enclosure or securely covered with a waterproof tarp; the plastic wrappers on the insulation products shall not be used as a means of weather protection.
- C) All materials shall be labeled for ready identification. Labels shall include the name of the manufacturer and product description.
- D) The Contractor shall store only that material on the roof that can be used in one day. Material stored on the roof shall be scattered so as not to apply a concentrated load to the roofing system (greater than 20 psf). No materials shall be stored on new roofing unless a protective layer of plywood with a foam insulation base is used.
- E) The Contractor shall use extreme care when transporting materials to the roof surface. Damaged materials shall not be installed and must be removed from the job site.
- F) The Contractor shall provide all required storage enclosures and safeguards.
- G) Materials shall be delivered in their original, unopened containers, clearly labeled. No materials shall be stored below 40 degrees F. Should any materials be stored below this temperature, they may not be installed until they are restored to a temperature greater than this.
- H) No materials shall be stored on surfaces with slopes greater than $\frac{1}{2}$ " per foot.
- I) Extreme caution must be used to properly secure the materials from wind.

1.7 ENVIRONMENTAL REQUIREMENTS

- A) Roofing materials shall not be installed in rain or snow. Roofing materials shall not be applied when there is heavy dew or frost on the roofing area. Application will not be allowed when the forecasted daily high temperature is less than 50 degrees or the wind speed is greater than 15 MPH.
- B) Do not heat the solvent based materials with an open flame in order to bring to a proper application temperature. Store materials in a heated location overnight if necessary.
- C) Provide drum heaters to properly maintain adhesive materials.

1.8 PROTECTION

- A) Adjacent surfaces shall be protected from stain and disfigurement during the demolition and application of roofing materials.
- B) The Contractor shall keep the building interior protected from the elements at all

times. Representatives from the Contractor shall be available in one hours notice should an emergency occur.

1.9 DEFECTS

A) Conditions which may be detrimental to the completion or performance of the specified work shall be reported in writing to the Architect/Engineer prior to commencing such work. Such work shall not start until defects have been corrected.

PART 2 - PRODUCTS

2.1 ABBREVIATIONS

A)	ASTM	American Society for Testing and Materials
B)	AWPB	American Wood Preservers Bureau
C)	FM	Factory Mutual
D)	FS	Federal Specification or Federal Standard
E)	SMACNA	Sheet Metal and Air Conditioning Contractors National Assoc.,
	Inc.	
F)	UL	Underwriters Laboratories
G)	WWPA	Western Wood Products Association

2.2 APPLICABLE PUBLICATIONS

A) The following publications of the issue listed below and referred thereafter by basic designation only form a part of this specification to the extent indicated by the references thereto (use latest publication):

2.3 ASTM PUBLICATIONS:

A)	ASTM A 307	Bolts & Nuts
B)	ASTM A 526	Galvanized Steel
C)	ASTM C 208	Wood Fiber Insulation

2.4 FEDERAL STANDARDS/SPECIFICATIONS:

A) TT-S 230C Sealing Compound

2.5 ROOF SYSTEM COMPONENTS

A) Insulation – Decks 1, 1A & 1B: Install a first layer of fiberglass faced isocyanurate foam insulation 1.0" thick, ASTM C 1289, Type II, Class I, Grade I. Over the layer of foam insulation set a single layer of 1/2" DensDeck Prime or

- approved equal.
- B) Insulation Decks 2, 3, 4 & 5: Install a single layer of 1/2" thick DensDeck Prime or approved equal.
- C) Insulation Attachment Decks 1, 1A, 1B & 5 Bid Option 1: The layer of foam insulation shall be secured with FM Approved concrete fasteners and insulation plates. The cover board shall be set in the roofing manufacturer's approved low rise foam adhesive. Boards shall be secured to meet FM 1-75 Approval.
- D) Insulation Attachment Decks 1, 1A, 1B & 5 Bid Option 2: The layer of foam insulation and cover board shall be secured using FM approved concrete fasteners and plates. Boards shall be secured to meet FM 1-75 Approval.
- E) Insulation Attachment Decks 2, 3, & 4: The layer of cover board shall be secured with FM Approved concrete fasteners and insulation plates. Boards shall be secured to meet FM 1-75 Approval.
- F) EPDM Roofing Bid Option 1: ASTM D4637, Type I 60 mil fire rated EPDM sheet over insulation. Finished construction must provide UL Class A surface. Products from Manville, Firestone and Carlisle are approved.
- G) EPDM Roofing Bid Option 2: ASTM D4637, Type I 90 mil fire rated EPDM sheet over insulation. Finished construction must provide UL Class A surface. Products from Manville, Firestone and Carlisle are approved.
- H) Seam Tape: Where possible use manufacturer's EPDM seam tape to construct field seams.
- I) Drain Sumps: Tapered insulation edge strip insulation built to have a slope of 1" per foot.
- J) Sheet Metal Finished: Where prefinished sheet metal is indicated, provide Kynar finish or equivalent.
- K) Accessories: Supply manufacturer required accessory products such as lap sealant in order to fully construct EPDM membrane system.

PART 3 - EXECUTION

3.1 GENERAL

- A) Deliver all materials to the site in a dry condition with labels intact. Either enclose materials in a trailer or cover with a waterproof tarpaulin to protect from the weather and moisture.
- B) For materials delivery in quantity to the site, obtain and submit a certification that the materials meet the required specification.
- C) Work so that each area of the membrane is completed the same day it is begun. This includes all base flashings.
- D) One, thirty-gallon per minute puddle type pump must be available on the job in case water must be removed from the roof surface on an emergency basis.
- E) The workers will not have access to the interior of the building unless it is related to associated interior work.

3.2 OPERATIONAL PROCEDURES

- A) Install temporary tie-ins and water cut-offs at the end of each workday. Remove all temporary tie-ins at the beginning of each workday.
- B) Except for expedient temporary work, do not roof during inclement weather as defined in the General Section of the Specification. Remove all temporary work prior to installing permanent components and materials.
- C) Confine equipment, storage of materials, debris, operations and movement of workers within the limits established for access at the pre-construction conference.
- D) Protect the building, all contents, and surrounding areas from damage, and building occupants from injury during the work. Do not affect the normal conduct of operations of the personnel in the building. Repairs must be made to all damage caused by lack of such protection to the Owner's satisfaction. If they determine that the repairs are beyond the Contractor's ability, then they will have the repairs performed by others and may charge the Contractor for these repairs.
- E) Remove daily all debris from the demolition and installation of the roof.
- F) When wheeled or other traffic over the partially or fully completed roofing is unavoidable, use adequate plywood protection for the membrane.
- G) Provide fifteen pound fire extinguishers at the point of application of any solvent based materials. The extinguishers should be Type A, B, C. No open flames shall be allowed around any of the solvent based products.

3.3 DEMOLITION

- A) Remove the existing roofing system as detailed in Section 02 41 13.
- B) If conditions are uncovered that would be detrimental to the application of the specified work, immediately notify the representative of the Owner.

3.4 INSULATION INSTALLATION

- A) Cut the insulation to fit snugly around penetrations and at the perimeters. No insulation gaps of over 1/4" shall be allowed. If gaps greater than this are created, then they shall be eliminated using trimmed pieces of isocyanurate insulation glued in place.
- B) Insulation boards shall be fully adhered with the 4' dimension staggered if possible.
- C) Follow additional applicable requirements of the roof insulation manufacturer and membrane manufacturer. No wet insulation shall be included in the final construction.

3.5 MEMBRANE INSTALLATION

- A) Except as modified and supplemented herein, apply membrane to meet the requirements and recommendations of the membrane manufacturer.
- B) Surfaces which have been contaminated by bitumen or other products which are

- not compatible with the membrane, flashings, or adhesives shall be cleaned or covered with plywood prior to the application of any roofing materials.
- C) Lift all mechanical unit and other roof top items as necessary to facilitate the proper installation of the membrane and flashings. Unit must be reset and brought back to proper functioning condition as soon as possible after the application of the roofing system. HVAC and other mechanical units require 96 hours of written notice from the Contractor to the Owner before approval can be given for this type of work.
- D) Over the new insulation system, unroll the EPDM sheet without stretching. Allow sheet to relax for 1/2 hour prior to adhering the sheet and seaming operations.
- E) Work with largest sheets possible.
- F) Use seam tape at all field formed rubber to rubber membrane seams unless indicated otherwise by manufacturer.
- G) After waiting at least two hours, but prior to leaving the job for the day, the Contractor shall apply lap sealant as recommended by the manufacturer.

3.6 FLASHING INSTALLATION

- A) Clean all surfaces to be flashed prior to the application of any new materials.
- B) Bond the specified flashing materials to the substrate in such a manner as to avoid loose spots, sags, and wrinkles. Flash all items in the configuration shown on the Drawings.

3.7 SEALANT

- A) Clean the substrate as best possible so no contaminants such as bitumen and dust remain.
- B) If required, prime the surface with the primer recommended by the manufacturer. Also, use sealant backing if required by manufacturer.

END OF SECTION 07 53 23

SECTION 01 01 00 – SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this contract consists of furnishing all management, supervision, labor, materials, tools, equipment, services, testing and incidentals for the construction of the Work indicated in the contract documents including lump sum items and unit price items.
- B. Reference: City and County of Denver Standard Specifications for Construction General Contract Conditions 2011 Edition (the yellow book) Contract General Conditions, GC 301 Consideration, GC 306 Working Hours and Schedule, GC Title 8 Protection of Persons and Property and GC Title 14 Site Conditions
- C. Project Description: Replace roofing on the Richard T. Castro Building. The building is located at 1200 Federal Blvd. Denver, CO 80204. The work shall include:
 - 1) Recover the existing roofing systems on the Richard T. Castro building. This base bid work takes place on Roof Decks 1, 1A and 1B.
 - a) Remove all loose wind damaged EPDM membrane from the surface of the existing foam insulation. Where the existing membrane is adhered to the existing insulation, remove 6" wide strips of the roof membrane 10" on center. Leave the remaining adhered membrane in place.
 - b) Remove existing EPDM membrane from wall substrate and curbs 6" back onto roof. Remove all copings and counterflashings not to be a part of the new roof system to the wall or curb substrate.
 - c) Add a layer of 1" thick isocyanurate foam over salvaged insulation and membrane. Set a .5" layer of high wind resistant cover board over the top of the foam insulation.
 - d) Bid Option 1: The foam insulation shall be mechanically attached. The cover board shall be set in low rise foam adhesive.
 - e) Bid Option 2: Both the foam insulation and cover board shall be mechanically attached to the deck.
 - f) Bid Option 1: Install a new fully adhered 60 mil EPDM membrane over the top of the cover board.
 - g) Bid Option 2: Install a new fully adhered 90 mil EPDM membrane over the top of the cover board.
 - h) Install new cured and uncured EPDM flashings.
 - i) Provide new sheet metal flashing and counterflashings.
 - j) Provide a written 20 year warranty covering the new roofing material and labor in a leak free state at a no-dollar limit.

- 2) Project Team Members:
 - a) Page Southerland Page / Project Architect John Schmitt
 - b) RoofTech Consultants / Roofing Consultant Ron Scott
 - c) City and County of Denver / Project Manager David Brown

1.2 SITE CONDITIONS

A. The Contractor acknowledges that he has reviewed sections 1401 and 1402 of Title 14 of City and County of Denver Standard Specifications for Construction General Contract Conditions 2011 Edition (The yellow book). The Contractor warrants that as a result of examination and investigation of all the aforesaid data and the site, that the Contractor can perform the Work in a good and workmanlike manner and to the satisfaction of the City. The City assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this contract unless such representation is expressly stated in the contract.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONTRACTOR'S DUTIES

- A. Except as otherwise specified, furnish the following to the full extent required by the contract:
 - 1) Labor, superintendence, supervision and products.
 - 2) Construction equipment, tools, machinery and materials.
 - 3) Utilities required for construction and related activities.
 - 4) Other facilities and services necessary to properly execute and complete the Work, including security for worksite, and storage and protection of all materials awaiting incorporation into the Work, providing a safe working environment for workers, City and County of Denver representatives, and the public in accordance with all local, state and federal requirements.
 - 5) Prosecute the Work as specified and in a timely manner. Submit a schedule of Work in accordance with GC 306 Working Hours and Schedule.

3.2 COORDINATION

A. Coordinate prosecution of the Work in accordance with GC 801 Safety of Persons

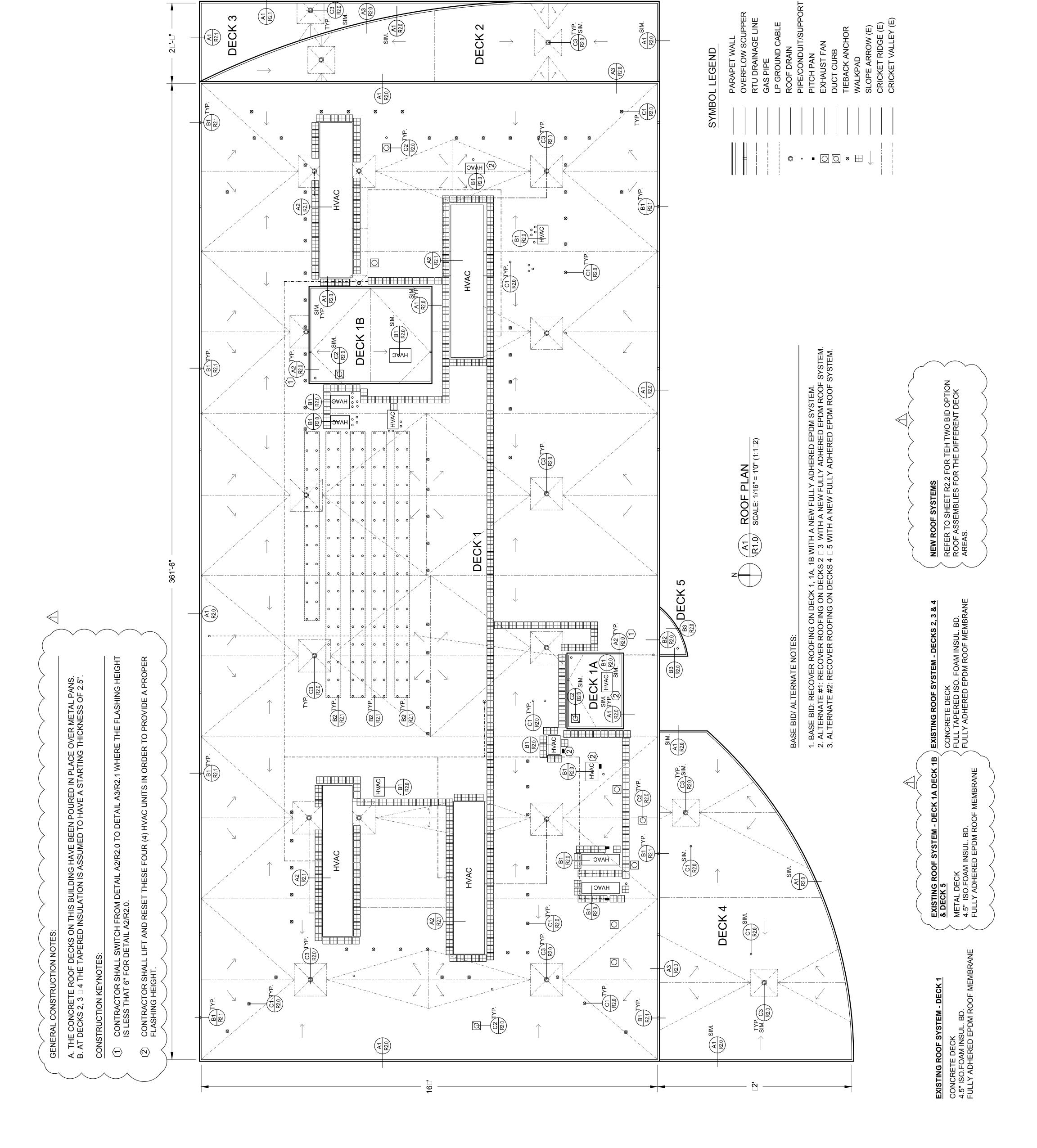
and GC 802 Protective Devices and Safety Precautions; GC 803 Protection of Property and Work in Progress; and GC 804 Protection of Municipal Public Service and Utility Systems with those ongoing City and County of Denver operations, public utilities, governmental bodies, private utilities and other contractors performing work on and adjacent to the worksites. Eliminate or minimize delays in the Work and conflicts with those operations, utilities, bodies and contractors. Schedule governmental, private utility and public utility work that relies upon survey points, lines and grades established by the Contractor to occur immediately after those points, lines and grades have been established. Confirm coordination measures for each individual case with the City in writing.

- B. In the coordination effort of work by others, the Contractor shall obtain and refer to equipment locations and other layouts, as available, to avoid interface problems.
- C. The City reserves the right to permit access to the site of the Work for the performance of work by other contractors and persons at such times that the City deems proper. The exercise of such reserved right shall in no way or to any extent relieve the Contractor from liability for loss and damage to the work due to or resulting from its operations or from responsibility for complete execution of the Contract. The Contractor shall cooperate with other contractors and persons in all matters requiring common effort.

3.3 CONTRACTOR USE OF WORKSITE

- A. Confine worksite operations to areas permitted by law, ordinances, permits and the contract.
- B. Per GC 801, consider the safety of the Work and that of the people and property on and adjacent to the worksite when determining amount, location, movement and use of materials and equipment on worksite.
- C. Do not load worksite with equipment and products that would interfere with the Work. Only equipment, tools or materials required for this Work may be stored at the worksite.
- D. Per GC 803, Protect products, equipment and materials stored on worksite.
- E. Relocate stored products, equipment and materials which interfere with operations of City, government bodies, public and private utilities, and other contractors.

END OF SECTION 01 01 00



REPLACE ROOFING RICHARD T. CASTRO BUILDING

1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO R1-0.DWG

ROOF PLAN

0

2

= 1'-0"

1/16"

4/11/2016

LB CKED BY

DB

RDS

RDS 6/30/2016 RDS

ASI #1

 \triangleleft

BID SET

4/11/16 RDS 11/18/15

95% DRAFT SUBMITTAL

RoofTech Consultants, Inc.
14828 W. 6TH Avenue, Unit B-8
Golden, Colorado 80401
Phone: (303) 233-1092
Fax: (303) 233-205

Southerland Page, Inc. 1530 15th St. Denver, Colorado 80202 Phone: (303) 595 0431

Page/





ARCHITECT

Page/

e Southerland Page, Inc. 1530 15th St. Denver, Colorado 80202 Phone: (303) 595 0431

ROOFING CONSULTANT

Roo

ofTech Consultants, Inc. 14828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205

4828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205
--

ofTech Consultants, Inc. 4828 W. GTH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205
--

4828 W. 6TH Avenue Golden, Colo Phone: (303 Fax: (303		14828 W. 6TH Avenue, Unit B-8	Golden, Colorado 80401	Phone: (303) 233-1092	Fax: (303) 233-2205			
--	--	-------------------------------	------------------------	-----------------------	---------------------	--	--	--

4828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205
--

828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205	
---	--

Golden, Colorado 80401 Phone: (303) 233-1092	Fax: (303) 233-2205		

60 MIL EPDM ROOF MEMBRANE

STRIP IN EPDM FLASHING

FIELD FORMED EPDM PIPE WRAP

0.5" WOOD FIBER INSUL. BD. 1.0" ISO. FOAM INSUL. BD.

ADHERED 60 MIL EPDM ROOF MEMBRANE (E)

2.5" ISO. FOAM INSUL. BD. (E)

CONCRETE DECK (E)

V.

60 MIL EPDM ROOF MEMBRANE

SHEET METAL INSERT COLLAR (E)

SHEET METAL SCUPPER INSERT (E)

OVERFLOW SCUPPER OPENING

EPDM STRIP IN FLASHING

- 0.5" WOOD FIBER INSUL. BD.
- 1.0" ISO. FOAM INSUL. BD.
- ADHERED 60 MIL EPDM
ROOF MEMBRANE (E)

2.5" ISO. FOAM INSUL. BD. (E)

 $\widehat{\mathbb{Q}}$

(E)

CONCRETE WALL PANEL (E)

Œ/

(E)

CONCRETE DECK (E)

2.0" ISO. FOAM INSUL. BD (E)

PIPE FLASHING SCALE 3" = 1'-0" (1:4)

B2 R2.1

2.0" ISO. FOAM INSUL. BD (E)

	RDS	6/30/16	RDS	4/11/16	RDS
	3	ASI #I	H L C	BIU SE I	H

BID SET 95% DRAFT SUBMITTAL REVISION PROJE RDS PROJE LB CHECKED BY: GT	01/00/0	RDS	91/11/4	RDS	11/18/15	BY/DATE	MGR:	DB	CT #:		4/11/2016
		H C	BIU SE I	H L 4	95% DKAFI SUBMIIAL	REVISION	DESIGNER: PROJ. MGR:	RDS	DRAFTER: PROJECT #:	ГВ	СТ

PROJECT #:	_{рате:} 4/11/2016	REPLACE ROOFING
drafter: LB	снескер ву: GT	REPLACE

PLACE ROOFING	RICHARD T.	STRO BUILDING
EPI		;AS

7		
_		
1		
_		
ון ה		
`		
J		
`		
)		
_		
`		
)		
•		

DENVER, CO 80204	FILE:	CASTRO RZ-1.DWG	
DENVER, CO 8020	FILE	CASTRO RZ-1.DWG	

ETAILS	
DE	
ЭF	
ROG	SCALE:

2.5" ISO. FOAM INSUL. BD. (E)

CONCRETE DECK (E)

N 7.

. 4

BASE FLASHING SCALE 3" = 1'-0" (1:4)

R2.1

NG SC.

	_	9
	۸i	P
	2	
#		,_

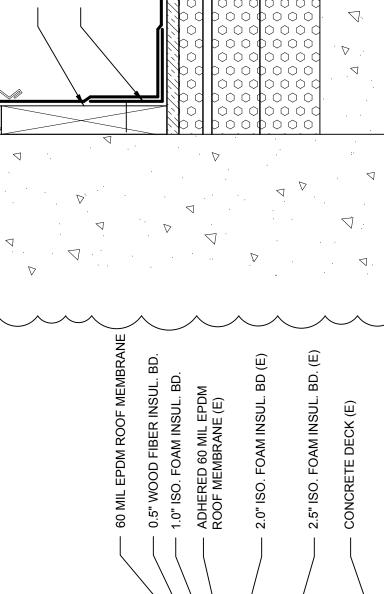
ASI #1	BID SET	95% DRAFT SUBMITTAL	REVISION	PROJ	PROJE	: DATE:	
\forall	Ш	95% DRA		DESIGNER: RDS	DRAFTER: LB	снескер вт.	
				~	\	\\\	_

24 GA. GALV. SHEET METAL SLIP COUNTERFLASHING - SCREW 2' O.C.

AC UNIT (E)

ISO. FOAM INSUL. BD.

HVAC CURB (E)



REINFORCED RUBBER FLASHING STRIP

7 .

60 MIL EPDM ROOF MEMBRANE

REINFORCED RUBBER FLASHING STRIP

WRAP RUBBER OVER TOP OF WALL

NOTE: TO BE USED IF ALTERNATE #2 IS TAKEN.

OVERFLOW SCUPPER FLASHING SCALE 3" = 1'-0" (1:4)

B1 R2.1

.

 \triangle

SCREW W/NEOPRENE WASHER SET 2' O.C.

Œ

(E

/()

24 GA. PRE-FINISHED SHEET METAL COPING CAP

22 GA. CONT. CLEAT NAILED 8" O.C.

0.5" WOOD FIBER INSUL. BD.

ADHERED 60 MIL EPDM ROOF MEMBRANE (E)

TAPERED ISO. FOAM INSUL. BD. (E)

/Ê

 \mathbb{Q}

Œ

and months are related as the contact and a

Œ

(E)

CONCRETE DECK (E)

√.

 \triangleright

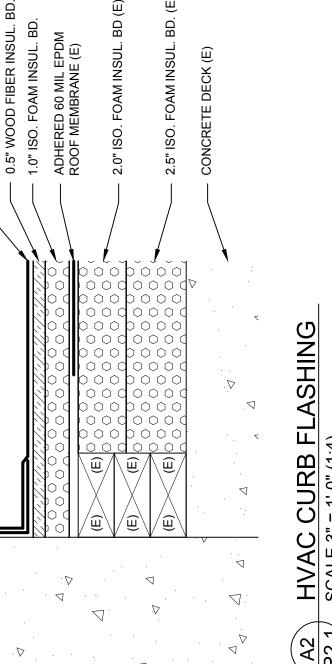
 ∇

PARAPET WALL FASHING SCALE 3" = 1'-0" (1:4)

A1 R2.1

· HVAC CURB (E)

REINFORCED RUBBER FLASHING STRIP





DETAIL NOTES:

1. DETAILS ARE EXPLODED FOR CLARITY. MAKE ALL CONNECTIONS WATERTIGHT.

2. (E) DENOTES EXISTING ITEMS TO REMAIN. ALL OTHER ITEMS ARE NEW.

3. LAP SEALANT NOT SHOWN. FOLLOW MFR. REQUIREMENTS.

2.0" ISO. FOAM INSUL. BD (EXISTING) O MIL EPDM ROOF MEMBRANE ADHERED 60 MIL EPDM ROOF MEMBRANE (EXISTING) 0.5" HIGH WIND COVER BD.1.0" ISO. FOAM INSUL. BD. 2.5" ISO. FOAM INSUL. BD. (EXISTING) METAL DECK (EXISTING) SCREW | INSULATION PLATE

BD (EXISTING)

2.0" ISO. FOAM INSUL.

BD.

2.5" ISO. FOAM INSUL. (EXISTING)

CONCRETE DECK (EXISTING)

 ∇

V.

DECK

BID OPTION 2 - NEW ROOFING SCALE 3" = 1'-0" (1:4)

B1 R2.2

ADHERED 60 MIL EPDM ROOF MEMBRANE (EXISTING)

1.0" ISO. FOAM INSUL. BD.

O MIL EPDM ROOF MEMBRANE

DRIVE PIN | INSULATION PLATE

THIS BID OPTION IS PRESENTED AS AN ALTERNATE ASSEMBLY TO THAT SHOWN FOR BID OPTION 1. THE LOW RISE FOAM INSULATION ADHESIVE IS ELIMINATED AND THE FASTENERS ARE MOVED TO THE TOP OF THE COVER BOARD. THE ROOF MEMBRANE IS SWITCHED TO IN ITHICKNESS.

BID OPTION #2 NOTES:

0.5" HIGH WIND COVER BD.

B2 BID OPTION 2 - NEW ROOFING □ DECKS 1A, 1B □ 5 (R2.2) SCALE 3" = 1'-0" (1:4)

CONCRETE DECK (EXISTING) DRIVE PIN | INSULATION PLATE . 7 000

ROOF DETAILS

NG SCALE:

Si

R2

1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO R2-0.DWG

დ

O MIL EPDM ROOF MEMBRANE ADHERED 60 MIL EPDM ROOF MEMBRANE (EXISTING) CONCRETE DECK (EXISTING) 0.5" HIGH WIND COVER BD. 1.0" ISO. FOAM INSUL. BD. TAPERED ISO. FOAM INSUL. BD (EXISTING) DRIVE PIN | INSULATION PLATE

RDS 6/30/2016 RDS 4/11/16 RDS 11/18/15

BID SET

#1

ASI

 \leqslant

95% DRAFT SUBMITTAL

2.0" ISO. FOAM INSUL. BD (EXISTING) 60 MIL EPDM ROOF MEMBRANE
0.5" HIGH WIND COVER BD.
SET IN FOAM ADHESIVES
1.0" ISO. FOAM INSUL. BD. ADHERED 60 MIL EPDM ROOF MEMBRANE (EXISTING) 2.5" ISO. FOAM INSUL. BD. (EXISTING) METAL DECK (EXISTING) SCREW ☐ INSULATION PLATE

BD (EXISTING)

2.0" ISO. FOAM INSUL.

2.5" ISO. FOAM INSUL. (EXISTING)

DECK

- NEW ROOFING

BID OPTION 1 SCALE 3" = 1'-0" (1:4)

A1 R2.2

 ∇

 $\sqrt{}$.

60 MIL EPDM ROOF MEMBRANE

DRIVE PIN | INSULATION PLATE

0.5" HIGH WIND COVER BD.SET IN FOAM ADHESIVES1.0" ISO. FOAM INSUL. BD.

A2 BID OPTION 1 - NEW ROOFING ☐ DECKS 1A, 1B
(R2.2) SCALE 3" = 1'-0" (1:4)

60 MIL EPDM ROOF MEMBRANE
0.5" HIGH WIND COVER BD.
SET IN FOAM ADHESIVES
1.0" ISO. FOAM INSUL. BD. ADHERED 60 MIL EPDM ROOF MEMBRANE (EXISTING) B3 BID OPTION 2 - NEW ROOFING □ DECKS 2, 3 □ 4 (R2.2) SCALE 3" = 1'-0" (1:4) TAPERED ISO. FOAM INSUL. BD (EXISTING) D 7. . 4 0000

REPLACE ROOFING

4/11/2016

кер ву:

LB

DB FECT #

RDS

RICHARD T. CASTRO BUILDING

4 A3 BID OPTION 1 - NEW ROOFING DECKS 2, R2.2 SCALE 3" = 1'-0" (1:4)

Page/

ARCHITECT

Southerland Page, Inc. 1530 15th St. Denver, Colorado 80202 Phone: (303) 595 0431 ROOFING CONSULTANT

RoofTech Consultants, Inc.
14828 W. 6TH Avenue, Unit B-8
Golden, Colorado 80401
Phone: (303) 233-1092
Fax: (303) 233-205

CITY AND COUNTY OF DENVER STATE OF COLORADO



Department of Public Works
Prevailing Wage Rates
Contract Number: 201628023

Castro Roof

June 6, 2016

Office of Human Resources



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



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

FROM: Alena Duran, Associate Human Resources Professional

DATE: Monday, March 21 2016

SUBJECT: Latest Change to Prevailing Wage Schedules

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

The attached Prevailing Wage Schedule is effective as of **Friday March 18, 2016** and applies to the City and County of Denver for **BUILDING CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) in accordance with the Denver Revised Municipal Code, Section 20-76(c).

General Wage Decision No. CO160030 Superseded General Decision No. CO20150030 Modification No. 3 Publication Date: 03/18/2016 (4 pages)

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

For questions call (720) 913-5018

Attachments as listed above.



General Decision Number: CO160030 03/18/2016 CO30

Superseded General Decision Number: CO20150030

State: Colorado

Construction Type: Building

County: Denver County in Colorado.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

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

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	02/26/2016
3	03/18/2016

ASBE0028-002 10/01/2012

	Rates	Fringes
ASBESTOS WORKER/HEAT & FROST INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation)	\$ 28.98	13.03
CARP0055-002 05/01/2015		
	Rates	Fringes
CARPENTER (Drywall Hanging Only)	\$ 25.00	6.19
CARP1607-001 06/01/2015		
	Rates	Fringes
MILLWRIGHT		11.88
ELEC0068-012 06/01/2015		

	Rates	Fringes	
ELECTRICIAN (Includes Low Voltage Wiring)	.\$ 33.15	13.46	
ELEV0025-001 01/01/2016			
	Rates	Fringes	
ELEVATOR MECHANIC	.\$ 41.47	30.285+a+b	
FOOTNOTE: a.Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked. b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.			
ENGI0009-017 10/23/2013			
	Rates	Fringes	
POWER EQUIPMENT OPERATOR (Crane) 141 tons and over	.\$ 24.88 .\$ 25.04	9.15 9.15 9.15 9.15 9.15	
IRON0024-009 06/01/2015			
	Rates	Fringes	
IRONWORKER, ORNAMENTAL	.\$ 25.05	11.14	
IRON0024-010 06/01/2015			
	Rates	Fringes	
IRONWORKER, STRUCTURAL	.\$ 25.05	11.14	
* PAIN0079-006 02/22/2016			
	Rates	Fringes	
PAINTER (Brush, Roller and Spray; Excludes Drywall Finishing/Taping)	.\$ 20.00	6.91	
* PAIN0079-007 02/22/2016			
	Rates	Fringes	
DRYWALL FINISHER/TAPER	.\$ 21.05	6.91	

PAIN0419-001 07/01/2015

	Rates	Fringes
SOFT FLOOR LAYER (Vinyl and Carpet)		10.09
PAIN0930-002 07/01/2015		
	Rates	Fringes
GLAZIER	\$ 30.52	8.12
PLUM0003-009 06/01/2015		
	Rates	Fringes
PLUMBER (Excludes HVAC Duct, Pipe and Unit Installation)	\$ 36.93	13.10
PLUM0208-008 06/01/2015		
	Rates	Fringes
PIPEFITTER (Includes HVAC Pipe and Unit Installation; Excludes HVAC Duct Installation)	\$ 35.35	13.39
SFC00669-002 01/01/2016		
	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)	\$ 34.43	19.50
SHEE0009-004 07/01/2015		
	Rates	Fringes
SHEET METAL WORKER (Includes HVAC Duct Installation; Excludes HVAC Pipe and Unit Installation)		14.63
SUCO2013-006 07/31/2015		
	Rates	Fringes
BRICKLAYER	\$ 21.96	0.00
CARPENTER (Acoustical Ceiling Installation Only)	\$ 22.40	4.85
CARPENTER (Metal Stud Installation Only)	\$ 17.68	0.00

CARPENTER, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud	
Installation\$ 21.09	6.31
CEMENT MASON/CONCRETE FINISHER\$ 20.09	7.03
LABORER: Common or General\$ 14.49	5.22
LABORER: Mason Tender - Brick\$ 15.99	0.00
LABORER: Mason Tender -	
Cement/Concrete\$ 16.00	0.00
LABORER: Pipelayer\$ 16.96	3.68
OPERATOR: Backhoe/Excavator/Trackhoe\$ 20.78	5.78
OPERATOR: Bobcat/Skid Steer/Skid Loader\$ 19.10	3.89
OPERATOR: Grader/Blade\$ 21.50	0.00
ROOFER\$ 16.56	0.00
TRUCK DRIVER: Dump Truck\$ 17.34	0.00
WATERPROOFER\$ 12.71	0.00

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

Office of Human Resources

Supplemental rates (Specific to the Denver projects) Supp #101, Date: 11-19-2015

Classification		<u>Base</u>	<u>Fringe</u>
Boilermakers		\$30.97	\$21.45
Iron Worker, Reinforcing		\$18.49	\$3.87
Paper Hanger		\$20.15	\$6.91
Power Equipment Operators (Concrete Mixers):			
	Less than 1 yd	\$23.67	\$10.67
	1 yd and over	\$23.82	\$10.68
	Drillers	\$23.97	\$10.70
	Loaders over 6 cu yd	\$23.82	\$10.68
	Oilers	\$22.97	\$10.70
Plasters		\$24.60	\$12.11
Plaster Tenders		\$10.79	-
Laborers: Concrete Saw		\$13.89	-
Tile Setter-Tile Finisher-Floor Grinder-Base Grinder		\$20.24	\$8.14
Power Equipment Operators:			
	Loader up to and incl 6 cu		
	yd	\$23.67	\$10.67
	Motor Grader	\$23.97	\$10.70
	Roller	\$23.67	\$10.67
Truck Drivers	Flatbed	\$19.14	\$10.07
	Semi	\$19.48	\$10.11

- Caulkers—Receive rate prescribed for craft performing operation to which caulking is incidental .i.e. glazier, painter, brick layer, cement mason.
- Use the "Carpenters, Excludes Acoustical Ceiling Installation, Drywall Hanging, and Metal Stud Installation" rates published by the Federal Davis-Bacon rates for batt insulation, pre-stress concrete and tilt up concrete walls.
- Use the "Laborer—Common", for General Housekeeping, Demolition, Final Cleanup and Indoor Fence Installer.
- Cleanup incidental to the craft performing work can't be classified as Laborer-Common.
- See Denver City Auditor's Office Prevailing Wage Clarification of Determinations 2015 Prevailing Wage Section Clarification of Determinations for list of complete classification uses at Denvergov.org/Auditor.

CITY AND COUNTY OF DENVER STATE OF COLORADO



Department of Public Works

Technical Specifications

Contract Number: 201628023

Castro Roof
June 6, 2016

Project Manual

Replace Roofing
City & County of Denver
Richard T. Castro Building

4/11/2016

TABLE OF CONTENTS

Project Manual Replace Roofing Richard T. Castro Building

<u>SPECIFICATIONS</u>	<u>SECTION</u>
DIVISION 1 - GENERAL REQUIREMENTS	
SUMMARY OF WORK	01 01 00
REGULATORY REQUIREMENTS	01 06 00
CONSTRUCTION SAFETY	01 11 00
PROJECT MEETINGS	01 20 00
ALTERNATES	01 23 00
UNIT PRICES	01 26 00
SUBMITTALS	01 30 00
SUBMITTAL REGISER	01 30 10
SCHEDULE	01 31 00
SHOP DRAWINGS	01 34 00
SCHEDULE OF VALUES	01 37 00
CONTRACTOR QUALITY CONTROL	01 40 00
QUALITY ASSURANCE	01 40 20
TEMPORARY FACILITIES	01 50 00
STORAGE AND PROTECTION	01 62 00
SUBSTITUTIONS	01 63 00
CONTRACT CLOSEOUT	01 70 00
CLEANING	01 71 00
CONTRACT RECORD DOCUMENTS	01 72 00
OPERATION MAINTENANCE DATA	01 73 00
CUTTING AND PATCHING	01 73 20
SELECTIVE DEMOLITION	01 73 60
WARRANTIES AND BONDS	01 74 00
CONSTRUCTION WASTE MANAG. AND DISOPOSAL	01 74 19
DIVISION 6 - CARPENTRY	
ROUGH CARPENTRY	06 10 00
DIVISION 7 - ROOFING SYSTEMS	
EPDM SINGLE PLY ROOFING	07 53 23
SHEET METAL FLASHINGS & ACCESSORIES	07 60 00
SEALANTS SEALANTS	07 92 00
DIVISION 22 - PLUMBING	
ROOF DRAIN TESTING & REPAIR	22 14 26-13

SECTION 01 01 00 – SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this contract consists of furnishing all management, supervision, labor, materials, tools, equipment, services, testing and incidentals for the construction of the Work indicated in the contract documents including lump sum items and unit price items.
- B. Reference: City and County of Denver Standard Specifications for Construction General Contract Conditions 2011 Edition (the yellow book) Contract General Conditions, GC 301 Consideration, GC 306 Working Hours and Schedule, GC Title 8 Protection of Persons and Property and GC Title 14 Site Conditions
- C. Project Description: Replace roofing on the Richard T. Castro Building. The building is located at 1200 Federal Blvd. Denver, CO 80204. The work shall include:
 - 1) Recover the existing roofing systems on the Richard T. Castro building. This base bid work takes place on Roof Decks 1, 1A and 1B.
 - a) Remove all loose wind damaged EPDM membrane from the surface of the existing foam insulation. Where the existing membrane is adhered to the existing insulation, remove 6" wide strips of the roof membrane 10" on center. Leave the remaining adhered membrane in place.
 - b) Remove existing EPDM membrane from wall substrate and curbs 6" back onto roof. Remove all copings and counterflashings not to be a part of the new roof system to the wall or curb substrate.
 - c) Add a layer of 1" thick isocyanurate foam over salvaged insulation and membrane. Set a .5" layer of fiberglass faced gypsum cover board over the top of the foam insulation. The foam insulation shall be mechanically attached. The cover board shall be set in low rise foam insulation adhesive.
 - d) Install a new fully adhered 60 mil EPDM membrane over the top of the cover board.
 - e) Install new cured and uncured EPDM flashings.
 - f) Provide new sheet metal flashing and counterflashings.
 - g) Provide a written 20 year warranty covering the new roofing material and labor in a leak free state at a no-dollar limit.

- 2) Project Team Members:
 - a) Page Southerland Page / Project Architect John Schmitt
 - b) RoofTech Consultants / Roofing Consultant Ron Scott
 - c) City and County of Denver / Project Manager David Brown

1.2 SITE CONDITIONS

A. The Contractor acknowledges that he has reviewed sections 1401 and 1402 of Title 14 of City and County of Denver Standard Specifications for Construction General Contract Conditions 2011 Edition (The yellow book). The Contractor warrants that as a result of examination and investigation of all the aforesaid data and the site, that the Contractor can perform the Work in a good and workmanlike manner and to the satisfaction of the City. The City assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this contract unless such representation is expressly stated in the contract.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONTRACTOR'S DUTIES

- A. Except as otherwise specified, furnish the following to the full extent required by the contract:
 - 1) Labor, superintendence, supervision and products.
 - 2) Construction equipment, tools, machinery and materials.
 - 3) Utilities required for construction and related activities.
 - 4) Other facilities and services necessary to properly execute and complete the Work, including security for worksite, and storage and protection of all materials awaiting incorporation into the Work, providing a safe working environment for workers, City and County of Denver representatives, and the public in accordance with all local, state and federal requirements.
 - 5) Prosecute the Work as specified and in a timely manner. Submit a schedule of Work in accordance with GC 306 Working Hours and Schedule.

3.2 COORDINATION

A. Coordinate prosecution of the Work in accordance with GC 801 Safety of Persons

and GC 802 Protective Devices and Safety Precautions; GC 803 Protection of Property and Work in Progress; and GC 804 Protection of Municipal Public Service and Utility Systems with those ongoing City and County of Denver operations, public utilities, governmental bodies, private utilities and other contractors performing work on and adjacent to the worksites. Eliminate or minimize delays in the Work and conflicts with those operations, utilities, bodies and contractors. Schedule governmental, private utility and public utility work that relies upon survey points, lines and grades established by the Contractor to occur immediately after those points, lines and grades have been established. Confirm coordination measures for each individual case with the City in writing.

- B. In the coordination effort of work by others, the Contractor shall obtain and refer to equipment locations and other layouts, as available, to avoid interface problems.
- C. The City reserves the right to permit access to the site of the Work for the performance of work by other contractors and persons at such times that the City deems proper. The exercise of such reserved right shall in no way or to any extent relieve the Contractor from liability for loss and damage to the work due to or resulting from its operations or from responsibility for complete execution of the Contract. The Contractor shall cooperate with other contractors and persons in all matters requiring common effort.

3.3 CONTRACTOR USE OF WORKSITE

- A. Confine worksite operations to areas permitted by law, ordinances, permits and the contract.
- B. Per GC 801, consider the safety of the Work and that of the people and property on and adjacent to the worksite when determining amount, location, movement and use of materials and equipment on worksite.
- C. Do not load worksite with equipment and products that would interfere with the Work. Only equipment, tools or materials required for this Work may be stored at the worksite.
- D. Per GC 803, Protect products, equipment and materials stored on worksite.
- E. Relocate stored products, equipment and materials which interfere with operations of City, government bodies, public and private utilities, and other contractors.

END OF SECTION 01 01 00

SECTION 01 05 00 – LAYOUT OF WORK AND SURVEYS

PART 1 - GENERAL

1.1 SCOPE

- A. This Section covers the procedures and accuracy requirements for survey services for layout of work and field measurement of work quantities to be determined by surveys.
- B. Reference Contract General Conditions, GC 318 and GC 319

1.2 SUBMITTAL

- A. Refer to Technical Specifications Section 01 30 00 for submittal requirements.
- B. Copies of original pages of field notes.
- C. Original field notebooks when filled and at end of contract.
- D. As-built measurements.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONSTRUCTION LINES AND GRADES

- A. The Contractor shall make surveys and layouts as necessary to delineate the work. The Contractor shall review GC 318 and CG 319 to assure construction surveys for the proper performance of the Work. The City will provide all reference points shown on the contract documents. The Contractor shall accurately transfer the survey control information to the points of application and maintain in good order survey control points that may be required for the completion of the Work subject as to their location, sufficiency and adequacy. The Contractor shall furnish skilled labor, instrument platforms, ladders and such other temporary structures as may be necessary for making and maintaining points and lines in connection with the surveys required.
- B. The City may draw the Contractor's attention to errors or omissions in lines or grades, but the failure to point out such errors or omissions shall not give the Contractor any right or claim nor shall in any way relieve the Contractor of his obligations according to the terms of this contract.

City and County of Denver Replace Roofing Richard T. Castro Building

C. The Contractor's instruments and other survey equipment shall be accurate, suitable for the surveys required in accordance with recognized professional standards and in proper condition and adjustment at all times. Surveys shall be performed under the direct supervision of a Colorado licensed surveyor.

3.2 AS-BUILT MEASUREMENTS

A. As-built measurement for items that will be hidden or visible including all civil, mechanical, electrical, control work and all utilities that are placed in concrete, earth or behind walls shall be made. Items located within five feet beyond a building shall be referenced to building column lines and finish floor elevations. Special attention shall be paid to items requiring service, sensors, items with moving parts, access points and locations of junctions, elevation changes and directional changes.

END OF SECTION 01 05 00

SECTION 01 06 00 – REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section identifies primary compliance with the State, City and County of Denver's regulatory requirements outlined in Special Contract conditions SC-1 Construction Specifications and SC-13 Construction Inspection by the City.
- B. Reference: City and County of Denver Standard Specifications for Construction General Contract Conditions 2011 Edition (the yellow book) Contract General Conditions, GC 205 Building Inspection and GC 317 Permits and Licenses

1.2 BUILDING AND FIRE CODES

A. All design and construction work shall be governed by the Building Code for the City and County of Denver, latest edition. This is based upon the International Building Code of the International Code Council with Denver Amendments to this code. See Special Contract Conditions, Construction Specifications.

1.3 DENVER BUILDING DEPARTMENT

A. For review and approval of all construction documents for compliance to the International Building Code 2009 and City and County and Denver Amendments 2011 or later approved editions.

City and County of Denver Community Planning and Development Building Inspection Division 201 West Colfax Avenue, Dept 205 Denver, Colorado 80202 Telephone 720-865-2720 Fax 720-865-2880

1.4 DENVER FIRE DEPARTMENT

A. For review and approval of plans for compliance with the Denver Fire Department's requirements as they apply to projects for the Department of Public Works:

Denver Fire Department

745 W. Colfax Ave.

Denver, Colorado 80204Telephone: 720-913-3474, or

E-mail: denfpb@denvergov.org

Fax 720-865-2833

- B. The Contractor is advised that the Denver Fire Department Fire Prevention Bureau requires permitting for the following activities as they apply to the scope of work. The Contractor is responsible for obtaining the appropriate permits necessary to complete the work. All costs associated with this permitting and policy compliance shall be the responsibility of the Contractor. The policies all reference the International Fire Code (IFC).
 - 1) "Hot work", which is defined as the operation of any equipment or tool that creates sparks, hot slag, or radiant or convective heat as a result of the work. This includes, but is not limited to, welding, cutting, brazing, or soldering.
 - 2) Use and storage of compressed gas for both temporary storage and permanent facility installation. This includes, but is not limited to, flammable gas (excluding propane-LPG), oxidizer (including oxygen), and inert and/or simple asphyxiates.
 - 3) Tank installation, which includes above-ground storage tanks (AST) and underground storage tanks (UST) for both temporary tanks and permanent facility installations.
- C. In addition to the above permits, the Denver Fire Department may require other permits that are associated with the specific work in the Contract Documents. Policies provided by the Denver Fire Department are meant to provide basic information for the most common conditions and situations. In any given occupancy, many other International Fire Code (IFC) requirements may be enforced. These should be addressed with the Denver Fire Department before construction begins and during construction with premise inspection(s). Any questions can be addressed to the Fire Prevention Bureau between 6:30 AM and 9:00 AM Monday-Friday at 720-913-8242 or -8237.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PERMITS AND CERTIFICATIONS

- A. The Contractor shall maintain records on site of all permits acquired by federal, state, and local agencies. Posting of permits shall conform to requirements of the respective agencies.
- B. At the time of Substantial Completion and Final Acceptance, the Contractor shall forward to the Project Manager a copy of the Temporary Certificate of Occupancy and the final Certificate of Occupancy.

END OF SECTION 01 06 00

SECTION 01 11 00 - CONSTRUCTION SAFETY

PART 1 - GENERAL

1.1 WORK INCLUDED

- A) Work specified in this Section includes construction safety precautions and programs by the Contractor
- B) Reference Contract General Conditions, GC 801 Safety of Persons, GC 802 Protective Devices and Safety, GC 803 Protection of Property and Work in Progress.

1.2 RESPONSIBILITY

A) The General Conditions make it clear in section 801 that all safety precautions during the construction process are the responsibility of the Contractor. The Contractor is responsible for the health and safety of his employees, agents, subcontractors and their employees, and other persons on the worksite; for the protection and preservation of the work and all materials and equipment to be incorporated therein; and for the worksite and the area surrounding the worksite. The Contractor shall take all necessary and reasonable precautions and actions to protect all such persons and property.

1.3 SUBMITTAL

A) Refer to Technical Specifications 01 3000 for submittal requirements. A safety plan shall be submitted by the General Contract prior to commencing any work.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S SAFETY PLAN

A) Provide a Contractor's Safety Program that as a minimum meets all applicable federal, state and local government requirements.

PART 3 - EXECUTION

3.1 IMPLEMENT CONTRACTOR'S SAFETY PLAN

A) Implement the approved Contractor's Operational Safety Plan as described in this Technical Specifications

City and County of Denver Replace Roofing Richard T. Castro Building

END OF SECTION 01 11 00

City and County of Denver Replace Roofing Richard T. Castro Building

SECTION 01 20 00 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 DESCRIPTION

- A) The Work specified in this Section requires the Contractor's Project Manager, Superintendent and Quality Control representative to attend meetings scheduled by the City for the collection and dissemination of information related to the subject contract.
 - 1) The Contractor will prepare the minutes of each construction meeting and distribute them to each of the participants.

1.2 OTHER MEETINGS

A) The Contractor will be advised of times, dates and places of City initiated meetings.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PRECONSTRUCTION MEETING

- A) A Preconstruction Meeting will be scheduled by the City after the Contract has been signed by all parties. The purpose of this meeting is to introduce the City's representatives to their counterparts in the Contractor's organization and to establish lines of communication between these representatives and outline some contract requirements. The Contractor's Superintendent and Quality Control Representative(s) shall attend this meeting.
- B) The Project Manager will distribute a notice of this meeting, along with an agenda of the subjects to be addressed.
- C) The Project Manager will explain and discuss the responsibilities and authorities of the City, the Designer, and the Project Manager's organization.
- D) The City will provide highlights of the following information at this meeting:
 - 1) Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) or Small Business Enterprise (SBE) if such was a specifically designated requirement.

- 2) Insurance and permit requirements.
- 3) Procedures for processing change orders.
- 4) Procedures for submitting shop and working drawings, product data and samples.
- 5) Monthly pay estimate cutoff dates.
- 6) Payment procedures.
- 7) Request for information procedures.
- 8) Communication procedures.
- 9) Contractor-required Daily Report
- 10) Scheduling and coordination requirements including utility outage notifications
- 11) Site and building access, staging areas, and parking for contractors
- 12) Any concerns for public interface during the execution of the work
- 13) Quality control/assurance procedures.
- 14) Environmental requirements regarding finding potentially contaminated materials during the execution of the work.
- 15) As-built documents.
- 16) Project closeout requirements.
- 17) The Contractor will introduce the Contractor's representatives and briefly describe each person's responsibilities. The Contractor will provide the following:
- 18) A list of all subcontractors.
- 19) Office, storage areas and construction area layouts, along with temporary easements.
- 20) Safety, first aid, emergency actions and security procedures including the name of the Contractor's insurance company.
- 21) 60 day preliminary milestone schedule.
- 22) Sequence of work.

- 23) Construction worksite waste stream sorting and haul plan.
- 24) Housekeeping procedures.
- 25) The Contractor's general erosion and sedimentation control plans, noise, hazardous material, air and water pollution control plans.
- 26) Coordination and notification for utility work and utility outages
- 27) Deliveries and priorities of major equipment.
- 28) Submittal Schedule
- 29) Explanations provided by the City will not amend, supersede or alter the terms or meaning of any contract document and the Contractor shall not claim reliance on such explanations as a defense to any breach or failure by the Contractor to perform as specified in the contract.

3.2 CONSTRUCTION PROGRESS MEETINGS

- A) Progress meetings will be scheduled weekly. The meetings will be held at the worksite or at a location selected by the Team. Meetings will be chaired by the Contractor.
- B) The Contractor's personnel shall attend and the Contractor will be responsible for publishing minutes of the meetings.
- C) At a minimum, the following items will be addressed at each meeting. The items addressed in the meeting do not waive notification or submittal requirements as required elsewhere in the contract.
- D) Safety: Contractor shall report any safety issues
- E) Quality Control
- F) The Contractor's Quality Control Representative shall report on inspections by other agencies and any follow-up activity required.
- G) The Project Manager and/or the Designer will present and discuss issues regarding quality control.
- H) Quality Assurance
- I) The Contractor will present and discuss issues regarding quality assurance.
- J) Design activities: open discussion

- K) Shop drawings/submittals/material procurement
- L) The Contractor shall provide and review the Contractor's submittal schedule and provide any updated information and/or changes to the schedule.
- M) The Contractor shall provide information on the status of submittals requiring resubmittal.
- N) The Contractor shall review any accepted submittals that the Contractor plans to re-submit with changes.
- O) Contract shall provide the status of material procurement for long-lead items All long-lead items shall be identified with a separate activity on the approved CPM project schedule.
- P) Construction activities: Open discussion to include coordination items with other Contractors and or agencies.
- Q) Schedule
- R) The Contractor shall provide the attendees with the Contractor's three week lookahead schedule and review the items on the schedule. The schedule shall be in bar chart format and coordinated with the approved CPM.

END OF SECTION 01 20 00

City & County of Denver Replace Roofing Richard T. Castro Building

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A) Drawings and general provisions of the Contract and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A) This Section includes administrative and procedural requirements governing Alternates.

1.3 DEFINITIONS

- A) Definition: An alternate is an amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to the Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1) The cost for each alternate is the net addition to the Contract Sum to incorporate the Alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A) Coordination: Modify or adjust affected adjacent Work as necessary to completely and fully integrate that Work into the Project.
 - 1) Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.
- B) Notification: Immediately following the award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate whether alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C) Execute accepted alternates under the same conditions as other Work of this Contract.
- D) Schedule: A "Schedule of Alternates" is included at the end of this Section.

ALTERNATES 01 23 00 - 1

Specification Sections referenced in the Schedule contain requirements for materials necessary to achieve the Work described under each alternate.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A) Alternate No. 1: Decks 2 & 3
 - 1) Install a new fully adhered EPDM recover roof system over the Deck 2 and 3 roofs. The existing roofing is to be demolished in the same manner prescribed for Deck 1. The insulation shall be salvaged in place.
 - 2) A new 0.5" fiberglass faced gypsum cover board shall be set over the existing tapered insulation system. The boards shall be mechanically fastened to the concrete decking.
 - 3) The fully adhered EPDM membrane shall be set over the gypsum cover board.
 - 4) Install new cured and uncured EPDM flashings. New sheet metal flashings and counterflashings are to be installed.
 - 5) Provide a new 20 year warranty for the new roofing system.

B) Alternate No. 2: Decks 4 & 5

- 1) Install a new fully adhered EPDM recover roof system over the Deck 4 and 5 roofs. The existing roofing is to be demolished in the same manner prescribed for Deck 1. The insulation shall be salvaged in place.
- 2) A new 0.5" fiberglass faced gypsum cover board shall be set over the existing tapered insulation system. The boards shall be mechanically fastened to the concrete and metal decking.
- 3) The fully adhered EPDM membrane shall be set over the fiberglass faced gypsum cover board.
- 4) Install new cured and uncured EPDM flashings. New sheet metal flashings and counterflashings are to be installed.
- 5) Provide a new 20 year warranty for the new roofing system.

END OF SECTION 01 23 00

ALTERNATES 01 23 00 - 2

SECTION 01 26 00 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This section includes administrative and procedural requirements for unit prices.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1) Division 1 Section "Quality Control Services" for general inspection requirements.

1.3 DEFINITIONS

A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if the estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, profit and applicable taxes.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. The Owner reserves the right to reject the Contractor's measurement of work-inplace that includes the use of established unit prices, and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Contractor.
- D. Schedule: A "Unit Price Schedule" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials described under each unit price.

UNIT PRICES 01 26 00 - 1

1.5 BASE BID SCHEDULED VALUES

- A. Scheduled quantities are established here for the Unit Prices to be listed. These schedule quantities are to be part of the base bid work. The Unit Prices to be listed shall be used for **additive or deductive** purposes in order to adjust the scheduled values to the actual work installed at jobs end.
 - 1) As part of the Base Bid, schedule the replacement of 1,000 board feet (1,000 sf of 1" material) of fiberglass faced isocyanurate foam with new isocyanurate foam meeting the roof specification.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 SCHEDULE A - UNIT PRICES

- A. Unit Price No. 1:
 - 1) Provide a unit price to be used for additive or deductive purposes for the installation of 100 board feet of new isocyanurate foam insulation to replace damaged foam insulation.

END OF SECTION 01 26 00

UNIT PRICES 01 26 00 - 2

City and County of Denver Replace Roofing Richard T. Castro Building

SECTION 01 30 00 - SUBMITTALS

PART 1 - GENERAL

1.1 DESCRIPTION

- A) The Work specified in this Section summarizes the requirements for the submittal of documents to the City that are defined in these Specifications. It also describes the procedures for "supplemental" submittals.
- B) Reference Contract General Conditions, GC 309 and GC 405.

PART 2 - PRODUCTS

2.1 SUBMITTAL SCHEDULE

- A) The Contractor shall provide a submittal schedule within 14 days after Notice to Proceed. Provide a submittal register for all submittals. The Submittal Schedule shall be directly related to the CPM schedule, shall identify all the submittals, and shall include the following information for each submittal item:
 - 1) Specification section, contract article, or special condition
 - 2) Specification Subparagraph
 - 3) Item description
 - 4) Date the submittal shall be submitted
 - 5) Name of subcontractor or supplier
 - The submittal schedule shall be updated every two weeks by the Contractor and reviewed with the Project Manager at the regular project meetings.

2.2 Electronic Submittals

- A) All submittals shall be delivered to the Project Manager and Designer in electronic format, whenever possible. See Technical Specifications Section 01 34 00 for additional information.
- A) Acceptable electronic formats
- B) Adobe Acrobat 9.0 or newer. All files shall be fully compatible with Adobe Acrobat 9.0. File shall have no security and bookmark every applicable submittal.
- C) Formats are acceptable only with written permission of the project manager or required by individual spec sections:
- D) Microsoft Office 2007 or newer. All files shall be fully compatible with Microsoft Office 2007.

- E) AutoDesk AutoCAD 2007 or newer. All files shall be fully compatible with AutoDesk AutoCAD 2007.
- F) AutoCAD files shall be self contained with no external x-references.
- G) Other files pre-approved by the Project Manager.
- H) Electronic file names: Each electronic document shall have a unique file name. File name convention shall be as follows unless otherwise agreed to by Project Manager: -AAA-BBBBB-CCC-RZ
- I) AAA =sequential submittal number starting at 001.
- J) BBBBB = specification section containing submittal requirements
- K) CCC = sequential specification submittal number starting at 001.
- L) RZ = sequential revision number. RZ not required on initial submittals.
- M) Example A: 005-013700-002", five submittals have been logged overall with two submittals made to specification section 013700.
- N) Example B: 009-013700-002-R3, nine submittals made overall and three revisions to submittal 013700-002.

2.3 INITIAL SUBMITTAL

- A) Each submittal document shall include a title block showing the following information:
- B) Date of submittal and revision dates.
- C) Contract title and number.
- D) The names of Contractor, subcontractor, supplier, manufacturer and when applicable, the seal and signature of an engineer registered in the State of Colorado, for the involved discipline.
- E) Identification of product by either description, model number, style number or lot number.
- F) Subject identification by contract drawing or specification reference.
- G) On each submitted drawing, include a blank space on each sheet, three inches by four inches, in the lower right corner, just above the title block, the Designer of Record may indicate the action taken.
- H) Make submissions sufficiently in advance so that the Designer review may be

- completed before any material procurement or Work represented by those submittals is scheduled to be performed.
- I) Allow a minimum cycle of 10 working days for review of each submittal by the Designer of Record.
- J) The Contractor shall at the time of submission describe variations from the contract documents in writing, separate from the submittal document. If the Project Manager approves any such variations, an appropriate contract change order shall be issued except that, if the variation is minor and does not involve a change in price or in time of performance, a modification need not be issued. If a submission contains variations and the variation column is not marked on the transmittal form, it will not be considered for review and acceptance. Along with marking the transmittal as a variation, a description must be included which outlines all the differences including maintenance and utility services along with any cost savings from an item not containing the variation.
- K) Changes in accepted submittal documents will not be permitted unless those changes have been accepted, in writing, by the City.
- L) The form and quality of submittal documents shall comply with Technical Specifications Section 013400.

2.4 SUPPLEMENTAL SUBMITTALS

A) Supplemental submittal documents initiated by the Contractor for consideration of corrective procedures shall contain sufficient data for review. Make supplemental submittals in the same manner as initial submittals with the appropriate primary transmittal referenced.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A) The Contractor shall review submittal documents, stamp and sign as reviewed and approved as complying with contract documents prior to submission to the Designer of Record.

3.2 CITY REVIEW

A) Submittal documents will be reviewed by the Designer for conformance to requirements of the contract drawings and specifications. Review of a separate item will not constitute review of an assembly in which the item functions. The Designer or the Project Manager will withhold approval of submittals that depend on other submittals not yet submitted. Review and acceptance will not relieve the

Contractor from his responsibility for accuracy of submittals, for conformity of submittal document to requirements of contract drawings and specifications, for compatibility of described product with contiguous products and the rest of the system, or for protection and completion of the contract in accordance with the contract drawings and specifications.

- B) The Designer, will review the submittal documents for general conformance with the contract documents and mark the Action Code, sign and date the transmittal.
- C) The Action Codes have the following meanings:
 - 1) **A ACCEPTED** is an approval, and means that the illustration and description appears to conform to the respective requirements of the contract documents.
 - 2) B ACCEPTED AS NOTED is an approval, and means that the illustration and description will conform to the respective requirements of the contract documents after changes in recognition of the reviewer's comments. Submittals so marked need not be resubmitted.
 - 3) C REVISE AND RESUBMIT means that the submittal is unacceptable and must be revised and resubmitted.
 - 4) E NOT ACCEPTED means that the submittal is not approved and that a new submittal in accordance with the contract documents shall be made.
 - 5) F RECEIPT ACKNOWLEDGED, means an item is received by the Designer but no review was made. This mark is for use in resubmitting items that were previously accepted as Noted and the Contractor has incorporated the notes and wants the Project Managers' staff to have the same material that the Contractor's field staff is using.

3.3 CONTRACTOR'S RESPONSIBILITIES

- A) Coordinate each submittal document with the requirements of the Work; place particular emphasis upon ensuring that each submittal of one trade is compatible with other submittals of that trade and submittals of other trades including producing as needed drawings showing the relationship of the work of different trades.
- B) Contractor's responsibility for errors and omissions in submittal documents and associated calculations is not relieved by the City's review, correction and acceptance of submittals.
- C) Contractor's liability to the City, in case of variations in the submittal document from the requirements of the contract documents, is not relieved by the City's review and acceptance of submittals containing variations unless the City expressly approves the deviation in writing, in which the City describes the variation.
- D) The Contractor shall maintain a file of all approved submittal documents at the worksite. The complete file of approved submittal documents shall be turned

City and County of Denver Replace Roofing Richard T. Castro Building

over to the City with the as-built documents at the end of the job.

E) Schedule impact due to resubmittal requirements is the responsibility of the Contractor.

END OF SECTION 01 30 00

SECTION 01 31 00 - SCHEDULE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section specifies the preparation of a preliminary schedule, construction schedule, related narratives and monthly progress reports, all encompassing complete performance of contract requirements.
- B. The Contractor shall schedule and coordinate the work of all of its subcontractors and suppliers including their use of the worksite. The Contractor shall keep the subcontractors and suppliers informed of the project construction schedule to enable the subcontractors and suppliers to plan and perform their work properly.
- C. The Contractor shall, in accordance with the requirements of the technical specifications, submit a construction schedule that shall provide for the expeditious and practicable execution of the Work within the Contract Time
- D. The construction schedule for the performance of the Work shall be a Critical Path Method (CPM) system in bar chart format, unless an alternate system is specifically identified in the technical specifications, with reasonable detail..
- E. Float or slack is defined as the amount of time between the early start date and the late start date or the early finish date and the late finish date of any activities in the schedule. Float or slack is not time for the exclusive use or benefit of either the Contractor or the City.
- F. The Contractor shall submit a monthly progress report and schedule update.
- G. The Contractor shall complete the Work within the Contract Time and in accordance with the most recent schedule submittal that has been reviewed and approved by the Project Manager during regular project meetings.
- H. Reference Special Contract Conditions, Liquidated Damages, and Contract General Conditions, GC 306, GC 603, GC 909, GC 1103, GC 1202, GC704

1.2 PLANNING

- A. The schedule shall show total contract time, including project milestones as follow or as established elsewhere in the contract documents:
 - 1) [Insert list of milestones]
- B. The Contractor shall prepare a work plan to complete the work within the contract time and complete those portions of work relating to each milestone date and oth-

er contract requirements. The Schedule shall be submitted electronically to the Project Manager in a dynamic format which will allow review and manipulation of any part of the schedule, and in PDF format. Upon the request of the Project Manager, the schedule activities shall be resource loaded showing labor man hours by crafts, major construction equipment by type and value of the work.

- C. In addition to the construction activities the schedule shall include activities for furnishing materials and equipment and vendor shop drawing preparation. The construction schedule, a supporting narrative, and the overall progress curve shall be submitted for approval within 30 days after Notice to Proceed. Within 30 days the City will respond with approval or direction to revise and resubmit within ten days. Failure of the Contractor to have a construction schedule approved by the City will be considered cause for withholding progress payment(s).
- D. To the extent that the construction schedule or any revisions thereof contains anything not jointly agreed upon in writing, or fails to show anything jointly agreed upon in writing, it shall not be considered to have the approval of the City. Failure to include any work item required for performance of this contract shall not excuse the Contractor from completing all work within applicable completion dates, regardless of the City's approval of the schedule.
- E. Failure of the Contractor to comply with this Section will be considered cause for withholding progress payment(s) or termination for default.

1.3 SUBMITTALS

- A. Refer to Technical Specifications Section 01 3000 for submittal procedures. Submit the following as indicated:
 - 1) Preliminary schedule Construction schedule data and work plan Monthly progress report
 - 2) As built construction schedule.

PART 2 - PRODUCT (NOT USED)

PART 3 - EXECUTION

3.1 PRELIMINARY SCHEDULE

A. The Contractor shall prepare a preliminary schedule covering the first 90 calendar days of the contract. This preliminary schedule shall be submitted at the Preconstruction Meeting and shall be accompanied by a narrative description of the work plan. The preliminary schedule shall show all significant work tasks that occur in the first 90 days, including planning, mobilization, shop submittals and approvals, procurement, fabrication and construction. It shall identify work items or mile-

stones that affect or are affected by the City, other Contractor's work, utilities and other third parties, and it shall list major data submittals required by the contract.

3.2 CONSTRUCTION SCHEDULE

- A. The construction schedule shall be a computerized CPM schedule that includes:
 - 1) The order, sequence and interdependence of all significant work items including construction, procurement, fabrication, testing, startup and inspection and delivery of critical or special materials and equipment, submittals and approvals of critical samples, shop drawings, procedures, or other documents that could have a schedule impact.
 - 2) Work items by the City, other Contractors, utilities and other third parties that may affect or be affected by Contractor's activities.
 - 3) Proper referencing of all work items to identify applicable subcontractors or other performing parties.
 - The construction schedule shall be prepared to include the data for the total contract duration, and the critical path shall be identified, including critical paths for interim completion dates. Scheduled start or completion dates imposed on the schedule by the Contractor shall be consistent with contract milestone dates. Milestone events shall be the schedule dates specified in the Special Conditions and shall be prominently identified and connected to the appropriate work item, denoting its start or completion. Work items related to any interim milestones shall be coded for that milestone.

3.3 PROGRESS REPORTING

- A. The Contractor shall submit a monthly progress report at the end of each month following the Notice to Proceed. At the end of each month, the Contractor and Project Manager shall agree on the progress of the work and the Contractor shall update the construction schedule accordingly. The updated construction schedule is a prerequisite to the submittal of the Contractor's application for progress payment. The schedule shall be made in accordance with Technical Specifications Section 013100-3.02. This review does not constitute an approval of the construction schedule and shall not be used for the purposes of modifying the initially approved construction schedule.
- B. The latest completion time for any work item does not fall within the time allowed by the construction schedule, the sequence of work and/or duration shall be revised by the Contractor through concurrent operations, additional manpower, additional shifts or overtime, additional equipment or alternative construction methods until the schedule produced indicates that all significant contract completion dates, occupancy dates and milestones will be met.

3.4 SCHEDULE CHANGES

A. The Contractor's request for construction schedule changes shall be made on the

latest approved construction schedule and shall be accompanied by a narrative description and justification for the change, and shall be submitted in accordance with the General Conditions Title 1105 on changes in time. Minor revisions submitted at monthly progress review meetings are not considered as changes in this context.

- B. The construction schedule may be changed when one or more of the following
 - 1) When a change order significantly affects the contract completion date or sequence of work items.
 - 2) When the Contractor elects to change the sequence or duration of work items affecting the critical path.
 - When the City directs a change that affects a milestone date(s) specified in the Special Conditions or alters the length of a critical path.

3.5 CONTRACT EXTENSIONS

- A. If the Contractor is granted an extension of time for completion of any milestone or contract completion date under the provisions of the contract, the determination of the total number of extended days will be based upon the current analysis of the schedule and upon all data relevant to the extension. Such data shall be incorporated in the next monthly update of the schedule.
- B. The Contractor acknowledges and agrees that delays in work items which, according to schedule analysis do not affect any milestone dates or contract completion date shown on the CPM network at the time of the delay will not be the basis for a contract extension.

3.6 AS-BUILT CONSTRUCTION SCHEDULE

A. After all contract work items are complete, the Contractor shall submit an as built construction schedule showing actual start and finish dates for all work items and milestones.

END OF SECTION 01 31 00

SECTION 01 34 00 – SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this Section consists of preparing and submitting shop and working drawings, product data, samples and record documents required by other technical specifications sections.
 - 1) The Contractor shall submit all shop drawings, working drawings, product data and samples, as defined in Title 1 of the General Conditions, to the Designer and Project Manager, if requested, in accordance with the requirements in the technical specifications. The Designer will return one copy of the shop drawings, working drawings and product data to the Contractor with a written transmittal within the time periods noted in the technical specifications.
 - 2) Reference Contract General Conditions, GC 110, GC 116, GC 117, GC 303, GC 324, GC 401, GC 402, and GC 405.

1.2 SUBMITTALS

- A. Refer to Technical Specifications Section 01 3000 for submittal procedures.
- B. Submittals shall be delivered to the Designer and Project Manager in electronic format, whenever possible. All submittals must be of a consistent format (all Acrobat or all Word, etc). No combination of electronic file types will be allowed unless required by a specific specification section..
- C. Acceptable electronic formats
 - a) Adobe Acrobat 9.0or newer. All files shall be fully compatible with Adobe Acrobat 9.0
 - b) Formats are acceptable only with written permission of the Project Manager or required by individual spec sections:
 - 1. Microsoft Office 2007 or newer. All files shall be fully compatible with Microsoft Office 2007.
 - 2. AutoDesk AutoCAD 2007 or newer. All files shall be fully compatible with AutoDesk AutoCAD 2007.
 - a) AutoCAD files shall be self contained with no external x-references.
 - b) Other files pre-approved by the Project Manager
 - c) Adobe Acrobat Requirements:

- d) Drawings shall have security set to "No Security". Commenting, printing, adding photos, form fields and document signing must be allowed.
- e) PDF submittals shall be one continuous file. No external links are allowed.
- f) All individual components of submittals shall be bookmarked inside the PDF file.
- g) All original documents shall be directly converted from the original electronic format to PDF. Failure to comply with these requirements will result in a return of file to the Contractor for immediate revision.
- 2) Electronic file names: Each electronic document shall have a unique file name. File name convention shall be as follows unless otherwise agreed to by Project Manager: -AAA-BBBBB-CCC-RZ
 - a) AAA = sequential submittal number starting at 001.
 - b) BBBB = specification section containing submittal requirements
 - c) CCC = sequential specification submittal number starting at 001.
 - d) RZ = sequential revision number. RZ not required on initial submittals.
 - e) Example A:005-013700-002", five submittals have been logged overall with two submittals made to specification section 013700.
 - f) Example B: 009-013700-002-R3, nine submittals made overall and three revisions to submittal 013700-002.
 - g) Quantities
 - h) Post electronic submittals as PDF electronic files directly to Designer's FTP, Contractors FTP site or a site specifically established for the Project.
 - i) The Contractor should send an email for each submittal posted to all parties notifying them the submittal is available for review.
 - j) The Project Manager or Designer will send an email to the Contractor when the submittal review is complete.
 - k) Contractor can submit electronic submittals via email as PDF electronic files if approved by the Project Manager.
 - 1) Three samples of each item specified in the various specification sections, unless otherwise specified.
 - m) Note: If manufacturer's printed information is in color, all copies of submittals must be in color.
 - n) Printed information is only allowed when electronic copies are not possible.
 - o) Review
 - p) Submittal review comments by the Designer will be in electronic form and incorporated into the electronic submittal file.
 - q) Resubmittals of electronic documents shall modify the original electronic file with new information and include the Designer's

comments with appropriate responses and additional information.

1.3 CHANGES

A. Changes in products for which shop or working drawings, product data or samples have been submitted will not be permitted unless those changes have been accepted and approved in writing by the City and County of Denver.

PART 2 - PRODUCTS

2.1 SHOP AND WORKING DRAWINGS

- A. Include the following as they apply to the subject:
- B. Contract title, work order and number.
- C. Respective contract drawing numbers.
- D. Applicable specification section numbers.
- E. Relation to adjacent structure or materials.
- F. Field dimensions clearly identified as such.
- G. Applicable standards such as ASTM or Federal Specification number, and pertinent authority specifications or standards.
- H. Identification of deviations from the contract drawings and specifications.
- I. Drawing name, number and revision.
- J. Contractor's stamp, initialed or signed, certifying:
- K. Verification of field measurements.
- L. Review of submittals for compliance with contract requirements.
- M. Compatibility of the Work shown thereon with that of affected trades.
- N. Blank space on each sheet per Technical Specifications Section 01300, paragraph 2.02.B.
- O. Drawings of equipment and other items that contain multiple parts shall include exploded views showing the relationship of parts and the description of the parts into the smallest units that may be purchased or serviced.

2.2 PRODUCT DATA

- A. Modify manufacturer's standard and/or schematic drawings to delete information which is not applicable to the contract. Supplement standard information with additional information applicable to this contract.
- B. Modify manufacturer's standard(s), diagrams, schedules, performance charts, illustrations, calculations and other descriptive data to delete information which is not applicable to the contract. Indicate dimensions, clearances, performance characteristics and capacities. Include with the submittal electrical, plumbing, HVAC and any other diagrams, as applicable.
- C. Modify erection, application and placing instructions to delete information that is not applicable to the contract or work order.
- D. Include the following:
- E. Contract title, work order and number
- F. Respective contract drawing numbers
- G. Applicable contract technical specification section numbers
- H. Applicable standards such as ASTM or Federal Specification number, and pertinent authority specification or standards
- I. Identification of deviations from the contract drawings and specifications
- J. Contractor's stamp, initialed or signed, certifying:
- K. Dimensional compatibility of the product with the space in which it is intended to be used
- L. Review of submittals for compliance with contract requirements
- M. Compatibility of the product with other products with which it is to perform or which will be next to it.
- N. The products electrical, plumbing, control and HVAC requirements conform to contract documents and the necessary utilities are provided for in the contract documents.
- O. Certificates of compliance shall be submitted for all products. The certificates shall:
- P. State that the product complies with the respective specification and contract drawing requirements
- Q. Be accompanied by a certified copy of test results pertaining to the product

- R. Show the submittals date, Contractor's name and address, contract title and number, product represented and its location in the contract, producer's name, product trade name and catalog number, place of product origin, test date, testing organization's name and address, quantity of the product to be furnished and related contract drawing and specification section numbers
- S. Be signed by an officer or another authorized representative of the producer and notarized
- T. Submit one electronic copy.
- U. Be received by the City not later than 30 days before the acceptance is needed of the products for ordering.

2.3 SAMPLES

- A. Submit samples of sizes and quantities to clearly illustrate full color range and functional characteristics of products and materials including attachment devices.
- B. Erect field samples and mock ups at the worksite as specified in the several technical specifications sections and at locations acceptable to the Project Manager. All field samples shall be erected in a location that will be readily visible throughout the life of the contract to allow comparison of the work as it progresses to the field sample.
- C. The Contractor shall verify, through appropriate inspections and tests, that the samples submitted meet the specifications and shall provide inspection and test data with the samples. The review and comments on the sample shall not relieve the Contractor of his responsibility for completion of the contract.
- D. Show the following information:
- E. Contract title and number
- F. Respective contract drawing numbers
- G. Applicable technical specification section numbers
- H. Applicable standards such as ASTM or Federal Specification number
- I. Identification of deviations from the contract drawings and specifications
- J. Contractor's stamp, initialed or signed, certifying:
- K. Dimensional compatibility of the product with the space in which it is intended to be used

- L. Review of submittals for compliance with contract requirements
- M. Compatibility of the product with other products with which it is to perform or which will be next to it
- N. If multiple samples are submitted and the Designer is requested to make a choice, each sample shall have a unique identification number attached to it so the returned transmittal can state the identification number of the accepted sample and the Contractor will know which one it is.

PART 3 - EXECUTION

3.1 CONTRACTOR RESPONSIBILITIES

- A. Verify field measurements, catalog numbers and similar data.
- B. The Contractor shall not start work for which submittals are required until a transmittal has been received by the Contractor showing acceptance or acceptance as noted by the Designer Before making submittals ensure that products will be available in the quantities and at the times required by the contract.
- C. Submit final, corrected, electronic drawings of contract and shop and working drawings showing the Work as actually installed, placed, erected and applied. Refer to Technical Specification Section 017000, Contract Closeout.

3.2 REVIEW BY THE CITY

- A. One electronic copy of the marked-up shop and working drawing and one electronic copy of the product data will be returned to the Contractor by the Designer. Only the transmittal form, appropriately marked, and two samples will be returned on sample submittals. Contractor shall maintain one approved sample onsite for the duration of the project.
- B. Contractor's responsibility for errors and omissions in submittals for compatibility will not be reduced, waived or otherwise limited by the review and acceptance of submittals by the City's Designer of Record.

END OF SECTION 01 34 00

SECTION 01 37 00 – SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this Section consists of preparing and submitting the Schedule of Values as referenced in the General Conditions. The Schedule of Values will be built upon a breakdown of the Work using specification sections and milestones. The Work also includes the preparing and submitting of updated copies of the Schedule of Values if the Schedule of Values is affected by change orders. The Project Manager may require additional breakdowns of information, or separate Schedules of Values for portions of work based upon project's funding requirements.
- B. A Schedule of Stored Material is a detailed cost breakdown for permanent materials that will be temporarily stored prior to their being installed and for which the Contractor seeks partial payments. The Schedule of Stored Material will be incorporated as a part of the Schedule of Values.
- C. Within 14 calendar days of issuance of the Notice to Proceed, the Contractor shall submit the Schedule of Values including the Schedule of Stored Material if applicable. The Schedule of Values and Schedule of Stored Material used to prepare the work/cost breakdown for the Schedule will be used for the Contractor's billings.
- D. Any contract allowances shall be included in the Schedule of Values. Expenditure of allowances shall be done through the use of the Allowance Authorization form. Use of this form does not increase or decrease the contract value.
- E. Reference Special Contract Conditions, Payment to Contractors, plus Contract General Conditions, GC 902, GC 903, and GC 906.

1.2 RELATED DOCUMENTS

A. Technical Specifications Section 01 3000 Submittals

1.3 SUBMITTAL

- A. The Schedule of Values shall be submitted in a format approved by the Project Manager.
- B. Upon request by the City, the Contractor shall support values given with the data which will substantiate the correctness of the values.
- C. The Schedule of Values will be utilized as a basis for review of the Contractor's

application for progress payment.

1.4 REVIEW AND RESUBMITTAL

A. If review by the City indicates that changes to the Schedule of Values are required, the Contractor shall revise and resubmit the Schedule of Values.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

3.1 ALLOWANCE AUTHORIZATION AND PAYMENT

- A. Contractor shall request written approval for expenditure of any contract allowances PRIOR TO performing the Work involved. List work to be performed and estimated cost in the requesting correspondence.
- B. Using the format provided by the City, the Contractor's request for payment of all contract allowances shall be included in the Schedule of Values.

END OF SECTION 01 37 00

SECTION 01 40 00 – CONTRACTOR QUALITY CONTROL

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section identifies the Quality Control activities to be performed during all phases of the contract by the Contractor.
- B. The Contractor shall have in place his Quality Control Program as necessary to ensure that all materials and work are completed in compliance with contract documents. The Contractor is solely responsible for Quality Control with the exception of those tests and/or audits that will be conducted by the City as defined in the contract documents.
- C. Test schedules and/or testing requirements for materials used on this project are included in the technical specifications. Laboratory and field testing identified in the technical specifications shall be conducted by an Independent Testing Agency (ITA) retained by the City unless stated otherwise.
- D. Reference General Contract Conditions GC 316, GC 702, GC 1801, GC 1902, and GC 2002

1.2 LEVEL OF CONTROL

- A. The intent of this section is to enable the Contractor to establish a necessary level of control that will:
 - 1) Adequately provide for the production of acceptable quality materials
 - 2) Provide sufficient information to ensure both the Contractor and the Designer of Record that the specification requirements are being met
 - 3) Allow the Contractor as much latitude as possible to develop his or her own standards of control.

1.3 SUBMITTALS

- A. Refer to Technical Specification Section 01 30 00 and 01 34 00 for submittal requirements.
- B. Quality Control Plan: Within 14 days after Notice to Proceed, the Contractor shall submit a Quality Control Plan for review and acceptance. Acceptance by the Project Manager does not relieve the Contractor of compliance with the contract requirements. The Contractor Quality Control Plan shall address the following as a minimum:
 - 1) Provide a general description of Quality Control monitoring to be per-

- formed until final acceptance by the City. Include securing of project site and staging areas and monitoring of the worksite during times no construction activity is scheduled to take place.
- 2) The Contractor shall designate an employee as the Quality Control Manager qualified to perform quality control monitoring of the Work. The designated individual shall have the authority to direct work changes required to bring the Work into conformance with contract requirements including stopping non-conforming work in progress.
- 3) Provide methodology of monitoring, testing and exercising of all equipment, valves and/or assemblies to ensure the Work installed is in proper working order.
- 4) The Contractor shall submit a list of suppliers and subcontractors. This list shall include items to be supplied by each supplier and/or subcontractor and shall identify work to be performed by each subcontractor. The list shall be updated and resubmitted as required.
- 5) Provide emergency contact information including name, company, title, work phone number, cell phone number and other means of contact. The Emergency Contact list shall include at least four individuals. In the event there is any change in any of the information, the Contractor shall forward the updated list to the Project Manager. The Emergency Contact list shall include the project address, project title and date of issue.
- 6) Daily Quality Control Report:
- The Daily Quality Control Report shall be submitted daily in the format detailed in Technical Specifications Section 01999. The report shall address as a minimum the following: identify number of workers on site each day by trade, identify notifications and discussions with/by Quality Assurance Inspectors and other agency inspectors, identify quality of work placed that day and any deviations and/or corrections required to bring the Work into conformance with the contract. Daily reporting may be computerized or typed, but must contain a legible signature. Scanned copies of daily reports are acceptable.
- 8) Submit one electronic copy of the Daily Quality Control Report to the Project Manager the day following the work. The report shall be signed by the Contractor's Quality Control Representative and the Contractor's Superintendent.
- 9) Corrective Action Report (CAR)
- 10) Conditions adverse to quality will be reviewed by the Contractor to determine the cause and to recommend a corrective action that will preclude recurrence. The condition, its cause and the corrective action planned shall be reported to the Project Manager prior to implementation. Follow-up action shall be taken to verify implementation of the corrective action. The Contractor will document the corrective action and a copy of the Corrective Action Report (CAR) will be transmitted to the Project Manager.

1.4 DOCUMENTATION

- A. The Contractor shall not change or alter approved submittals, procedures, specifications, drawings or other pertinent documentation without the Project Manager's written authorization.
- B. All records and documents that are quality related shall be prepared, identified and maintained by the Contractor and shall be made available to the City upon request. Records shall be protected from damage, deterioration or loss.
- C. The Contractor shall maintain records at the actual worksite and at Contractor's office to show the inspection status of materials and items installed in order to ensure that the required inspections and tests have been performed in a timely and correct manner.

1.5 INSPECTIONS AND TESTS

- A. Inspections, tests and system shut down requests, conducted by persons or agencies other than the Contractor, shall not in any way relieve the Contractor of his responsibility and obligation to meet all specifications and the referenced standards. The Contractor's designated Quality Control Representative shall inspect the work and shall ensure the work complies with the contract requirements prior to any requests for inspection or testing.
- B. When the specifications, laws, ordinances, rules, regulations or orders of any public agency having jurisdiction require the ITA's surveillance of inspections or tests, the Contractor shall notify the ITA of the place, date and time 48 hours prior to the inspection and/or test. The Contractor shall be responsible for notifying and requesting inspection by other agencies including but not limited to the Denver Building Inspection Division, Denver Fire Department and Denver Water Department. Prior to request for other agency inspections, the Contractor shall meet and plan inspection times with the Project Manager and or the Project Manager's designated representative.
- C. Special inspections or tests may be required by the technical specifications, City, State and/or Federal Agencies in addition to those tests already performed. The Contractor shall notify the Project Manager at least 48 hours in advance of the additional inspections or tests.

1.6 INSPECTION PLAN

- A. The Contractor shall utilize the following six-point inspection plan to ensure the conformance of the Work performed by the Contractor meets the requirements of the contract drawings and specifications, the referenced codes and standards and the approved submittals:
 - 1) Prework Coordination: Prior to the start of construction work on the contract and prior to the start of work under each separate specification sec-

tion and prior to the start of work where a change in a construction operation is contemplated by the Contractor and prior to a new subcontractor starting work, a coordination meeting will be held with the Contractor's superintendent, Quality Control and Safety representative(s). Some portions of the work may require coordination with the Project Manager, facility operator, Designer of Record, ITA and/or commissioning agent; this would be included as an activity in the regularly updated schedules and specific invitations will be issued by the Contractor. The Contractor's Quality Control Representative shall chair, prepare and distribute minutes of Quality Control meetings. Meeting minutes shall be electronically distributed within 48 hours of the meeting.

- 2) The purpose of the meeting is to ensure that the Contractor's personnel and sub-contractors have no misunderstandings regarding their safety and quality procedures as well as the technical requirements of the contract.
- Initial Inspection: Upon completion of a representative sample of a given feature of the Work and no later than two weeks after the start of a new or changed operation, the Project Manager's designated representatives will meet with the Contractor's Quality Control representative and applicable subcontractor's supervisor and their Quality Control representatives to check the following items, as a minimum:
 - a) Workmanship to established quality standards
 - b) Conformance to contract drawings, specifications and the accepted shop drawings
 - c) Adequacy of materials and articles utilized
 - d) Results of inspection and testing methods
 - e) Adequacy of as-built drawings maintained daily.
- 4) Once accepted, the representative sample will become the physical baseline by which ongoing work is compared for quality and acceptability. To the maximum practical extent, approved representative samples of work elements shall remain visible until all work in the appropriate category is complete. Acceptance of a sample does not waive or alter any contract requirements or show acceptance of any deviation from the contract not approved in writing by a fully executed change order.
- 5) Follow-up Inspection: The Contractor's Quality Control representative will monitor the work to review the continuing conformance of the work to the workmanship standards established during the preparatory and initial inspections.
- Pre-Final Acceptance Inspection: Prior to requesting a Pre-Final Acceptance Inspection by the City, all work and operational systems to be inspected shall be satisfactorily completed and tested by the Contractor. The Contractor's written request for this inspection shall be made 72 hours in advance. With the request shall come a list of any known deficiencies and when they will be corrected. If the list is too large or contains too many significant items, in the opinion of the Project Manager, no inspection will

- be held because of the incompleteness of the work.
- 7) The Project Manager will schedule the Pre-Final Acceptance Inspection and will prepare a list of deficient items (punch list) discovered during the inspection. If during the inspection the list becomes too large or too many significant items are on the list, the inspection will be canceled. After the inspection is completed, the Deficiency List will be transmitted to the Contractor for correction of the deficient items.
- 8) Final Acceptance Inspection: After the Contractor has completed all items on the Deficiency List (generated from the Pre-Final Acceptance Inspection) he shall request a Final Acceptance Inspection. The request shall be made in writing at least 72 hours in advance of the inspection. All areas must be cleaned and ready for turnover prior to this inspection. The Project Manager, the design consultant, the facility operator, a representative of the funding agency (if applicable) and other interested parties will inspect the subject Work to ensure that all deficiencies have been satisfactorily attended to and that no new deficiencies have appeared and that all systems are completely functional. Any outstanding or additional deficient items will be noted and handled per the requirements of the Pre-Final Acceptance Inspection noted above until the Work is acceptable to the Project Manager.

1.7 SAMPLES

- A. The Contractor shall maintain at the worksite a copy of all samples submitted and accepted by the City. Samples shall be made available to the designer or the Project Manager's designated representatives for review and comparison in the field. The Project Manager prior to use on the project must accept all items and materials.
- B. The installed work will be compared to the samples and if any of the work is not of the same quality, material, finish, color, texture or appearance as the sample, that portion that is not the same will be considered defective and in nonconformance.
- C. Contractor selection of samples will only be considered if taken at random. The Contractor shall permit representatives of the City to witness the selection of samples. Inspection or tests of items or materials that fail shall be sufficient cause to terminate further inspections/tests of the same brand, make or source of that product.
- D. The Contractor is obligated to correct any item deemed deficient.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 REQUIREMENTS

- A. All materials required for the contract shall be new except where specified otherwise. Inspections and tests performed by the City shall not relieve the Contractor from the responsibility to meet the specifications, nor shall such inspections/tests be considered a guarantee for acceptance of materials that will be delivered at a later time.
- B. The Contractor is obligated to correct or remove non-conforming materials, whether in place or not. If necessary, the Project Manager will send written notification to the Contractor to correct or remove the defective materials from the project. If the Contractor fails to respond, the Project Manager may order correction, removal and/or replacement of defective materials by others, in which case the Contractor shall bear all costs incurred by such actions.
- C. Materials accepted on the basis of a Certificate of Compliance may be sampled and inspected/tested by the City Project Manager or its Designer at any time. The fact that the materials were accepted on the basis of such certification shall not relieve the Contractor of his responsibility to use materials that conform to the specifications.
- D. The Contractor shall impose upon his suppliers the same quality control requirements, including inspection and test procedures, as imposed upon him by the specifications and referenced standards. The Contractor shall apply appropriate controls, designed to ensure that all materials supplied meet the requirements and specifications.

END OF SECTION 01 40 00

SECTION 01 40 20 – QUALITY ASSURANCE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This Section identifies inspection activities to be performed by inspectors employed by the City and/or working under the direction of the City Project Manager.
- B. Inspection and tests, conducted by persons or agencies other than the Contractor, shall not in any way relieve the Contractor of his responsibility and obligation to meet all specifications and the referenced standards.
- C. The inspection and approval of work by other agencies above does not constitute inspection or acceptance of work required by the City. Technical specifications may contain requirements more stringent than Building Inspection Division or other code agency requirements.
- D. Reference Contract General Conditions, GC 1701, GC 1702, GC 1703, GC 1704, GC 1705, GC 1706

1.2 RELATED DOCUMENTS

- A. Technical Specifications Section 01 40 00 "Contractor Quality Control"
- B. Technical Specifications Section 01 30 00 "Submittals"
- C. Technical Specifications Section 01 34 00 "Shop and Working Drawings, Product Data and Samples"

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 CONTRACTOR'S QUALITY CONTROL SYSTEM

A. The Contractor is responsible for quality control of the Construction. All acquisition of materials, sequence of construction (except as otherwise indicated), and means and methods of construction shall be the responsibility of the Contractor. Establish system to perform sufficient inspection and tests of all items of work, including that of subcontractors, to ensure conformance to Contract Documents for materials, workmanship, construction, finish, functional performance and identification.

- Control System: Establish for all construction except where Contract Documents provide for specific compliance tests by testing laboratories and engineers employed by the City.
- 2) Control System: Specifically include all testing required by various sections of Specifications.
- 3) Quality Control System: Means by which Contractor assures himself that construction complies with requirements of Contract Documents.
- 4) Controls: Adequate to cover all construction operations and keyed to proposed construction schedule.
- 5) The Contractor shall be responsible for assuring compliance with the quality standards as indicated in the Contract Documents. In addition, the Contractor shall be responsible for:
- 6) Review of submittals prior to their being forwarded to the Designer for review. The Contractor shall mark submittals with comments and shall indicate the date and party conducting the Contractor's review of each submittal.
- 7) Final inspection of the project prior to calling for the City to conduct a final inspection. The Contractor shall provide his inspection comments to the Designer and City prior to the scheduled final inspection.
- 8) Verification of completion of punch-list items prior to calling for verification inspection by the Designer and the City.
- 9) Records: Maintain correct records on appropriate form for all inspections and tests performed, instructions received from the Designer or Independent Testing Agency (ITA) and actions taken as result of those instructions.
- 10) Records: Include evidence that required inspections or tests have been performed (including type and number of inspections or tests, nature of defects, causes for rejection, etc.) proposed or directed remedial action, and corrective action taken.
- 11) Document inspections and tests as required by each section of Specifications.
- 12) The Contractor is responsible for complying with the requirements of the Contract Documents. Testing performed by the City's Agents shall not be relied upon by the Contractor as sufficient to assure compliance with the Contract Documents. The Contractor shall procure and pay for testing necessary to assure that the construction is in compliance with the Contract Documents.

3.2 STANDARDS

- A. Generally accepted Construction Industry standards for materials, products, quality, and workmanship shall supplement the Specifications.
 - 1) Where industry standards are less than the Specifications and Drawings require, the Contract Documents shall govern.
 - 2) The Contractor shall provide materials and products which conform to in-

- dustry standards of quality.
- 3) Construction tasks shall be performed by craftsmen skilled and experienced in the trades required. Work shall be subject to review by the City and the Designer.
- 4) Work and/or materials which fail to meet accepted industry standards of performance, quality, and/or appearance will be rejected and shall be brought into compliance or replaced by the Contractor at no additional cost to the City.

3.3 MATERIAL AND WORKMANSHIP

- A. Unless otherwise specified, or indicated on the Drawings, material shall be new, of best quality, and without flaws, and delivered upon completion in an undamaged condition.
- B. Workmanship shall be the best of its respective kind. Labor shall be performed in a thorough workmanlike manner by qualified, efficient, and skilled mechanics, acceptable to the City, Designer and other trades involved on the job requiring acceptable substrate for the performance of their work.

3.4 TESTING – GENERAL

- A. Testing Laboratory and/or Engineering services are required for quality control in portions of the work identified in other sections of these specifications.
- B. Tests required by these Specifications shall be performed in strict accordance with referenced testing methods, procedures, and conditions. Pertinent data shall be included in clear, comprehensive written forms according to the Designer's or Engineer's requirements.
- C. Contractor: Provide equipment and facilities as required for testing at no additional cost, subject to City's review, for conducting field tests and for collecting and forwarding samples.
 - Do not use materials or equipment represented by samples until tests, if required, have been made and materials or equipment found to be acceptable.
 - 2) Do not incorporate any product into work which becomes unfit for use after acceptance thereof.
- D. Testing: Materials or equipment proposed to be used may be tested at any time during their preparation or use. Furnish required samples without charge and give sufficient notice of placing of orders to permit testing. Products may be sampled either prior to shipment or after being received at site of work.
- E. Tests: Made by accredited testing laboratory selected by City. Except as other-

wise provided, sampling and testing of materials and laboratory methods and testing equipment shall be in accordance with latest standards and tentative methods of ASTM.

3.5 COST OF TESTING

- A. Unless indicated otherwise, City's testing shall be performed by the City's authorized agents, at the City's expense.
- B. Costs for re-testing of non-complying work shall be borne by the Contractor.
- C. According to the judgment of the City and/or Designer, ANY portion of the work in this contract may be tested at any time for any reason. Costs for such testing shall be borne by the Contractor only if such tests indicate that work does not meet Contract Document requirements.

3.6 OTHER TESTING

- A. Following Testing: Performed at expense of Contractor:
 - 1) Any additional tests required because of any tests that fail subject to following conditions:
 - a) Quantity and Nature of Tests: Determined by the Designer.
 - b) Tests: Taken in presence of the City and/or the Designer.
 - c) Proof of Noncompliance: Contractor liable for corrective action which the City and/or the Designer feel is required including complete removal and replacement of defective material.
 - 2) Material Substitution: Any tests of material or equipment offered as substitute for specified item on which test may be required in order to prove its compliance with Specifications.
 - 3) Contractor: May have tests performed on material and equipment for his own information and job control so long as the City does not assume responsibility for costs or for giving them consideration when appraising quality of materials.

3.7 EQUIPMENT TESTING

- A. Equipment testing shall be as determined appropriate by the City to assure proper performance according to the manufacturer's specifications for each equipment item.
- B. After all utility connections to equipment are completed, the Contractor shall conduct final tests of equipment in presence of the City and the Designer.

C. Unless waived in writing by the City, the requirements of this section shall apply to all installed equipment items having utility connections.

3.8 NOTIFICATION

- A. The Contractor shall be responsible for notifying the City and Designer at least three (3) working days prior to commencing work which is identified as requiring testing in their presence.
- B. The Contractor shall be responsible for scheduling and coordinating all required testing with the City and the City's Independent Testing Agency.

3.9 TEST REPORTS

- A. Test reports, whether performed for the City or the Contractor, shall be submitted to the City, the Designer, and Contractor as soon as results are available. Reports shall be clear, concise, comprehensive written forms containing required test results.
- B. Reports of tests made by testing laboratories shall be distributed via e-mail by testing laboratory as follows: to City Project Manager, Contractor, Applicable Supplier or Subcontractor; Designer and Applicable Engineer;

3.10 MANUFACTURING AND FABRICATION INSPECTIONS

- A. The Project Manager may elect to perform additional inspections and/or tests at the place of the manufacture, the shipping point or at the destination to verify conformance to applicable specifications. Inspections and tests performed by the City shall not relieve the Contractor from the responsibility to meet the specifications, nor shall such inspections/tests be considered to be a guarantee for acceptance of materials that will be delivered at a later time.
- B. The Project Manager or his authorized representative may inspect at its source any material or assembly to be used in the Work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the Work and to obtain samples for testing and further inspection.
- C. Should the Project Manager conduct plant inspections the following conditions shall exist:
 - 1) The Project Manager shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.
- D. It is understood and agreed that the City shall have the right to re-test at the City's

expense any materials that have been tested and accepted at the source of supply after it has been delivered to the site.

END OF SECTION 01 40 20

SECTION 01 50 00 - TEMPORARY FACILITIES

PART 1 - GENERAL

1.1 DESCRIPTION

A. The Work specified in this Section consists of furnishing, installing, operating, maintaining and removing temporary construction barriers, enclosures and field facilities including the Contractor's construction offices, staging areas, yards, storage areas, electrical power, telephone, water, fire protection and sanitary service.

B. Construction Office, Yards and Storage Areas

1) Temporary facilities which the Contractor desires to locate in staging areas adjacent to the Work or within the project limits are subject to approval by the Project Manager.

C. Electrical Service

- 1) Reference Contract General Conditions, GC 327
- 2) Provide power centers for electrically operated and controlled construction facilities including tools, equipment, testing equipment, interior construction lighting, heating, cooling and ventilation equipment.

D. Telephone Service

1) The Contractor shall furnish, field staff cell phones

E. Internet Service

1) The Contractor shall furnish, install and maintain at least one computer with email in his main field office. This computer should be able to access all email and FTP as part of project submittal process.

F. Fire Protection

1) Furnish, install and maintain temporary portable fire protection equipment throughout the construction period at all buildings (including the project site), maintenance shops, and fuel storage on all large construction equipment and at the location of any flammable materials or construction materials.

G. Sanitary Service

1) Reference Contract General Conditions, GC 326

- 2) Furnish, install and maintain temporary sanitary facilities and services throughout the construction period.
- 3) Ensure that separate or single user toilets shall be provided to ensure privacy between the sexes.
- 4) Provide general washing facilities adequate for the number of employees.
- 5) Provide special washing facilities adequate for the number of employees engaged in the application of paints, coating and other volatile or hazardous materials.

1.2 QUALITY CONTROL

A. Provide products for, and the execution of, the Work of this Section that will satisfy the requirements of the NEC, OSHA and local codes. Provide products that satisfy requirements of NEMA and are UL listed.

1.3 SUBMITTALS

- A. Refer to Technical Specifications Sections 01 3000 and 01 3400 for submittal procedures.
 - 1) Details and layout of temporary installations including fences, roads, parking, buildings, storage areas and drainage plans.

PART 2 - PRODUCTS

2.1 ELECTRICAL SERVICE

- A. Provide temporary extension cords to supply tools not longer than 200 feet, except that additional length may be used if equipment will be grounded within 200 feet of tool or power.
- B. Portable power generators shall be grounded.

2.2 DRINKING WATER SERVICE

A. Provide sanitary materials and equipment that satisfies the requirements of codes and regulations pertaining to temporary water systems. Bottled products may be used if those products comply with codes. Clearly label portable containers having a dispensing tap and used only for drinking water. Provide single service disposable cups and a sanitary container for dispensing cups. A trash receptacle shall be provided and maintained beside each portable water supply.

2.3 FIRE PROTECTION

A. Fire extinguishers shall be UL rated and shall comply with the current City fire

code.

2.4 SANITARY SERVICE

- A. Provide materials and equipment adequate for the intended purposes, which will neither create unsanitary conditions nor violate the codes applicable to temporary sanitary facilities. Enclosures for toilet and washing facilities shall be weather-proof, sight proof, ventilated and sturdy.
- B. Provide portable type toilet facilities that satisfy the requirements of OSHA.
- C. Provide washing facilities as needed. Furnish soap, single-service paper towels, towel dispenser and towel receptacle. If paints, coatings and other volatile or hazardous materials injurious to humans will be applied as part of the contract, provide washing facilities with warm water of approximately 120 degrees F.

PART 3 - EXECUTION

3.1 FIRE PROTECTION

- A. Install products in conformance with the requirements of the applicable Denver Fire Department and OSHA regulations.
 - 1) Provide functional fire extinguishers that are clearly identified for fire and an accessible supply of water during the period of construction. These fire extinguishers shall remain in place until permanent fire protection systems are functional.
 - 2) Furnish not less than one 20-pound fire extinguisher, type 2A-20ABC within ten feet of cutting and welding operations.
 - 3) Provide 20-pound fire extinguishers, type 2A-20ABC no further then 100 feet apart in buildings.
 - 4) Provide not less than one 20-pound fire extinguisher, type 2A-20ABC on any equipment of 75 horsepower or more.
- B. Instruct construction personnel as to location and use of temporary fire protection equipment.
- C. Fire extinguishers shall be located for easy access. Their location shall be clearly marked so that they can be seen at least 75 feet away.

3.2 SANITARY SERVICE

A. Place temporary sanitary (and washing) facilities in a neat and orderly manner within the limits of the work and convenient to the work stations. Make these facilities structurally and mechanically sound. Modify, relocate and extend the fa-

cilities as required by progress of the work.

- B. Service toilets at those time intervals which will minimize the accumulation of wastes and prevent creation of unsanitary conditions, but not less than once a week.
- C. The waste from the sanitary and wash facilities shall be disposed of in accordance with all applicable rules, regulations and laws and with the least environmental impact.

3.3 FENCING

A. Contact all utility service companies prior to planning fence location and post locations for certification of current utilities. Locate pothole posts planned within 5 feet of known utilities. Submit fencing plan and typical details to Project Manager at least seven days before planned execution for review and acceptance.

3.4 SIGNAGE

A. Contractor shall not provide any signage for temporary facilities without prior approval from the Project Manager.

3.5 REMOVAL

- A. The Contractor shall locate all temporary facilities including the underground utilities so they can be completely removed without damaging permanent work or the worksite of other contractors.
- B. The Contractor shall remove all temporary facilities, including all underground utilities, and restore the site to the condition in which the City initially provided it to the Contractor.

END OF SECTION 01 50 00

SECTION 01 62 00 - STORAGE AND PROTECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this Section consists of providing storage and protection of the materials, products and supplies which are to be incorporated into the construction and indicating such storage areas on the working drawings with the location and dates when such areas will be available for each purpose.
- B. Reference Contract General Conditions, GC 803

1.2 SUBMITTALS

- A. Refer to Technical Specifications Sections 01 3000 and 01 3400 for submittal procedures. Submit concurrently with submittals required in Section 01 0500.
- B. Submit working drawings showing locations of storage areas not indicated on the Contract Drawings.
- C. Submit descriptions of proposed methods and locations for storing and protecting products.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Materials required for the storage and protection of the items specified shall be durable, weatherproof and either factory finished or painted to present an appearance acceptable to the City. Storage facilities shall be uniform in appearance with similar materials used to the maximum extent possible.

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS OF EXECUTION

- A. Palletize materials, products and supplies which are to be incorporated into the construction and stored off the ground. Store these items in a manner which will prevent damage and which will facilitate inspection. Leave seals, tags and labels intact and legible. Maintain access to products to allow inspection. Protect products that would be affected by adverse environmental conditions.
- B. Periodically inspect stored products to ensure that products are being stored as

- stipulated and that they are free from damage and deterioration.
- C. Do not remove items from storage until they are to be incorporated into the Work.
- D. The Contractor shall ensure that all protective wrappings and coverings are secure and ballasted to prevent any items from deterioration and/or subsequent dislodgment. All items on the worksite that are subject to becoming windborne shall be ballasted or anchored.

3.2 HANDLING AND TRANSPORTATION

A. Handling

- 1) Avoid bending, scraping or overstressing products. Protect projecting parts by blocking with wood, by providing bracing or by other approved methods.
- 2) Protect products from soiling and moisture by wrapping or by other approved means.
- 3) Package small parts in containers such as boxes, crates or barrels to avoid dispersal and loss. Firmly secure an itemized list and description of contents to each container
- 4) Transportation
- 5) Conduct the loading, transporting, unloading and storage of products so that they are kept clean and free from damage.

3.3 STORAGE

- A. Store items in a manner that shall prevent damage to the owner's property. Do not store hydraulic fluids, gasoline, liquid petroleum, gases, explosives, diesel fuel and other flammables in excavations, except one day's supply of diesel fuel may be stored in open excavations.
- B. Provide sheltered weather-tight or heated weather-tight storage as required for products subject to weather damage.
- C. Provide blocking, platforms or skids for products subject to damage by contact with the ground.
- D. All material shall be stored according to the manufacturer's recommendations. Any material that has to be stored within specified temperature or humidity ranges shall have a 24-hour continuously written recording made of the applicable condition. Should the recording show that the material was not stored within the recommended ranges the material shall be considered defective and in nonconformance. If a certification from the manufacturer's engineering design representative is provided stating that the actual variations are acceptable and will in no way harm the material or affect warranties, then the deficiency will be considered cor-

rected.

E. Store hazardous material separately, with all material marked with a label showing the hazard and how to treat exposure to the material.

3.4 LABELS

A. Storage cabinets and sheds that will contain flammable substances and explosive substances shall be labeled FLAMMABLE--KEEP FIRE AWAY and NO SMOKING with conspicuous lettering and conforming to OSHA requirements.

END OF SECTION 01 62 00

SECTION 01 63 00 - SUBSTITUTIONS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this Section consists of submitting for the approval of a different material, equipment or process then is described in the Contract Documents.
- B. If the substitution changes the scope of work, contract cost or contract time, a change order is required. As-built drawings and specifications must include all substitutions even if a change order is not issued.
- C. Reference Contract General Conditions, GC 406.

1.2 QUALITY CONTROL

- A. The substitution must provide the same quality as what it is replacing. The level of quality is defined by:
 - 1) Maintenance and operating cost
 - 2) Reliability
 - 3) Durability
 - 4) Life expectancy
 - 5) Ease of cleaning
 - 6) Ability to be upgraded as needed
 - 7) Ease of interacting with other systems or components
 - 8) Ability to be repaired
 - 9) Availability of replacement parts
 - 10) Established history of use in similar environments
 - 11) Performance equal or superior to that which it is replacing.

1.3 SUBMITTAL

- A. Refer to Technical Specifications Sections 01 3000 and 01 3400 for submittal procedures.
- B. A complete request for substitution must be made at least 60 days prior to when an order needs to be placed or a method needs to be changed.
- C. The submittal shall contain, as appropriate, detailed product data sheets for the specified items and the substitution. Samples and shop drawings shall also be submitted of the substitution as applicable. The submittal shall contain all the data required to be submitted for acceptance of the originally specified item or pro-

SUBSTITUTIONS 01 63 00 - 1

cess.

- D. The submittal shall contain all the applicable information required in Technical Specifications Section 01 6300, paragraph 2.01 below.
- E. A signed statement as outlined in Technical Specifications Section 01 6300, paragraph 2.03.B below must accompany the Request for Substitution.

PART 2 - PRODUCTS

2.1 INFORMATION

- A. Provide the following information as applicable with the Request for Substitution on the item or process that is being requested to be substituted:
 - 1) A complete description of the item or process
 - 2) Utility connections including electrical, plumbing, HVAC, fire protection and controls
 - 3) The physical dimensions and clearances
 - 4) A parts list with prices
 - 5) Samples of color and texture
 - 6) Detailed cost comparisons of the substitution and the contract specified item or process
 - 7) Manufacturer warranties
 - 8) Energy consumption over a one-year period
 - 9) What local organization is certified to maintain the item
 - 10) Performance characteristics and production rates
 - 11) A list of any license fees or royalties that must be paid
 - 12) A list of all variations for the item or method specified
 - A list of at least three other projects of similar nature to this contract where the products or methods have been in use for at least one year including telephone number and name of the person to contact at these other projects
 - An analysis of the effect of the substitution on the schedule and contract cost and on the overall project as it relates to adjoining work.

2.2 SUBSTITUTION REQUEST

- A. The formal Request for Substitution will be evaluated by the Project Manager and the Designer of Record based on the following criteria:
 - 1) Compatibility with the rest of the project
 - 2) Reliability, ease of use and maintenance
 - 3) Both initial and long term cost
 - 4) Schedule impact
 - 5) The willingness of the Contractor to share equally in any cost savings

SUBSTITUTIONS 01 63 00 - 2

- The ability of the item or process to meet all applicable governing regulations, rules and laws along with funding agency requirements
- 7) The cost of evaluating the substitution.
- B. Based upon the above evaluation the Project Manager will make a final determination of what is in the best interest of the City and either approve, disapprove or approve as noted the requested substitution.

2.3 CONDITIONS

- A. As a condition for submitting a Request for Substitution the Contractor waives all rights to claim for extra cost or change in contract time other than those outlined in the request and approved by the Project Manager. The Contractor, by submitting a Request for Substitution, also accepts all liability for cost and scheduling impact on other contractors or the City due to the substitution.
- B. Included with the Request for Substitution shall be the following statement:
 - 1) "The substitution being submitted is equal to or superior in all respects to the contract-required item or process. All differences between the substitution and the contract-required item or process are described in this request along with all cost and scheduling data."
- C. The statement shall be signed and dated by the Contractor's Superintendent.

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 63 00

SUBSTITUTIONS 01 63 00 - 3

SECTION 01 70 00 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work specified in this Section includes procedures required prior to Final Acceptance of the Work in addition to those specified in General Conditions Title 20 and Technical Specifications Section 01 7200.
- B. Reference Special Contract Conditions, Liquidated Damages, and Contract General Conditions, GC 602, GC906, GC 909, GC 910, GC 2003.

1.2 PREPARATION FOR FINAL INSPECTION

A. Before requesting inspection for Final Acceptance of the Work by the City, inspect, clean and repair the Work as required.

1.3 FINAL INSPECTION

- A. When the Contractor considers that the Work is complete, he shall submit written certification that:
 - 1) All punch list items have been completed.
 - 2) All clean up at the project site has been accomplished.
 - 3) Work has been inspected by the Contractor for compliance with contract documents
 - 4) Work has been completed in accordance with contract documents.
 - 5) Work is ready for final inspection by the City.
 - 6) All as-built required documents have been submitted and accepted.
 - 7) All damaged or destroyed real, personal, public or private property has been repaired or replaced.
 - 8) All operation and maintenance manuals have been submitted and accepted and all training has been completed.
- B. The Project Manager and/or the Designer of Record will inspect to verify the status of completion with reasonable promptness after receipt of such certifications. If the Project Manager and/or the Designer of Record finds incomplete or defective work:
 - 1) The Project Manager may, at the Project Manager's sole discretion, either terminate the inspection or prepare a punch list and notify the Contractor in writing, listing incomplete or defective work.
 - 2) The Contractor shall take immediate steps to remedy stated deficiencies and send a second written certification to the Project Manager that Work is

complete.

3) The Project Manager and the Designer of Record will then re-inspect the Work.

1.4 REINSPECTION FEES

- A. Should the Project Manager perform re-inspection due to failure of the Work to comply with the claims of status of completion made by the Contractor:
 - 1) The Contractor shall compensate the City for such additional services at the rate identified in the Special Contract Conditions, Liquidated Damages,
 - 2) The City shall deduct the amount of such compensation from the final payment to the Contractor.

1.5 FINAL CHANGE ORDER

- A. If required, the Project Manager will prepare a final change order, reflecting approved adjustments to the Contract sum which were not previously made by change orders including the following:
 - 1) Additions and deductions resulting from:
 - a. Allowances.
 - b. Final quantities for unit price items. Along with this statement shall be detailed backup for the quantities.
 - c. Deductions or corrected work.
 - d. Penalties.
 - e. Deductions for liquidated damages.
 - f. Deductions for re-inspection payments.
 - g. City resurveys required due to the Contractor.
 - h. Other adjustments.

1.6 FINAL APPLICATION FOR PAYMENT

A. The Contractor shall submit the final application for payment in accordance with the procedures and requirements stated in the General Conditions Title 20.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 70 00

SECTION 01 71 00 - CLEANING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this section consists of maintaining a clean, orderly, hazard free worksite during construction, and final cleaning for the City's Final Acceptance. Failure to maintain the worksite will be grounds for withholding monthly payments until corrected to the satisfaction of the Project Manager and/or. the Project Inspector.
- B. Reference Contract General Conditions, GC 325, GC 803, GC 2001

1.2 JOB CONDITIONS

A. Safety Requirements

- Maintain the worksite in a neat, orderly and hazard-free manner in conformance with all federal, state and local rules, codes, regulations and orders, including all OSHA requirements, until Final Acceptance of the Work. Keep catwalks, underground structures, worksite walks, sidewalks, roadways and streets, along with public and private walkways adjacent to the worksite, free from hazards caused by construction activities. Inspect those facilities regularly for hazardous conditions caused by construction activities.
- 2. Hazards Control
- 3. Store volatile wastes in covered metal containers and remove those wastes from worksite daily.
- 4. Do not accumulate wastes which create hazardous conditions.
- 5. If volatile and noxious substances are being used in spaces that are not naturally ventilated, provide artificial ventilation.
- 6. Hazard controls shall conform to the applicable federal, state and local rules and regulations.
- 7. Provide appropriate waste receptacles in all areas in which employees are working. Waste receptacles shall be kept covered at all times. All materials on site shall be anchored and covered to prevent any objects from becoming wind-borne.
- 8. Should an incident involving a spill or other encounter of a non-contained

CLEANING 01 71 00 - 1

hazardous material occur on site, the Contractor shall immediately call 311 and ask to have Environmental Health notified of the event and also immediately notify the City Project Manager.

- 9. Access
- 10. Maintain the worksite to permit access by other City contractors as required and to allow access by emergency personnel.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

- A. Utilize the type of cleaning materials recommended by the manufacturer for the surfaces to be cleaned.
- B. Maintain current Material Safety Data Sheets (MSDS) on site for all chemicals.
- C. Ensure proper disposal of all wastes generated from the use of these **materials**. **Must ensure compliance with all environmental regulations**.

PART 3 - EXECUTION

3.1 INTERIM CLEANING

- A. Clean the worksite every shift/workday for the duration of the construction contract. Maintain structures, grounds, storage areas and other areas of worksite, including public and private properties immediately adjacent to worksite, free from accumulations of waste materials caused by construction operations. Place waste materials in covered metal containers. All hard concrete, steel, wood and finished walking surfaces shall be swept clean daily.
- B. Remove or secure loose material on open decks and on other exposed surfaces at the end of each workday or more often in a manner that will maintain the worksite hazard free. Secure material in a manner that will prevent dislodgment by wind and other forces.
- C. Sprinkle waste materials with water or acceptable chemical palliative to prevent blowing of dust.
- D. Promptly empty waste containers when they become full and legally dispose of the contents at dumping areas off the City's property.
- E. Control the handling of waste materials. Do not permit materials to be dropped or thrown from structures.

CLEANING 01 71 00 - 2

- F. Immediately remove spillage of construction related materials from haul routes, work site, private property or public rights of way.
- G. Clean only when dust and other contaminants will not precipitate upon newly painted surfaces.
- H. Cleaning shall be done in accordance with manufacturer's recommendation.
- I. Cleaning shall be done in a manner and using such materials as to not damage the Work.
- J. Clean areas prior to painting or applying adhesive.
- K. Clean all heating and cooling systems prior to operations. If the contractor is allowed to use the heating and cooling system it shall be cleaned prior to testing.
- L. Clean all areas that will be concealed prior to concealment.

3.2 FINAL CLEANING

- A. Inspect interior and exterior surfaces, including concealed spaces, in preparation for completion and acceptance.
- B. Remove dirt, dust, litter, corrosion, solvents, discursive paint, stains and extraneous markings.
- C. Remove surplus materials, except those materials intended for maintenance.
- D. Remove all tools, appliances, equipment and temporary facilities used in the construction.
- E. Remove detachable labels and tags. File them with the manufacturer's specifications for that specific material for the City's records.
- F. Repair damaged materials to the specified finish or remove and replace.
- G. After all trades have completed their work and just before Final Acceptance, all catch basins, manholes, drains, strainers and filters shall be cleaned; roadway, driveways, floors, steps and walks shall be swept. Interior building areas shall be vacuum cleaned and mopped.
- H. Final cleanup applies to all areas within and adjacent to the site.

END OF SECTION 01 71 00

CLEANING 01 71 00 - 3

SECTION 01 72 00 – CONTRACT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this Section consists of maintaining, marking, recording and submitting contract record documents which include shop drawings, warranties, contract documents and contractor records.
- B. Reference Contract General Conditions, GC 324

1.2 RELATED DOCUMENTS

- A. Technical Specifications Section 01 40 00 "Contractor Quality Control"
- B. Technical Specifications Section 01 42 00 "Quality Assurance"

1.3 SUBMITTALS

- A. Each submittal of record documents shall contain the following information:
 - 1) Date
 - 2) Project title, address and numbers
 - 3) Contractor's name and address
 - 4) Title and number of each record document
 - 5) Certification that each document as submitted is complete and accurate
 - 6) Signature of the Contractor or his authorized representative.
 - 7) At the completion of this contract, deliver all record documents including the following:
 - 8) As-built shop drawings, diagrams, illustrations, schedules, charts, brochures and other similar data
 - 9) Warranties, guarantees and bonds
 - 10) Contract documents
 - 11) Contractor records.

1.4 QUALITY CONTROL

A. Record documents shall be prepared to a high standard of quality

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 MAINTENANCE OF DOCUMENTS

- A. The Contractor shall maintain at the worksite on a current basis one record copy of all drawings, specifications, addenda, change orders, approved shop drawings, working drawings, product data and samples in good order and marked currently to record all changes made during construction.
- B. Maintain at the field office one copy of the following record documents:
 - 1) Contract Documents
 - a) Contract drawings with all clarifications, requests for information, directives, changes and as-built conditions clearly posted.
 - b) Contract specifications with all clarifications, requests for information, changes, directives and record of manufacturer actually used along with product trade name..
 - c) One set of drawings to record the following:
 - 2) Horizontal and vertical location of underground utilities affected by the Work.
 - 3) Location of internal utilities; include valves, controls, conduit, duct work, switches, pressure reducers, size reducers, transitions, crosses, tees, filters, motors, heaters, dampers, regulators, safety devices, sensors, access doors and appurtenances that are concealed in the construction shall be shown with dimensions given from a visible and recognizable reference to the item being located in all three dimensions. The drawing shall also reference the applicable submittal for the item being located.
 - 4) Field changes of dimensions and details including as-built elevations and location (station and offset).
 - 5) Details not on original contract drawings but obtained through requests for information or by other communications with the City or Designer of Record.
 - 6) Contractor Records
 - a) Daily QC Reports
 - b) Certificates of compliance for materials used in construction
 - c) Nonconformance Reports (NCRs)
 - d) Remedial Action Requests (RARs)
 - e) Completed inspection list
 - f) Inspection and test reports
 - g) Test procedures
 - h) Approved submittals
 - i) Material and equipment storage records
 - j) Erosion, sediment, hazardous and quality plans
 - k) Hazardous material records
 - 1) First report of injuries

3.2 RECORDING

- A. Keep record documents current daily.
- B. Legibly mark copies of the contract drawings to record actual construction.
- C. Legibly mark up each Section of the technical specifications and contract drawings to record:

Changes made by change orders, requests for information, substitutions and variations approved by submittals.

3.3 DOCUMENT MAINTENANCE

- A. Maintain Documents in a clean, dry and legible condition, which shall be turned over to the City prior to final acceptance.
- B. Do not use record documents for construction purposes.
- C. Make documents available for inspection by the Project Manager and any others having jurisdiction.

3.4 MONTHLY REVIEW

- A. The Project Manager or his designated representative can inspect the record documents to ensure that they are being maintained and contain the most current correct data with particular attention to as-built drawings.
- B. If, the Project Manager determines that the documents are not being maintained and kept current as to as-built conditions, an amount may be withheld from the payment request and deducted from the contract value to cover the City's cost of collecting and recording the as-built contract data. This cost will be determined on the basis of \$75.00 per man-hour of effort.

END OF SECTION 01 72 00

SECTION 01 73 00 – OPERATIONS AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 DESCRIPTION

A. The Work specified in this Section consists of preparing and submitting operation and maintenance data for mechanical, electrical and other specified equipment.

1.2 SUBMITTALS

- A. Refer to Technical Specifications Section 01 30 00 and 01 34 00 for submittal procedures.
- B. Submit one (1) electronic copy and two (2) bound hard copy of the proposed Operation and Maintenance Data Manual format including a table of contents not less than 30 days prior to acceptance tests and final inspection.
- C. Submit one (1) electronic copy and two (2) bound hard copy of Operation and Maintenance Data Manual prior to final payment These copies shall incorporate any comments made on the previous submittals, along with final readings on all settings and gauges taken while the system is in fully satisfactory operation, final test and balance reports, and final sequence of operations standards.

1.3 CONTINUOUS UPDATING PROGRAM

- A. Furnish one electronic copy of the Contractor's letter indicating that suppliers have been notified to provide updated operation and maintenance data, service bulletins and other information pertinent to the equipment, as it becomes available.
 - 1. Contractor to verify with Project Manager to which Facility Operator these notices are to be sent. All updates after Final Acceptance are to be sent to a Facility Operator with only a copy of the transmittal to the Project Manager.

PART 2 - PRODUCTS

- 2.1 The following products are the requirements of hard copies:
 - A. PAPER SIZE 8-1/2 inches x 11 inches.
 - B. PAPER White bond, at least 20 pound weight.
 - C. TEXT typewritten.

- D. PRINTED DATA Manufacturer's catalog cuts, brochures, operation and maintenance data. Clear reproductions thereof will be acceptable. If this data is in color, all final manuals must contain color data.
- E. DRAWINGS 8-1/2 inches x 11 inches, bound with the text. Larger drawings are acceptable provided they are folded to fit into a pocket inside the rear cover of the manual. Reinforce edges of large drawings.
- F. PRINTS OF DRAWINGS black ink on white paper, sharp in detail and suitable for making reproductions.
- G. FLYSHEETS Separate each portion of the manual with colored, neatly prepared flysheets briefly describing the contents of the ensuing portion.
- H. COVERS Provide 40 to 50 mil, clear plastic, front and plain back covers for each manual. The front covers shall contain the information required in paragraph 3.02 below.
- I. BINDINGS Conceal the binding mechanism inside the manual; lockable 3 ring binders shall be provided.

PART 3 - EXECUTION

3.1 COVER

- A. Include the following information on the front cover and on the inside cover sheet:
 - 1. OPERATION AND MAINTENANCE INSTRUCTIONS
 - 2. (TITLE OF STRUCTURE OR FACILITY AND ADDRESS)
 - 3. (TITLE AND NUMBER OF CONTRACT)
 - 4. (CONTRACTOR'S NAME AND ADDRESS)
 - 5. (GENERAL SUBJECT OF THE MANUAL)
 - 6. (Leave spaces for signatures of the City representatives and acceptance date)

3.2 CONTENTS OF THE MANUAL

- A. An index of all volumes in each volume of multiple volume systems.
- B. An index in front of each volume. List and combine the literature for each system in the sequence of operation.
- C. Name, address and telephone numbers of Contractor, suppliers and installers along with the manufacturer's order number and description of the order.

- D. Name, address and telephone numbers of manufacturer's nearest service representatives.
- E. Name, address and telephone number of nearest parts vendor and service agency.
- F. Copy of guaranties and warranties issued to, and executed in the name of, the City.
- G. Anticipated date City assumes responsibility for maintenance.
- H. Description of system and component parts including theory of operation.
- I. Pre operation check or inspection list.
- J. Procedures for starting, operating and stopping equipment.
- K. Post operation check or shutdown list.
- L. Inspection and adjustment procedures.
- M. Troubleshooting and fault isolation procedures for on-site level of repair.
- N. Emergency operating instructions.
- O. Accepted test data.
- P. Maintenance schedules and procedures.
- Q. Test procedures to verify the adequacy of repairs.
- R. One copy of each wiring diagram.
- S. One copy of each piping diagram.
- T. Location where all measurements are to be made.
- U. One copy of each duct diagram.
- V. One copy of control diagram.
- W. One copy of each accepted shop drawing.
- X. One copy of software programs imputable or changeable on site.
- Y. Manufacturer's parts list with catalog names, numbers and illustrations.
- Z. A list of components which are replaceable by the City.
- AA. An exploded view of each piece of the equipment with part designations.

City and County of Denver Replace Roofing Richard T. Castro Building

- BB. List of manufacturer's recommended spare parts, current prices and recommended quantities for two years of operation.
- CC. List of special tools and test equipment required for the operation, maintenance, adjustment, testing and repair of the equipment, instruments and components.
- DD. Scale and corrosion control procedures.
- EE. Disassembly and re-assembly instructions.
- FF. Troubleshooting and repair instructions.
- GG. Calibration procedures.
- HH. Ordering information.
- II. Training course material used to train City staff, including DVD, slides and other presentation material.
- JJ. Inventory of all attic stock provided per the Technical Specifications and the specific location to which this was delivered.

END OF SECTION 01 73 00

SECTION 01 73 20 - CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Technical Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for cutting and patching.
- B. Cutting and patching includes cutting existing construction to provide for installation or performance of other Work, and subsequent fitting and patching required to restore surfaces to original conditions.
- C. Demolition of selected portions of the building for alterations is included in Technical Specification Section 01 73 60, "Selective Demolition."

1.3 SUBMITTALS

- A. Cutting and Patching Proposal: Where approval of procedures for cutting and patching is required before proceeding, submit a description of proposed procedures well in advance of the time cutting and patching will be performed and request approval to proceed from Project Manager and/or Designer. Include the following information, as applicable, in the proposal:
 - 1) Describe the extent of cutting and patching required and how it is to be performed; indicate why it cannot be avoided.
 - 2) Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
 - 3) List products to be used and firms or entities that will perform Work.
 - 4) List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
 - 5) Approval by the Project Manager and/or Designer to proceed with cutting and patching does not waive the Designer's right to later require complete removal and replacement of a part of the Work found to be unsatisfactory.

1.4 QUALITY ASSURANCE

- A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
 - 1) Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:
 - a) Foundation construction.
 - b) Bearing walls.
 - c) Wood beams.
 - 2) Refer to General Contract Conditions Section 316 Cutting and Patching the Work.
- B. Operational and Safety Limitations: Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.
 - 1) Obtain approval from the Project Manager and/or Designer of the cutting and patching proposal before cutting and patching the following operating elements or safety related systems:
 - a) Primary operational systems and equipment.
 - b) Water, moisture, or vapor barriers.
 - c) Roofing and flashings.
 - d) Control systems.
 - e) Electrical wiring systems.
- C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Designer's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS

1.1 MATERIALS

A. Use materials that are identical to existing materials. If identical materials are not available or cannot be used where exposed surfaces are involved, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

1.1 INSPECTION

A. Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.

1.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Take all precautions necessary to avoid cutting existing pipe, conduit or ductwork serving the building, but scheduled to be removed or relocated until provisions have been made to bypass them.

1.3 PERFORMANCE

- A. General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1) Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
- B. Cutting: Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. Where possible review proposed procedures with the original installer; comply with the original installer's recommendations.
 - In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Do not cut holes larger than necessary. Temporarily cover openings when not in use.
 - 2) To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
 - 3) Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.

- 4) Comply with requirements of applicable Technical Specification Sections of Division-2 where cutting and patching requires excavating and backfilling.
- By-pass utility services such as pipe or conduit, before cutting, where services are shown or required to be removed, relocated or abandoned. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.
- C. Perform all patching with durable seams that are not discernable from normal viewing distances. Comply with specified tolerances.
 - 1) Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
 - 2) Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.

1.4 CLEANING

A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

END OF SECTION 01 73 20

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Technical Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section requires the selective removal and subsequent offsite disposal of the following:
 - 1) Portions of existing building indicated on drawings and as required to accommodate the restoration and rehabilitation of the building.
 - 2) Removal of items indicated "remove."
 - 3) Removal and protection of items indicated "remove," "salvage" or "relocate."
 - 4) Roofing Removal: Remove roofing items not designated to remain in a clean safe manner. Protect adjacent surfaces with tarps as required to keep from damaging or staining surfaces.
- B. Removal work specified elsewhere:
 - 1) Cutting and patching is specified in Technical Specification 017320.
- C. Related work specified elsewhere:
 - 1) Remodeling construction work and patching are included within the respective sections of specifications, including removal of materials for reuse and incorporation into remodeling.

1.03 SUBMITTALS

- A. Schedule indicating proposed sequence of operations for selective demolition work to Project Manager for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required, together with details for dust and noise control protection.
- B. Photograph existing conditions of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. File with Project Manager prior to start of work.

1.04 JOB CONDITIONS

- A. Condition of Structures: City assumes no responsibility for actual condition of items to be removed.
 - 1) Conditions existing at time of inspection for bidding purposes will be maintained by City insofar as practicable. However, minor variations within structure may occur by City's removal and salvage operations prior to start of selective demolition work.
- B. Partial Demolition and Removal: Items indicated to be removed but of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.
 - 1) Storage or sale of removed items on site will not be permitted.
- C. Protections: Provide temporary barricades and other forms of protection to protect City's personnel and general public from injury due to selective demolition work.
 - 1) Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain.
 - 2) Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
 - 3) Protect floors with suitable coverings when necessary.
 - 4) Construct temporary dustproof partitions where required to separate areas where extensive dirt or dust operations are performed.
 - 5) Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage or damage occurs to structure or interior areas of existing building.
 - 6) Remove protections at completion of work.
- D. Damages: Promptly repair damages caused to adjacent facilities by demolition work.
- E. Flame Cutting: Do not use cutting torches without obtaining prior permission from the Project Manager and/or Designer.

- 1) Where permission is granted, do not proceed until work area is cleared of flammable materials. At concealed spaces, such as interior of ducts and pipe spaces, verify condition of hidden space before starting flame-cutting operations. Maintain portable fire suppression devices during flame-cutting operations.
- F. Utility Services: Maintain existing utilities indicated to remain in service and protect them against damage during demolition operations.
 - 1) Maintain fire protection services during selective demolition operations.
- G. Environmental Controls: Use necessary and appropriate methods to limit dust and dirt migration. Comply with governing regulations pertaining to environmental protection.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 INSPECTION

A. Prior to commencing with selective demolition work, inspect areas in which work will be performed. Photograph existing conditions of structure surfaces, equipment or surrounding properties which could be misconstrued as damage resulting from selective demolition work; file with Designer prior to starting work.

3.02 PREPARATION

- A. General: Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of areas to be demolished and adjacent facilities to remain.
 - 1) Cover and protect City's property from soilage or damage when demolition work is performed in areas where such items have not been removed.
 - 2) Locate, identify, stub off, and disconnect utility services that are not indicated to remain.
 - a) Provide bypass connections as necessary to maintain continuity of service to occupied areas of building. Provide minimum of 72 hours advance notice to Project Manager if shutdown of service is necessary during changeover.

3.03 DEMOLITION

- A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
 - 1) Remove concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.
 - 2) Promptly remove debris to avoid imposing excessive loads on supporting walls, floors, or framing.
 - 3) Provide services for effective dust control.
- B. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Designer in written, accurate detail. Pending receipt of directive from Designer, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.

3.04 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from building site debris, rubbish, and other materials resulting from demolition operations. Transport and legally dispose off site. Coordinate with City all building materials removed from the building for on-site disposal.
 - If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution. Notify Project Manager and obtain specific direction regarding the suspected hazardous material from the City's Environmental Health Division.
 - 2) Burning of removed materials is not permitted on project site or elsewhere within the City and County of Denver.

3.05 CLEANUP AND REPAIR

- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.
 - 1) Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start of demolition operations. Repair and clean adjacent construction or surfaces soiled or damaged by selective demolition work.

City and County of Denver Replace Roofing Richard T. Castro Building

SECTION 01 73 60 – SELECTIVE DEMOLITION

END OF SECTION 01 73 60

SECTION 01 74 00 – WARRANTIES AND BONDS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Work specified in this Section consists of preparing and submitting warranties and bonds required by these specifications.
- B. Reference Contract General Conditions: GC 111, GC 1501, GC 1502, GC 1503, GC 1801, GC 1802.

1.2 SUBMITTALS

- A. Refer to Technical Specifications Section 01 3000 for submittal procedures.
- B. Submit executed warranties and bonds.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 WARRANTIES AND BONDS

- A. Execute the warranties and bonds required by the Contract Documents. Prepare and submit all bonds on the forms provided by the City. Deliver the executed warranties in electronic and hard copy format.
- B. Provide warranties or bonds for the materials, labor and time period set forth in the sections of these specifications requiring such documents. All warranties shall be in accordance with the Contract General Conditions. Refer to the Technical Specifications for all specific items requiring longer warranty periods.
- C. Provide all warranties and bonds that the manufacturer or supplier furnishes at no additional cost in regular commercial trade.

END OF SECTION 01 74 00

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Technical Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1) Salvaging nonhazardous demolition waste.
 - 2) Recycling nonhazardous demolition and construction waste.
 - 3) Disposing of nonhazardous demolition and construction waste.
- B. Related Requirements, if applicable:
 - 1) Division 02 Section "Selective Structure Demolition" for disposition of waste resulting from partial demolition of buildings, structures, and site improvements.
 - 2) Division 31 Section "Site Clearing" for disposition of waste resulting from site clearing and removal of above- and below-grade improvements.

1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 5 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including the following:
 - 1) Demolition Waste:
 - a) Asphalt paving.
 - b) Concrete.
 - c) Concrete reinforcing steel.
 - d) Terra cotta/plaster walls.
 - e) Structural and miscellaneous steel.
 - f) Rough hardware.
 - g) Insulation.
 - h) Doors and frames.
 - i) Door hardware.
 - j) Windows.
 - k) Glazing.
 - 1) Gypsum board.
 - m) Equipment.
 - n) Cabinets.
 - o) Piping.
 - p) Supports and hangers.
 - q) Valves.
 - r) Mechanical equipment.
 - s) Refrigerants.
 - t) Electrical conduit.
 - u) Copper wiring.
 - v) Lighting fixtures.
 - w) Lamps.
 - x) Ballasts.
 - y) Electrical devices.

2) Construction Waste:

- a) Lumber.
- b) Wood sheet materials.
- c) Metals.
- d) Insulation.
- e) Carpet.

Replace Roofing Richard T. Castro Building

- f) Metal studs.
- g) Gypsum board.
- h) Piping.
- i) Electrical conduit.
- j) Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
 - 1. Paper.
 - 2. Cardboard.
 - 3. Boxes.
 - 4. Plastic sheet and film.
 - 5. Polystyrene packaging.
 - 6. Wood crates.
 - 7. Plastic pails.

1.5 ACTION SUBMITTALS

A. Waste Management Plan: Submit plan within 7 days of date established for the Notice to Proceed.

1.6 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include the following information:
 - 1) Material category.
 - 2) Generation point of waste.
 - 3) Total quantity of waste in tons.
 - 4) Quantity of waste salvaged, both estimated and actual in tons.
 - 5) Quantity of waste recycled, both estimated and actual in tons.
 - 6) Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7) Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- E. Recycling and Processing Facility Records: Indicate receipt and acceptance of

- recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Retain "LEED Submittal" Paragraph below if Contractor rather than Architect or Owner is required to sign letter for LEED credits.
- H. LEED Submittal: (Not applicable)
- I. Coordinate "Qualification Data" Paragraph below with qualification requirements in Division 01 Section "Quality Requirements" and as may be supplemented in "Quality Assurance" Article.
- J. Qualification Data: For refrigerant recovery technician.
- K. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.7 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: General Contractor with a record of successful waste management coordination of projects with similar requirements.
- B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- C. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
 - 1) Disposal Procedures:
 - a) Location: Denver Arapahoe Disposal Site DADS. All debris must be disposed of at this location.
 - b) Removal and Hauling: All Debris removal and hauling cost shall be part of base bid.
 - c) The Owner will set up an account with DADS that will cover the dump volumes cost only. All other fees to be included in base bid by General Contractor.
- D. Waste Management Conference: Conduct conference at Project site to comply with requirements in Technical Specification Section 012000 "Project Meetings."

Meeting shall include contractors affected by the Waste Management Plan. Review methods and procedures related to waste management including, but not limited to, the following:

- 1) Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
- 2) Review requirements for documenting quantities of each type of waste and its disposition.
- 3) Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
- 4) Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
- 5) Review waste management requirements for each trade.

1.8 WASTE MANAGEMENT PLAN

- A. General: Develop plan consisting of waste identification. Include separate sections in plan to distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition, siteclearing, and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: (Not applicable)
- D. See Evaluations for example of cost/revenue analysis in "Cost/Revenue Analysis" Paragraph below.
- E. Cost/Revenue Analysis: (Not applicable)

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Retain option in "Waste Management Coordinator" Paragraph below when Project size and complexity of waste management justifies full-time, on-site waste management coordinator.

- C. General Contractor's Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.
- D. Training: Train workers, subcontractors, and suppliers on appropriate separation, handling, and recycling to be used by all parties and proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1) Distribute waste management plan to everyone concerned within three days of submittal return.
 - 2) Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- E. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 3) Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
 - 4) Comply with Technical Specification Section 01500 "Temporary Facilities" for controlling dust and dirt, environmental protection, and noise control.
- F. Waste Management in Historic Zones or Areas: Hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, by 12 inches or more.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:
 - 1) Clean salvaged items.
 - 2) Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
 - 3) Store items in a secure area until installation.
 - 4) Protect items from damage during transport and storage.
 - 5) Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- B. Salvaged Items for Sale and Donation: Not permitted on Project site.
- C. Salvaged Items for Owner's Use: (Not applicable)

- D. Remaining paragraphs below are examples of additional requirements that can be added for salvaging materials. Insert other requirements to suit Project.
- E. Leaving door hardware attached to doors can make it easier to reuse in another project.
- F. Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors.
- G. Lighting Fixtures: Separate lamps by type and protect from breakage.
- H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. "Recycling Receivers and Processors" Paragraph below may be helpful for bidders with little or no previous experience with recycling. List of recycling and processing facilities is available from telephone directories and many local and state authorities.
- C. Recycling Receivers and Processors: List below is provided for information only; available recycling receivers and processors include, but are not limited to, the following:

RECYCLING RECEIVERS AND PROCESSORS				
CO Resource	400 Marriel Avenue	(970) 963- 8900	George MacDonald	
Management	Carbondale, CO 81623	0700	MacDonald	
Oxford Recycling	2400 W. Oxford Avenue	(303) 762- 1160	John Kent	
	Englewood, CO 80110			
Allied Waste	10303 E. Dry Creek Rd #250	(720) 895- 1500	Bill Kich	
	Englewood, CO 80112			
Waste-Not	1065 Poplar Street	(970 669- 9912	Gary Gettman	
	Loveland, CO 80534			
Bunting Disposal	3315 State Street	(970) 339-	Bryan Bunting	

	Evans, CO 80620	3023	
Phoenix	2501 Delwood Avenue Durango, CO 81301	(970) 375-	Mark
Recycling		1300	Thompson
Waste Chasers	19 Oak Avenue Eaton, CO 80615	(970) 454- 2497	Jason Hawk
Colorado All	7247 E. County Line	(303) 702-	Majori
Waste	Rd	9955	McDonald
	Longmont, CO 80504		
Patch	12655 State Hwy 67	(719) 784-	David Patch Jr.
Construction	Florence, CO 81226	6236	
Pueblo Disposal	28900 E. Hwy 96 Pueblo, CO 81001	(719) 948- 0047	
Construction	2255 E. Las Vegas Rd	(303) 375-	
Endeavors	Colorado Springs, CO	0785	

- D. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- E. Procedures in "Procedures" Paragraph below describe the "source-separated" method for handling recyclable waste. If space at Project site is limited, consider revising below to allow "co-mingled" method, which takes less space because it permits all recyclable waste to be placed in a single container that is separated later at the recycling facility.
- F. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1) Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a) Inspect containers and bins for contamination and remove contam-

inated materials if found.

- 2) Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
- 3) Stockpile materials away from construction area. Do not store within drip line of remaining trees.
- 4) Store components off the ground and protect from the weather.
- 5) Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

- A. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
- B. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
 - 1) Pulverize concrete to maximum 4-inch size.
- C. Masonry (Terra Cotta): Remove anchors and ties from masonry and sort with other metals.
 - 1) Pulverize masonry to maximum 4-inch size.
- D. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, panel products, and treated wood materials.
- E. Metals: Separate metals by type.
 - 1) Remove and dispose of bolts, nuts, washers, and other rough hardware.
- F. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
- G. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
- H. Conduit: Reduce conduit to straight lengths and store by type and size.

3.5 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 - 1) Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.

- 2) Polystyrene Packaging: Separate and bag materials.
- 3) Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- 4) Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Site-Clearing Wastes: Chip brush, branches, and trees on-site.
 - 1) Comply with requirements in Division 32 Section "Plants" for use of chipped organic waste as organic mulch.

C. Wood Materials:

- 1) Clean Cut-Offs of Lumber: Grind or chip into small pieces.
- 2) Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
 - a) Comply with requirements in Division 32 Section "Plants." for use of clean sawdust as organic mulch.
- D. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
 - 1) Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1) Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2) Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Retain first "Disposal" Paragraph below if disposal is permitted on Owner's property; revise, if applicable, to indicate limits on type of materials that may be disposed of on-site.
- D. Delete first paragraph and retain second paragraph when disposal off Owner's property is required. Add specific requirements for off-site disposal to suit Pro-

City and County of Denver Replace Roofing Richard T. Castro Building

ject.

- E. Disposal: Remove waste materials and dispose of at designated spoil areas on Owner's property.
- F. Disposal: Remove waste materials from Owner's property and legally dispose of them.

END OF SECTION 01 74 19

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A) Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Technical Specification Sections, apply to this Section.

1.2 SUMMARY

- A) Section includes administrative and procedural requirements for the following:
 - 1) Salvaging nonhazardous demolition waste.
 - 1) Recycling nonhazardous demolition and construction waste.
 - 2) Disposing of nonhazardous demolition and construction waste.
- B) Related Requirements, if applicable:
 - 1) Division 02 Section "Selective Structure Demolition" for disposition of waste resulting from partial demolition of buildings, structures, and site improvements.
 - 2) Division 31 Section "Site Clearing" for disposition of waste resulting from site clearing and removal of above- and below-grade improvements.

1.3 DEFINITIONS

- A) Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B) Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C) Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D) Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

- E) Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F) Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE REQUIREMENTS

- A) General: Achieve end-of-Project rates for salvage/recycling of 75 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including the following:
 - 1) Demolition Waste:
 - a) Asphalt paving.
 - b) Concrete.
 - c) Concrete reinforcing steel
 - d) Terra cotta/ plaster walls
 - e) Structural and miscellaneous steel
 - f) Rough hardware
 - g) Insulation
 - h) Doors and frames
 - i) Door hardware
 - j) Windows
 - k) Glazing
 - 1) Gypsum board
 - m) Equipment
 - n) Cabinets
 - o) Piping
 - p) Supports and hangers
 - q) Valves
 - r) Mechanical equipment
 - s) Refrigerants
 - t) Electrical conduit
 - u) Copper wiring
 - v) Lighting fixtures
 - w) Lamps
 - x) Ballasts
 - y) Electrical devices
 - 2) Construction Waste:

- a) Lumber.
- b) Wood sheet materials.
- c) Metals.
- d) Insulation.
- e) Carpet.
- f) Metal studs.
- g) Gypsum board.
- h) Piping.
- i) Electrical conduit.
- j) Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:
 - 1. Paper.
 - 2. Cardboard.
 - 3. Boxes.
 - 4. Plastic sheet and film.
 - 5. Polystyrene packaging.
 - 6. Wood crates.
 - 7. Plastic pails.

1.5 ACTION SUBMITTALS

A) Waste Management Plan: Submit plan within 7 days of date established for the Notice to Proceed.

1.6 INFORMATIONAL SUBMITTALS

- A) Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include the following information:
 - 1) Material category.
 - 2) Generation point of waste.
 - 3) Total quantity of waste in tons.
 - 4) Quantity of waste salvaged, both estimated and actual in tons.
 - 5) Quantity of waste recycled, both estimated and actual in tons.

- 6) Total quantity of waste recovered (salvaged plus recycled) in tons.
- 7) Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B) Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- C) Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- D) Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- E) Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- F) Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G) LEED Submittal: (Not applicable)
- H) Qualification Data: For refrigerant recovery technician.
- I) Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.7 QUALITY ASSURANCE

- A) Waste Management Coordinator Qualifications: General Contractor with a record of successful waste management coordination of projects with similar requirements.
- B) Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- C) Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
 - 1) Disposal Procedures:

- a) Location: Denver Arapahoe Disposal Site DADS. All debris must be disposed of at this location.
- b) Removal and Hauling: All Debris removal and hauling cost shall be part of base bid.
- c) The Owner will set up an account with DADS that will cover the dump volumes cost only. All other fees to be included in base bid by General Contractor.
- D) Waste Management Conference: Conduct conference at Project site to comply with requirements in Technical Specification Section 012000 "Project Meetings." Meeting shall include contractors affected by the Waste Management Plan. Review methods and procedures related to waste management including, but not limited to, the following:
 - 1) Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
 - 2) Review requirements for documenting quantities of each type of waste and its disposition.
 - 3) Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 - 4) Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - 5) Review waste management requirements for each trade.

1.8 WASTE MANAGEMENT PLAN

- A) General: Develop plan consisting of waste identification. Include separate sections in plan to distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B) Waste Identification: Indicate anticipated types and quantities of demolition, siteclearing, and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C) Waste Reduction Work Plan: (Not applicable)
- D) Cost/Revenue Analysis: (Not applicable)

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A) General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B) General Contractor's Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.
- C) Training: Train workers, subcontractors, and suppliers on appropriate separation, handling, and recycling to be used by all parties and proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1) Distribute waste management plan to everyone concerned within three days of submittal return.
 - 2) Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D) Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1) Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
 - 2) Comply with Technical Specification Section 01500 "Temporary Facilities" for controlling dust and dirt, environmental protection, and noise control.
- E) Waste Management in Historic Zones or Areas: Hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, areas, rooms, and openings, by 12 inches or more.

3.2 SALVAGING DEMOLITION WASTE

A) Salvaged Items for Reuse in the Work: Salvage items for reuse and handle as follows:

- 1) Clean salvaged items.
- 2) Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
- 3) Store items in a secure area until installation.
- 4) Protect items from damage during transport and storage.
- 5) Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- B) Salvaged Items for Sale and Donation: Not permitted on Project site.
- C) Salvaged Items for Owner's Use: (Not applicable)
- D) Doors and Hardware: Brace open end of door frames. Except for removing door closers, leave door hardware attached to doors.
- E) Lighting Fixtures: Separate lamps by type and protect from breakage.
- F) Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A) General: Recycle paper and beverage containers used by on-site workers.
- B) Recycling Receivers and Processors: List below is <u>provided for information only</u>; available recycling receivers and processors include, but are not limited to, the following:

RECYCLING RECEIVERS AND PROCESSORS				
CO Resource	400 Marriel Avenue	(970) 963-8900	George MacDonald	
Management	Carbondale, CO 81623			
Oxford Recycling	2400 W. Oxford Avenue	(303) 762-1160	John Kent	
	Englewood, CO 80110			
Allied Waste	10303 E. Dry Creek Rd #250	(720) 895-1500	Bill Kich	
	Englewood, CO 80112			

		T	1
Waste-Not	1065 Poplar Street	(970 669-9912	Gary Gettman
	Loveland, CO 80534		
Bunting Disposal	3315 State Street	(970) 339-3023	Bryan Bunting
	Evans, CO 80620		
Phoenix Recycling	2501 Delwood Avenue	(970) 375-1300	Mark Thompson
	Durango, CO 81301		
Waste Chasers	19 Oak Avenue	(970) 454-2497	Jason Hawk
	Eaton, CO 80615		
Colorado All Waste	7247 E. County Line Rd	(303) 702-9955	Majori McDonald
	Longmont, CO 80504		
Patch Construction	12655 State Hwy 67	(719) 784-6236	David Patch Jr.
	Florence, CO 81226		
Pueblo Disposal	28900 E. Hwy 96	(719) 948-0047	
	Pueblo, CO 81001		
Construction Endeavors	2255 E. Las Vegas Rd	(303) 375-0785	
	Colorado Springs, CO		

- C) Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D) Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1) Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.

- a) Inspect containers and bins for contamination and remove contaminated materials if found.
- b) Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
- c) Stockpile materials away from construction area. Do not store within drip line of remaining trees.
- d) Store components off the ground and protect from the weather.
- e) Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

- A) Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
- B) Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
 - 1) Pulverize concrete to maximum 4-inch size.
- C) Masonry (Terra Cotta): Remove anchors and ties from masonry and sort with other metals.
 - 1) Pulverize masonry to maximum 4-inch size.
- D) Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, panel products, and treated wood materials.
- E) Metals: Separate metals by type.
- F) Remove and dispose of bolts, nuts, washers, and other rough hardware.
- G) Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
- H) Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
- I) Conduit: Reduce conduit to straight lengths and store by type and size.

3.5 RECYCLING CONSTRUCTION WASTE

- A) Packaging:
 - 1) Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.

- 2) Polystyrene Packaging: Separate and bag materials.
- 3) Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- 4) Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B) Site-Clearing Wastes: Chip brush, branches, and trees on-site.
 - 1) Comply with requirements in Division 32 Section "Plants" for use of chipped organic waste as organic mulch.
- C) Wood Materials:
 - 1) Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 - 2) Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
 - a) Comply with requirements in Division 32 Section "Plants." for use of clean sawdust as organic mulch.
- D) Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
 - 1) Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.6 DISPOSAL OF WASTE

- A) General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1) Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2) Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B) Burning: Do not burn waste materials.
- C) Disposal: Remove waste materials and dispose of at designated spoil areas on Owner's property.

City and County of Denver Replace Roofing Richard T. Castro Building

D) Disposal: Remove waste materials from Owner's property and legally dispose of them.

END OF SECTION 01 74 19

SECTION 06 10 00 – ROUGH CARPENTRY

PART 1 - GENERAL

1.1 DESCRIPTION

- A) Work Included: Provide wood, nails, bolts, screws, framing anchors and other rough hardware, and other items needed and perform rough carpentry for the construction shown on the Drawings, as specified herein, and as needed for the complete and proper installation.
- B) Related Work: Documents affecting work in this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- C) The work is primarily associated with the installation of new wood nailers and curbs. All wood shall be compliant with AWPA U1, Use Category 3B and fire preservative treated (Non-Com).

1.2 QUALITY ASSURANCE

- A) Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the crafts and who are completely familiar with the specified requirements and the methods needed for the proper performance of the work of this Section.
- B) Codes and Standards: In addition to complying with the pertinent codes and regulations of governmental agencies having jurisdiction unless otherwise specifically directed or permitted by the Architect comply with:
 - 1) "Product Use Manual" of the Western Wood Products Association for the selection and use of products included in that manual.
 - 2) "Plywood Specification and Grade Guide" of the American Plywood Association.

1.3 PRODUCT HANDLING

- A) Comply with pertinent provisions of Section 01 34 00.
- B) Deliver the materials to the job site, in a safe manner, out of the way of traffic, and shored up off the ground surface.
- C) Identify framing lumber as to grades, and store each grade separately from other grades.
- D) Protect materials with adequate waterproof wrapping.

E) Use extreme care in off loading of lumber to prevent damage, splitting, and breaking of materials.

PART 2 - PRODUCTS

2.1 GRADE STAMPS

- A) Identify framing lumber by the stamp of the Western Pine Inspection Bureau, or such other grade stamp as is approved in advance by the Architect.
- B) Identify plywood as to species, grade, and glue type by the stamp of the American Plywood Association.
- C) Identify other materials of the Section by the appropriate stamp of the agency approved in advance by the Roofing Consultant.

2.2 MATERIALS

- A) Provide materials in quantities needed for Work as shown on the Drawings, and meeting or exceeding the following standards of quality:
 - 1) Horizontal framing members: Douglas Fir-Hemlock, Pine, construction grade.
 - 2) Plywood Sheathing: Structural II, CDX, exterior; or standard sheathing with exterior glue.
 - 3) Steel Items: Comply with ASTM A7 or ASTM A36. Use galvanized steel in exterior locations.
 - 4) Machines Bolts: Comply with ASTM A307.
 - 5) Lag Bolts: Comply with Fed Spec FF-B-561.
 - 6) Nails: Use common except as otherwise noted. Comply with Fed Spec FF-N-1. Use galvanized at exterior locations.

2.3 OTHER MATERIALS

A) Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A) Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the

Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 DELIVERIES

- A) Stockpile materials sufficiently in advance of need to assure their availability in a timely manner for this work.
- B) Make as many trips to the job site as are needed to deliver materials of this Section in a timely manner to ensure orderly progress of the Work.

3.3 COMPLIANCE

- A) Do not permit materials not complying with provisions of this Section to be brought onto or stored at the job site.
- B) Promptly remove non-complying materials and replace with materials meeting the requirements of this Section.

3.4 WORKMANSHIP

- A) Produce joints which are tight, true, and well nailed, with members assembled in accordance with the Drawings and with pertinent codes and regulations.
- B) Carefully select members. Select individual pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing, and will allow making of proper connections. Cut out and discard defects which render a piece unable to serve its intended function. Lumber may be rejected by the Architect, whether or not it has been installed, for excessive warp, twist, bow, crook, mildew, fungus, or mold, as well as for improper cutting and fitting.
- C) Do not shim any component.

3.5 GENERAL FRAMING

- A) In addition to framing operation normal to the fabrication and erection as indicated on the Drawings, install wood blocking and backing required for the work of other trades.
- B) Set horizontal and sloped members with crown up.
- C) Do not notch, cut, or bore members for pipes, ducts, or conduits or for other reasons except as shown on the Drawings or as specifically approved in advance by the Architect.
- D) Make bearings full unless otherwise indicated on the Drawings.
- E) Finish bearing surfaces on which structural members are to rest so as to give sure

ROUGH CARPENTRY

and even support.

F) Where framing members slope, cut or notch the ends as required to give uniform bearing surface.

3.6 BLOCKING AND BRIDGING

- A) Install blocking as required to support items of finish and to cut off concealed draft openings, both vertical and horizontal, between ceiling and floor areas.
- B) Install solid block between joists at points of support and wherever sheathing is discontinuous. Blocking may be omitted where joists are supported on metal hangers.

3.7 ALIGNMENT

A) Nailing:

- 1) Use only common wire nails or spikes, except where otherwise specifically noted on the Drawings.
- 2) Provide penetration into the piece receiving the point of not less than 1/2 the length of the nail or spike, provided, however, that 16d nails may be used to connect two pieces of 2" (nominal) thickness.
- 3) Nail without splitting wood.
- 4) Pre-bore as required.
- 5) Remove split members and replace with members complying with the specified requirements.

B) Bolting:

- 1) Drill holes 1/16" larger in diameter than the bolts being used.
- 2) Drill straight and true from one side only.
- 3) Do not bear bolt heads on wood, but use washers under head and nut where both bear on wood, and use washers under all nuts.

C) Screws:

1) For lag screws and wood screws, pre-bore holes same diameter as roof of threads, enlarging holes to shank diameter for length of shank.

END OF SECTION 06 10 00

SECTION 07 53 23 – ADHERED EPDM SINGLE-PLY ROOFING

PART 1 - GENERAL

- 1.1 DESCRIPTION: Furnish the labor, administration, materials and equipment to integrate the work into the overall building system so as to provide a leak free, EPDM (Ethylene Propylene Diene Monomer) elastomeric roof system. The system is an assembly of components including the insulation, roofing membrane, metal flashings, and all related parts necessary to complete the assembly.
- 1.2 A brief description of the major base bid work items follows:
 - A) Single-Ply Roofing: On the low slope areas shown on the Drawings, remove the existing roof membranes and install a new fully adhered insulated EPDM recover roofing system.

1.3 APPLICATOR'S QUALIFICATIONS

A) Prior to the Notice of Award, the Contractor shall submit evidence that his company is an approved roofer for the membrane material manufacturer providing the membrane and has five years continuous successful experience in applying EPDM roofing systems.

1.4 QUALITY ASSURANCE

- A) A roofing consultant has been engaged to provide part time inspection of materials and workmanship. The Contractor shall provide a minimum of one weeks notice to the County Project Manager or representative/Engineer prior to the start of roofing operations so that such services can be scheduled.
- B) Except as modified and supplemented herein, follow the published requirements and written recommendations of the EPDM membrane and other material manufacturers. Concerning methods of application industry standards apply only when this contract does not address the matter. Industry Standards shall be predefined in the "NRCA (National Roofing Contractors Association) Manual of Roofing and Waterproofing".

1.5 SUBMITTALS

- A) When submitting manufacturer's literature, highlight all items pertaining to this project. See Division 1 for other items.
- B) Submit to the County Project Manager or representative/Engineer the items listed in the Submittal Register found in Division 1, and any other pertinent items not listed but necessary to complete the construction.
- C) Submit current manufacturer's literature for all items shown above. Also submit

literature for any other items which may have a direct bearing on the quality of the finished roofing.

D) Provide certification that materials meet the ASTM and Federal Specifications.

1.6 MATERIAL STORAGE AND HANDLING

- A) Where applicable, the Contractor shall store material in accordance with the material manufacturer's recommendation as to temperature.
- B) All insulation and water sensitive products shall be protected from the elements at all times. Such materials are to be stored in an enclosure or securely covered with a waterproof tarp; the plastic wrappers on the insulation products shall not be used as a means of weather protection.
- C) All materials shall be labeled for ready identification. Labels shall include the name of the manufacturer and product description.
- D) The Contractor shall store only that material on the roof that can be used in one day. Material stored on the roof shall be scattered so as not to apply a concentrated load to the roofing system (greater than 20 psf). No materials shall be stored on new roofing unless a protective layer of plywood with a foam insulation base is used.
- E) The Contractor shall use extreme care when transporting materials to the roof surface. Damaged materials shall not be installed and must be removed from the job site.
- F) The Contractor shall provide all required storage enclosures and safeguards.
- G) Materials shall be delivered in their original, unopened containers, clearly labeled. No materials shall be stored below 40 degrees F. Should any materials be stored below this temperature, they may not be installed until they are restored to a temperature greater than this.
- H) No materials shall be stored on surfaces with slopes greater than $\frac{1}{2}$ " per foot.
- I) Extreme caution must be used to properly secure the materials from wind.

1.7 ENVIRONMENTAL REQUIREMENTS

- A) Roofing materials shall not be installed in rain or snow. Roofing materials shall not be applied when there is heavy dew or frost on the roofing area. Application will not be allowed when the forecasted daily high temperature is less than 50 degrees or the wind speed is greater than 15 MPH.
- B) Do not heat the solvent based materials with an open flame in order to bring to a proper application temperature. Store materials in a heated location overnight if necessary.
- C) Provide drum heaters to properly maintain adhesive materials.

1.8 PROTECTION

- A) Adjacent surfaces shall be protected from stain and disfigurement during the demolition and application of roofing materials.
- B) The Contractor shall keep the building interior protected from the elements at all

times. Representatives from the Contractor shall be available in one hours notice should an emergency occur.

1.9 DEFECTS

A) Conditions which may be detrimental to the completion or performance of the specified work shall be reported in writing to the Architect/Engineer prior to commencing such work. Such work shall not start until defects have been corrected.

PART 2 - PRODUCTS

2.1 ABBREVIATIONS

A)	ASTM	American Society for Testing and Materials
B)	AWPB	American Wood Preservers Bureau
C)	FM	Factory Mutual
D)	FS	Federal Specification or Federal Standard
E)	SMACNA	Sheet Metal and Air Conditioning Contractors National Assoc.,
	Inc.	
F)	UL	Underwriters Laboratories
G)	WWPA	Western Wood Products Association

2.2 APPLICABLE PUBLICATIONS

A) The following publications of the issue listed below and referred thereafter by basic designation only form a part of this specification to the extent indicated by the references thereto (use latest publication):

2.3 ASTM PUBLICATIONS:

A)	ASTM A 307	Bolts & Nuts
B)	ASTM A 526	Galvanized Steel
C)	ASTM C 208	Wood Fiber Insulation

2.4 FEDERAL STANDARDS/SPECIFICATIONS:

A) TT-S 230C Sealing Compound

2.5 ROOF SYSTEM COMPONENTS

A) Insulation – Decks 1, 1A & 1B: Install a first layer of fiberglass faced isocyanurate foam insulation 1.0" thick, ASTM C 1289, Type II, Class I, Grade I. Over the layer of foam insulation set a single layer of 1/2" fiberglass faced

- gyspum cover board (ASTM C 1177).
- B) Insulation Decks 2, 3, 4 & 5: Install a single layer of 1/2" thick fiberglass faced gypsum cover board insulation (ASTM C 1177).
- C) Insulation Attachment Decks 1, 1A, 1B & 5: The layer of foam insulation shall be secured with FM Approved concrete fasteners and insulation plates. The cover board shall be set in the roofing manufacturer's approved low rise foam adhesive. Boards shall be secured to meet FM 1-75 Approval.
- D) Insulation Attachment Decks 2, 3, & 4: The layer of gupsum cover board shall be secured with FM Approved concrete fasteners and insulation plates. Boards shall be secured to meet FM 1-75 Approval.
- E) EPDM Roofing: ASTM D4637, Type I 60 mil fire rated EPDM sheet over insulation. Finished construction must provide UL Class A surface. Products from Manville, Firestone and Carlisle are approved.
- F) Seam Tape: Where possible use manufacturer's EPDM seam tape to construct field seams.
- G) Drain Sumps: Tapered insulation edge strip insulation built to have a slope of 1" per foot.
- H) Sheet Metal Finished: Where prefinished sheet metal is indicated, provide Kynar finish or equivalent.
- I) Accessories: Supply manufacturer required accessory products such as lap sealant in order to fully construct EPDM membrane system.

PART 3 - EXECUTION

3.1 GENERAL

- A) Deliver all materials to the site in a dry condition with labels intact. Either enclose materials in a trailer or cover with a waterproof tarpaulin to protect from the weather and moisture.
- B) For materials delivery in quantity to the site, obtain and submit a certification that the materials meet the required specification.
- C) Work so that each area of the membrane is completed the same day it is begun. This includes all base flashings.
- D) One, thirty-gallon per minute puddle type pump must be available on the job in case water must be removed from the roof surface on an emergency basis.
- E) The workers will not have access to the interior of the building unless it is related to associated interior work.

3.2 OPERATIONAL PROCEDURES

- A) Install temporary tie-ins and water cut-offs at the end of each workday. Remove all temporary tie-ins at the beginning of each workday.
- B) Except for expedient temporary work, do not roof during inclement weather as defined in the General Section of the Specification. Remove all temporary work prior to installing permanent components and materials.

- C) Confine equipment, storage of materials, debris, operations and movement of workers within the limits established for access at the pre-construction conference.
- D) Protect the building, all contents, and surrounding areas from damage, and building occupants from injury during the work. Do not affect the normal conduct of operations of the personnel in the building. Repairs must be made to all damage caused by lack of such protection to the Owner's satisfaction. If they determine that the repairs are beyond the Contractor's ability, then they will have the repairs performed by others and may charge the Contractor for these repairs.
- E) Remove daily all debris from the demolition and installation of the roof.
- F) When wheeled or other traffic over the partially or fully completed roofing is unavoidable, use adequate plywood protection for the membrane.
- G) Provide fifteen pound fire extinguishers at the point of application of any solvent based materials. The extinguishers should be Type A, B, C. No open flames shall be allowed around any of the solvent based products.

3.3 DEMOLITION

- A) Remove the existing roofing system as detailed in Section 02 41 13.
- B) If conditions are uncovered that would be detrimental to the application of the specified work, immediately notify the representative of the Owner.

3.4 INSULATION INSTALLATION

- A) Cut the insulation to fit snugly around penetrations and at the perimeters. No insulation gaps of over 1/4" shall be allowed. If gaps greater than this are created, then they shall be eliminated using trimmed pieces of isocyanurate insulation glued in place.
- B) Insulation boards shall be fully adhered with the 4' dimension staggered if possible.
- C) Follow additional applicable requirements of the roof insulation manufacturer and membrane manufacturer. No wet insulation shall be included in the final construction.

3.5 MEMBRANE INSTALLATION

- A) Except as modified and supplemented herein, apply membrane to meet the requirements and recommendations of the membrane manufacturer.
- B) Surfaces which have been contaminated by bitumen or other products which are not compatible with the membrane, flashings, or adhesives shall be cleaned or covered with plywood prior to the application of any roofing materials.
- C) Lift all mechanical unit and other roof top items as necessary to facilitate the proper installation of the membrane and flashings. Unit must be reset and brought back to proper functioning condition as soon as possible after the application of the roofing system. HVAC and other mechanical units require 96 hours of written notice from the Contractor to the Owner before approval can be

City and County of Denver Replace Roofing Richard T. Castro Building

- given for this type of work.
- D) Over the new insulation system, unroll the EPDM sheet without stretching. Allow sheet to relax for 1/2 hour prior to adhering the sheet and seaming operations.
- E) Work with largest sheets possible.
- F) Use seam tape at all field formed rubber to rubber membrane seams unless indicated otherwise by manufacturer.
- G) After waiting at least two hours, but prior to leaving the job for the day, the Contractor shall apply lap sealant as recommended by the manufacturer.

3.6 FLASHING INSTALLATION

- A) Clean all surfaces to be flashed prior to the application of any new materials.
- B) Bond the specified flashing materials to the substrate in such a manner as to avoid loose spots, sags, and wrinkles. Flash all items in the configuration shown on the Drawings.

3.7 SEALANT

- A) Clean the substrate as best possible so no contaminants such as bitumen and dust remain.
- B) If required, prime the surface with the primer recommended by the manufacturer. Also, use sealant backing if required by manufacturer.

END OF SECTION 07 53 23

SECTION 07 60 00 – SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 DESCRIPTION

- A) Work included: Provide flashings and sheet metal not specifically described in other Sections of these Specifications but required to prevent penetration of water through the exterior shell of the building.
- B) This Section covers sheet metal accessories needed for the project but are not sold by the roof system manufacturer.
- C) Related work: Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE

- A) Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the Work of this Section.
- B) In addition to complying with pertinent codes and regulations, comply with pertinent recommendations contained in current edition of "Architectural Sheet Metal Manual" published by the Sheet Metal and Air Conditioning Contractors National Association (SMACNA).
- C) Standard commercial items may be used for flashing, trim, reglets, and similar purposes provided such items meet or exceed the quality standards specified.

1.3 SUBMITTALS

- A) When submitting manufacturer's literature, highlight all items pertaining to this project.
- B) Submit to the Roofing Consultant the manufacturer's latest published materials and samples along with any other items necessary for construction.
- C) Submit current manufacturer's literature for all items proposed to be provided under this Section.
- D) Provide certification that materials meet the state ASTM and Federal specifications.

- E) Shop Drawings in sufficient detail to show fabrication, installation, anchorage, and interface of the work of this Section with the work of adjacent trades.
- F) Manufacturer's recommended installation procedures which, when approved by the Roofing Consultant, will become the basis for accepting or rejecting actual installation procedures used on the Work.

1.4 PRODUCT HANDLING

A) Comply with pertinent sections of Division 7.

PART 2 - PRODUCTS

2.1 MATERIALS AND GAGES

A) Where sheet metal is required, and no material or gage is indicated on the Drawings, provide the highest quality and gage commensurate with the referenced standards.

2.2 GALVANIZED IRON

- A) Provide sheet metal or sheet iron of a standard brand of open-hearth copper-bearing steel, copper-molybdenum iron, or pure iron sheets.
- B) Zinc coating:
 - 1) Where galvanizing is required, provide zinc coating by hot-dip galvanize to all surfaces.
- C) Weight:
 - 1) Provide not less than 1-1/4 oz. per sq. ft., nor more than 1-1/2 oz. per sq. ft., to surfaces required to be galvanized.
 - 2) Comply with ASTM A93.

2.3 NAILS, RIVETS AND FASTENERS

A) Use only soft iron rivets having rust-resistive coating, galvanized nails, and cadmium plated screws and washers in connection with galvanized iron and steel.

2.4 ALUMINUM

A) Where aluminum is shown, use flat stock of 6063-T5 alloy in thicknesses indicated. Use appropriate fasteners so as not to create galvanic action.

2.5 FLUX

A) Where flux is required, use raw muriatic acid.

2.6 SOLDER

A) Where solder is required, comply with ASTM B32.

2.7 SCREWS

- A) Provide new stainless steel screw fasteners at wall panels where existing screws are to be removed for installation of new flashings and counterflashings. Screw shall be of same type and size and shall integral washer flanges with neoprene washers.
- B) At all other locations where new fasteners are called out, provide fastener of same type of material as that to be fastened. Do not use screws smaller than #10.

2.8 OTHER MATERIALS

A) Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Roofing Consultant.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A) Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 WORKMANSHIP

A) General:

- 1) Form sheet metal accurately and to the dimensions and shapes required, finishing molded and broken surfaces with true, sharp, and straight lines and angles and, where intercepting other members, coping to an accurate fit and soldering securely.
- 2) Unless otherwise specifically permitted by Architect, turn exposed edges back with 1/2" hem.
- 3) Form, fabricate, and install sheet metal to adequately provide for expansion and contraction in the finished Work.

B) Weatherproofing:

- 1) Finish watertight and weathertight where so required.
- 2) Make lock seam work flat and true to line, sweating full of solder.
- 3) Make lock seams and lap seams, when soldered, at least 1/2" wide.
- 4) Where lap seams are not soldered, lap according to pitch, but in no case less than 3".
- 5) Make flat and lap seams in the direction of flow.

C) Joints:

- 1) Provide 3" splice joint at perimeter trim metal and at counterflashings. Set lap in 2 beads of sealant. Secure with ½" splice into hem and two pop rivets of same type of metal as flashing material.
- 2) Join other parts with rivets or sheet metal screws where necessary for strength and stiffness.
- 3) Provide suitable watertight expansion joints for runs of more than 40'-0", except where closer spacing is indicated on the Drawings or required for proper installation.

D) Fastening:

1) For fastening into brick or concrete use soft metal jacketed pre-drilled drive-pins, 1/4" in diameter.

3.3 EMBEDMENT

A) Embed metal in connection with roofs in a solid bed of sealant, using materials and methods which may be described in sections of Division 7.

3.4 TESTS

A) Upon request of the Roofing Consultant, demonstrate by hose or standing water that the flashing and sheet metal are completely watertight.

END OF SECTION 07 60 00

SECTION 07 92 00 – SEALANT AND CAULKING

PART 1 - GENERAL

1.1 DESCRIPTION

A) Section covers sealant and caulking material and application.

1.2 QUALITY CONTROL

A) Installer Qualifications: An experienced installer who has specialized in installing joint sealants similar in material, design, and extent to those indicated for this Project and whose work has resulted in joint-sealant installations with a record of successful in-service performance.

1.3 SUBMITTALS

- A) Submit in accordance with Section 01 30 00, SUBMITTALS.
- B) Manufacturer's installation instructions for each product used.
- C) Cured samples of exposed sealants for each color where required to match adjacent material.
- D) Manufacturer's Literature and Data:
 - 1) Caulking compound
 - 2) Primers
 - 3) Sealing compound, each type, including compatibility when different sealants are in contact with each other.

1.4 PROJECT CONDITIONS

- A) Environmental Limitations:
 - 1) Do not proceed with installation of joint sealants under following conditions:
 - a) When ambient and substrate temperature conditions are outside limits permitted by joint sealant manufacturer or are below 4.4 °C (40 °F).
 - b) When joint substrates are wet.
- B) Joint-Width Conditions:

1) Do not proceed with installation of joint sealants where joint widths are less than those allowed by joint sealant manufacturer for applications indicated.

C) Joint-Substrate Conditions:

1) Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

1.5 DELIVERY, HANDLING, AND STORAGE:

- A) Deliver materials in manufacturers' original unopened containers, with brand names, date of manufacture, shelf life, and material designation clearly marked thereon.
- B) Carefully handle and store to prevent inclusion of foreign materials.
- C) Do not subject to sustained temperatures exceeding 5 °C (90 °F) or less than 32 °C (40 °F).

PART 2 - PRODUCTS

2.1 SEALANTS:

- A) S-1:
 - 1) ASTM C920, polyurethane.
 - 2) Type M.
 - 3) Class 25.
 - 4) Grade NS.
 - 5) Shore A hardness of 20-40

2.2 COLOR:

- A) Sealants used with exposed masonry shall match color of mortar joints.
- B) Sealants used with unpainted concrete shall match color of adjacent concrete.
- C) Color of sealants for other locations shall be light gray or aluminum, unless specified otherwise.

2.3 JOINT SEALANT BACKING:

A) General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field

experience and laboratory testing.

- B) Cylindrical Sealant Backings: ASTM C1330, of type indicated below and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
 - 1) Type C: Closed-cell material with a surface skin.

2.4 PRIMER:

- A) As recommended by manufacturer of caulking or sealant material.
- B) Stain free type.

PART 3 - EXECUTION

3.1 INSPECTION:

- A) Inspect substrate surface for bond breaker contamination and unsound materials at adherent faces of sealant.
- B) Coordinate for repair and resolution of unsound substrate materials.
- C) Inspect for uniform joint widths and that dimensions are within tolerance established by sealant manufacturer.

3.2 PREPARATIONS:

- A) Prepare joints in accordance with manufacturer's instructions and SWRI.
- B) Clean surfaces of joint to receive caulking or sealants leaving joint dry to the touch, free from frost, moisture, grease, oil, wax, lacquer paint, or other foreign matter that would tend to destroy or impair adhesion.
 - 1) Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants.
 - 2) Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air. Porous joint surfaces include the following:
 - a) Concrete.
 - b) Masonry.
 - c) Unglazed surfaces of ceramic tile.

- 3) Remove laitance and form-release agents from concrete.
- 4) Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.
 - a) Metal.
 - b) Glass.
 - c) Porcelain enamel.
 - d) Glazed surfaces of ceramic tile.
- C) Do not cut or damage joint edges.
- D) Apply masking tape to face of surfaces adjacent to joints before applying primers, caulking, or sealing compounds.
 - 1) Do not leave gaps between ends of sealant backings.
 - 2) Do not stretch, twist, puncture, or tear sealant backings.
 - 3) Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- E) Apply primer to sides of joints wherever required by compound manufacturer's printer instructions.
 - 1) Apply primer prior to installation of back-up rod or bond breaker tape.
 - 2) Use brush or other approved means that will reach all parts of joints.
- F) Take all necessary steps to prevent three sided adhesion of sealants.

3.3 SEALANT DEPTHS AND GEOMETRY:

- A) At widths up to 6 mm (1/4 inch), sealant depth equal to width.
- B) At widths over 6 mm (1/4 inch), sealant depth 1/2 of width up to 13 mm (1/2 inch) maximum depth at center of joint with sealant thickness at center of joint approximately 1/2 of depth at adhesion surface.

3.4 INSTALLATION:

A) General:

- 1) Apply sealants and caulking only when ambient temperature is between 5 degrees C and 38 degrees C (40 and 100 degrees F).
- 2) Do not use polysulfide base sealants where sealant may be exposed to fumes from bituminous materials, or where water vapor in continuous contact with cementitious materials may be present.
- 3) Do not use sealant type listed by manufacture as not suitable for use in locations specified.

City and County of Denver Replace Roofing Richard T. Castro Building

- 4) Apply caulking and sealing compound in accordance with manufacturer's printer instructions.
- 5) Avoid dropping or smearing compound on adjacent surfaces.
- 6) Fill joints solidly with compound and finish compound smooth.
- 7) Tool joints to concave surface unless shown or specified otherwise.
- 8) Finish paving or floor joints flush unless joint is otherwise detailed.
- 9) Apply compounds with nozzle size to fit joint width.
- 10) Test sealants for compatibility with each other and substrate. Use only compatible sealant.
- B) For application of sealants, follow requirements of ASTM C1193 unless specified otherwise.

3.5 CLEANING:

- A) Fresh compound accidentally smeared on adjoining surfaces: Scrape off immediately and rub clean with a solvent as recommended by the caulking or sealant manufacturer.
- B) After filling and finishing joints, remove masking tape.
- C) Leave adjacent surfaces in a clean and unstained condition.

END OF SECTION 07 92 00

SECTION 22 14 26.13 – ROOF DRAIN TESTING & REPAIR

PART 1 - GENERAL

1.1 DESCRIPTION

A) This section covers the work that involves typical drain inspection and repair work for the roofing projects.

1.2 RELATED WORK

A) Refer to Section 07 53 23 for flashing of roof drains.

1.3 SUMMARY

A) Provide labor and components to return the drain bowls and cast iron strainers to a functioning state. Flood test the bowl and leader before and after work has taken place.

PART 2 - PRODUCTS

2.1 DRAIN STRAINER:

A) All strainers shall be of cast iron construction.

PART 3 - EXECUTION

3.1 Drain Work

- A) Drain Testing: Prior to starting of work flood test each drain leader with a 3/4" hose running at full flow for 10 minutes. After work is complete perform the same water test. Owners representative or Roof Consultant must be present for test. Document finding in writing and submit.
- B) Strainers: Where roof drain strainers are missing. Provide new cast iron strainers from Josam, Wade or others. If exact match can't be made provide closest match that function and sits in the bowl properly.
- C) Bolts: Provide new clamp ring bolts as needed. Remove and retap as needed.

END OF SECTION 22 14 26.13

CITY AND COUNTY OF DENVER STATE OF COLORADO



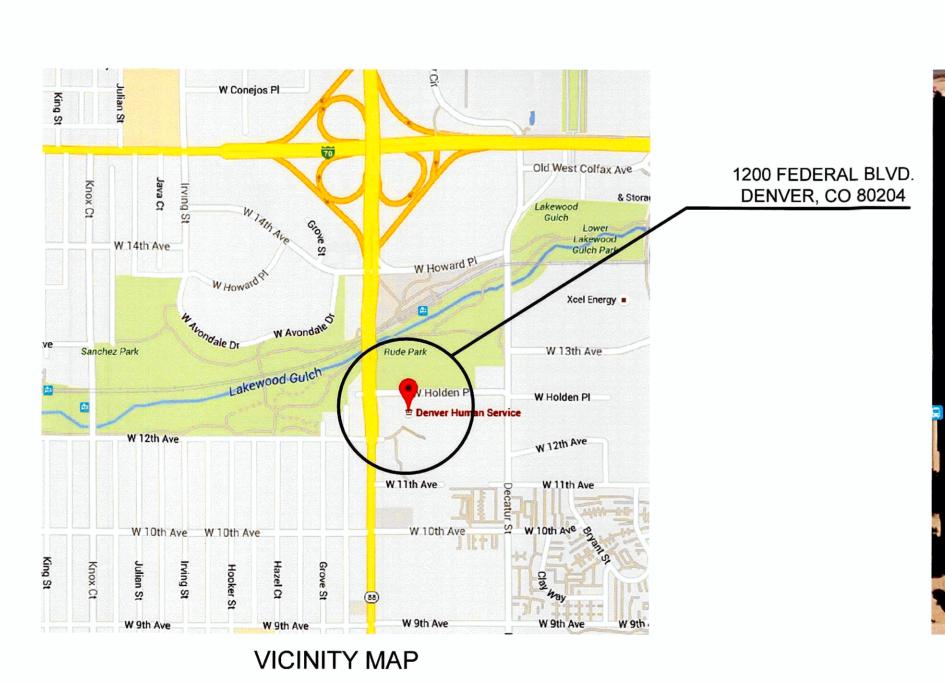
Department of Public Works Drawings

Contract Number: 201628023

Castro Roof June 6, 2016

REPLACE ROOFING CITY & COUNTY OF DENVER RICHARD T. CASTRO BUILDING

APRIL 11, 2016





SATELLITE PHOTO

Applicable Codes:

2009 International Mechanical Code (IMC)
2009 International Building Code (IBC)
2009 International Plumbing Code (IPC)
2009 International Fuel Gas Code (IECC)

2009 International Fuel Gas Code (IFGC)
2009 International Energy Conservation Code (IECC)

	SHEET INDEX
NUMBER	DESCRIPTION
	ARCHITECTURAL
G1.0	COVER SHEET
G1.1	ACCESS PLAN
R1.0	ROOF PLAN
R2.0	ROOF DETAILS
R2.1	ROOF DETAILS

CITY AND COUNTY OF DENVER DEPARTMENT OF PUBLIC WORKS

APPROVED BY:	
Lesling B John	4.18.16
EXECUTIVE DIRECTOR OF PUBLIC WORKS	DATE
Kely Shin	4.18.16
CITY ENGINEER	DATE
Sul Ventre	4/18/1
DIRECTOR OF ENGINEERING CAPITAL PROJECTS	DATE
Mich P. Falis	4/22/1
CITY TRAFFIC ENGINEER	ØATE €



ARCHITECT



Page Southerland Page, Inc.
1530 15th St.

Phone: (303) 595 0431

ROOFING CONSULTANT



RoofTech Consultants, Inc. 14828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205

CONTACT INFORMATION

David Brown
City & County of Denver
201 W. Colfax Ave., Dept 506
Denver, CO 80202
David.Brown@denvergov.org

John Schmitt
Page Southerland Page
1530 15th St.
Denver, CO 80202
JSchmitt@pagethink.com

Ron Scott RoofTech Consultants, Inc. Ron@rooftechconsultants.com

BID SET		RDS
		4/11/16
OF OF DEALET CHEMITTAL		RDS
95% DRAFT SUBMI	IIAL	11/18/15
REVISION		BY/DATE
DESIGNER: PROJ.		MGR:

DESIGNER:

RDS

DRAFTER:

LB

CHECKED BY:

GT

PROJ. MGR:

PROJECT #:

DATE:

4/11/2016

REPLACE ROOFING RICHARD T. CASTRO BUILDING

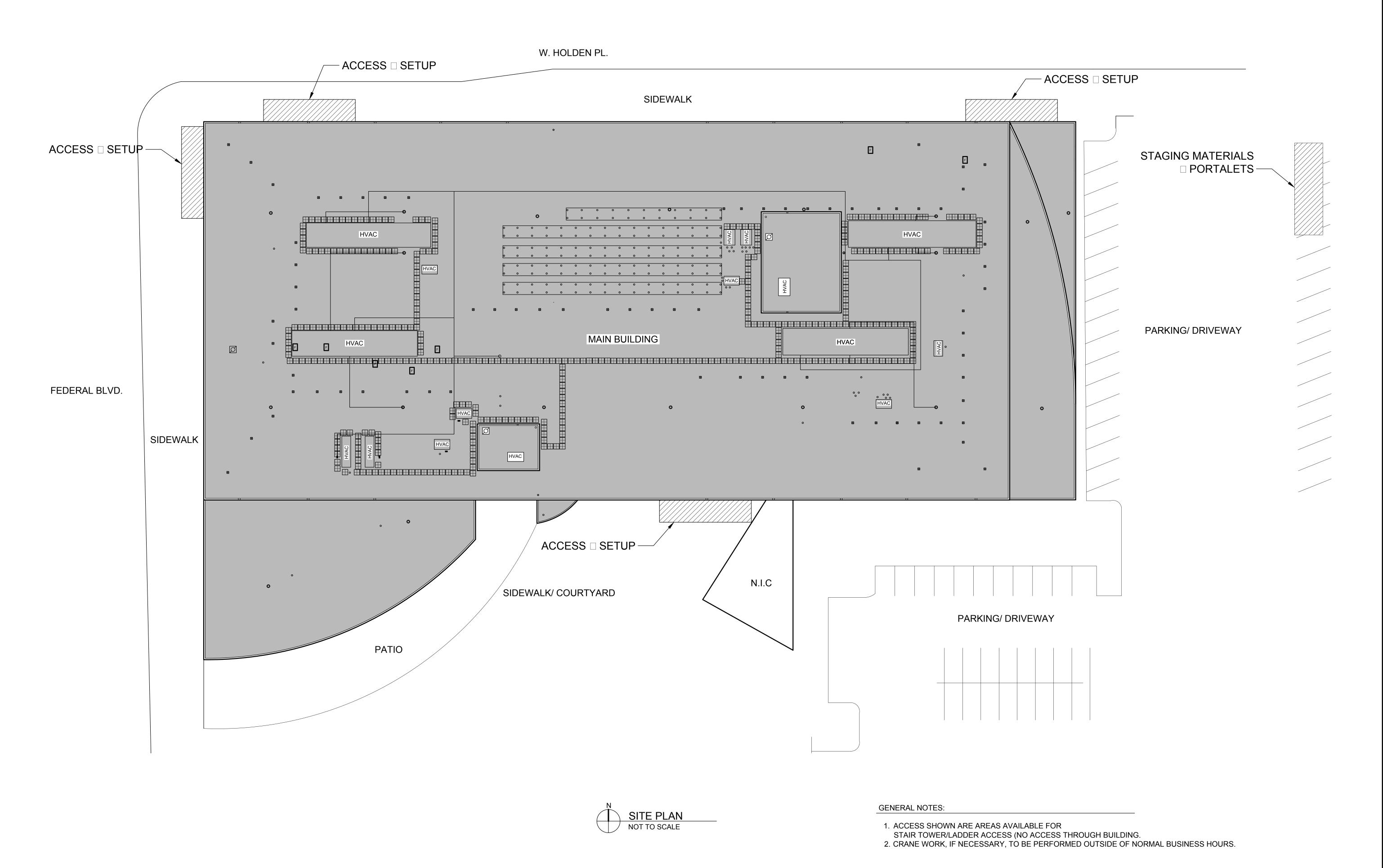
1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO G1-0.DWG

COVER SHEET

DRAWING SCALE

G1.0





ARCHITECT



nge Southerland Page, Inc. 1530 15th St. Denver, Colorado 80202 Phone: (303) 595 0431

ROOFING CONSULTANT



ofTech Consultants, Inc. 4828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205

REPLACE ROOFING RICHARD T. CASTRO BUILDING

4/11/2016

1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO G1-1.DWG

ROOF ACCESS PLAN

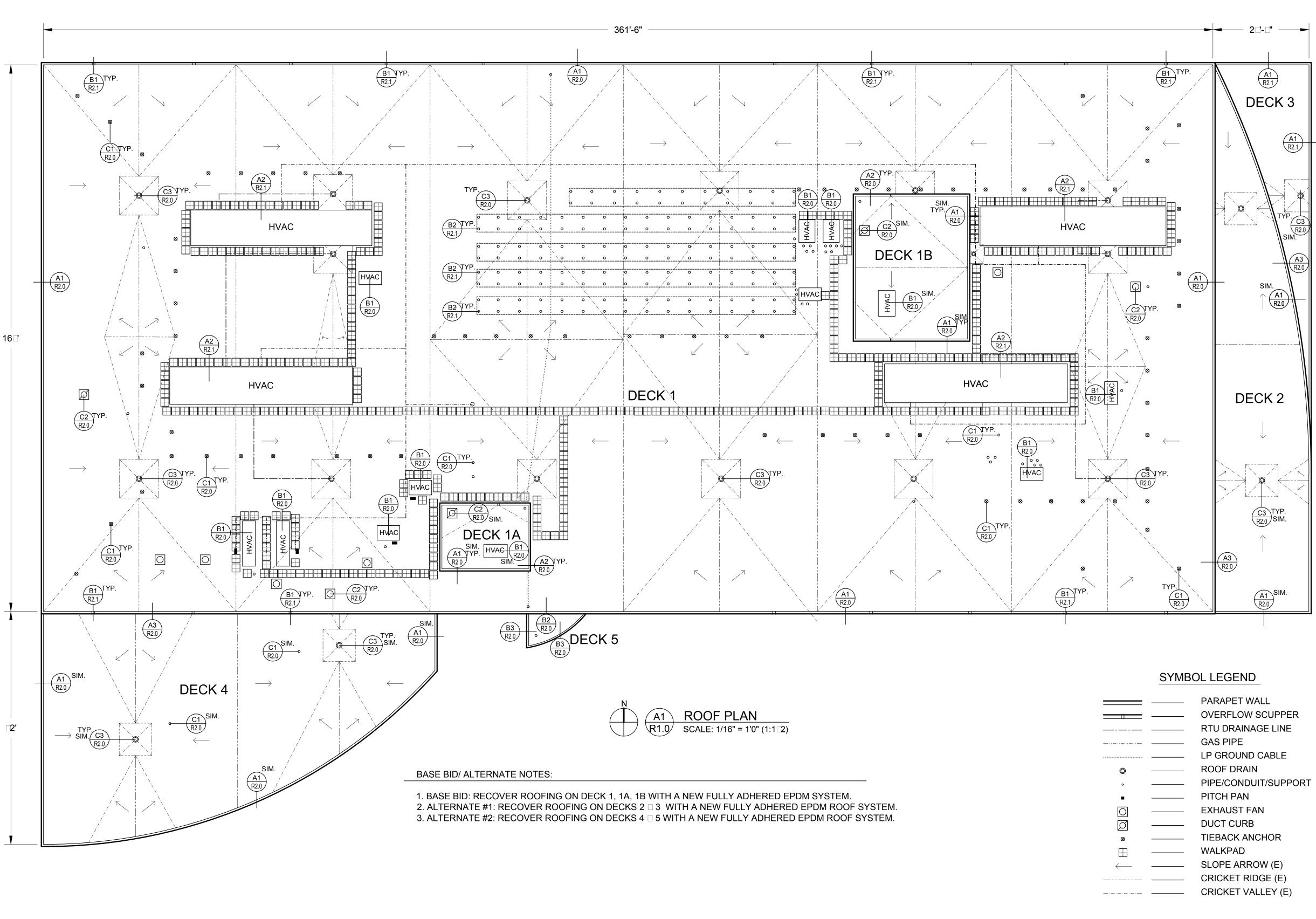
DRAWING SCALE:

NTS

CHECKED BY:

G1.1

2 OF 5





CONCRETE DECK 4.5" ISO.FOAM INSUL. BD. FULLY ADHERED EPDM ROOF MEMBRANE

EXISTING ROOF SYSTEM - DECK 1

EXISTING ROOF SYSTEM - DECK 1 PENTHOUSES & DECK 5

METAL DECK FULL TAPERED ISO.FOAM INSUL. BD. FULLY ADHERED EPDM ROOF MEMBRANE

EXISTING ROOF SYSTEM - DECKS 2, 3 & 4

CONCRETE DECK FULL TAPERED ISO. FOAM INSUL. BD. FULLY ADHERED EPDM ROOF MEMBRANE

NEW ROOF SYSTEM - DECK 1

CONCRETE DECK (E) 4.5" ISO.FOAM INSUL. BD. (E) FULLY ADHERED EPDM ROOF MEMBRANE (E) 1" ISO. FOAM INSUL. BD. 0.5" FG FACED GYPSUM BD. 60 MIL FULLY ADHERED EPDM ROOF MEMBRANE

NEW ROOF SYSTEM - DECK 1A, IB & 5

METAL DECK (E) FULL TAPERED ISO.FOAM INSUL. BD. (E) FULLY ADHERED EPDM ROOF MEMBRANE (E) 0.5" FG FACED GYPSUM BD. 60 MIL FULLY ADHERED EPDM ROOF MEMBRANE

NEW ROOF SYSTEM - DECKS 2, 3 & 4

CONCRETE DECK (E) FULL TAPERED ISO. FOAM INSUL. BD. (E) FULLY ADHERED EPDM ROOF MEMBRANE (E) 0.5" FG FACED GYPSUM BD. 60 MIL FULLY ADHERED EPDM ROOF MEMBRANE



ARCHITECT



Page Southerland Page, Inc.

ROOFING CONSULTANT



14828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205

DID CET	RDS	
BID SET	4/11/16	
% DRAFT SUBMITTAL		RDS
		11/18/15
REVISION	BY/DATE	
SIGNER:	PROJ.	MGR:
RDS		DB

REPLACE ROOFING RICHARD T. CASTRO BUILDING

4/11/2016

1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO R1-0.DWG

ROOF PLAN

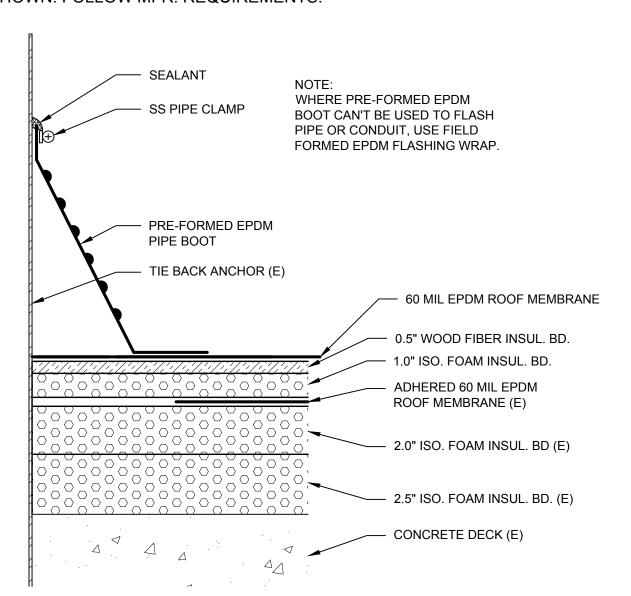
1/16" = 1'-0" DRAWING #:

LB HECKED BY:

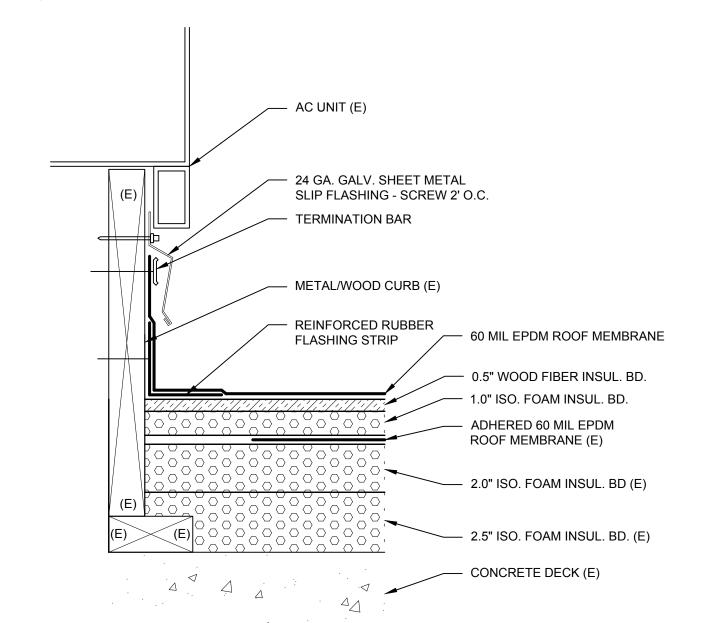
R1.0

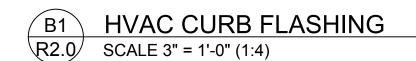
DETAIL NOTES:

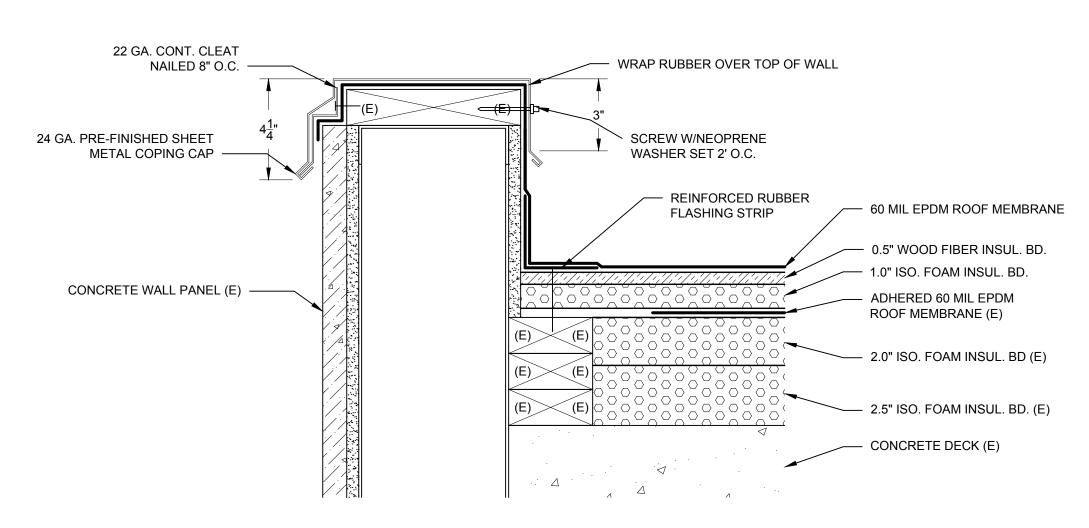
- 1. DETAILS ARE EXPLODED FOR CLARITY. MAKE ALL CONNECTIONS WATERTIGHT.
- 2. (E) DENOTES EXISTING ITEMS TO REMAIN. ALL OTHER ITEMS ARE NEW.
- 3. LAP SEALANT NOT SHOWN. FOLLOW MFR. REQUIREMENTS.



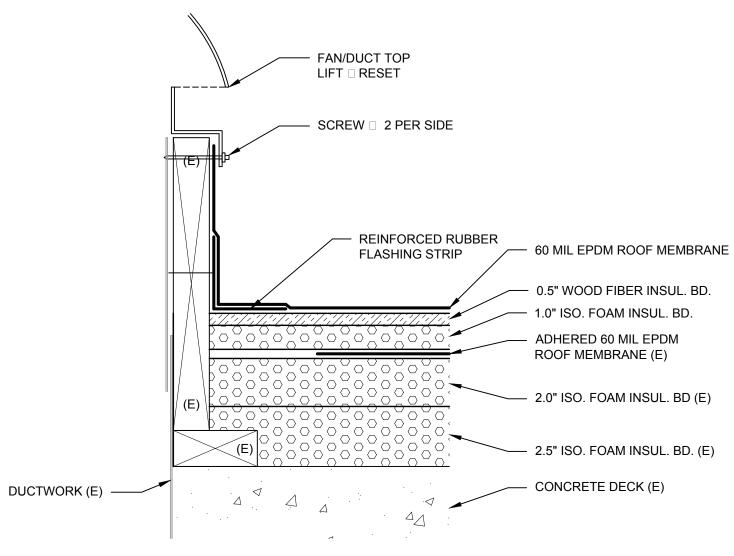
C1 PIPE/ CONDUIT FLASHING R2.0 SCALE 3" = 1'-0" (1:4)



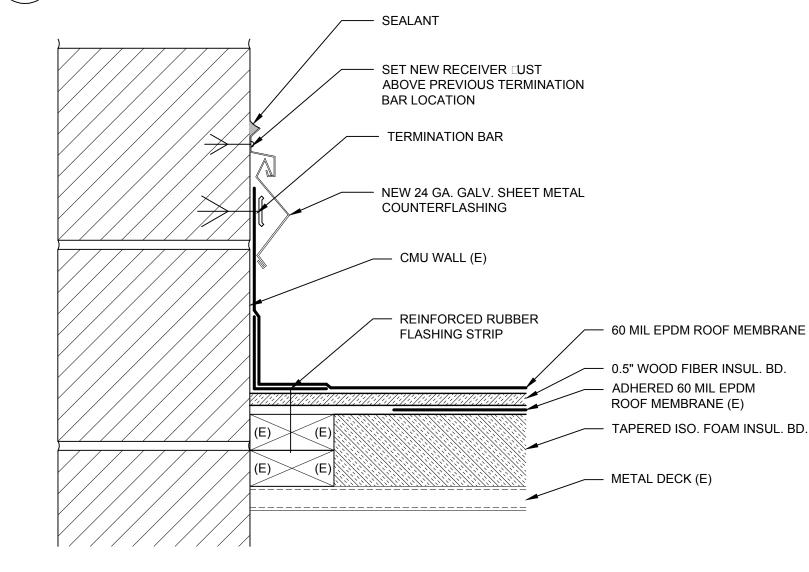




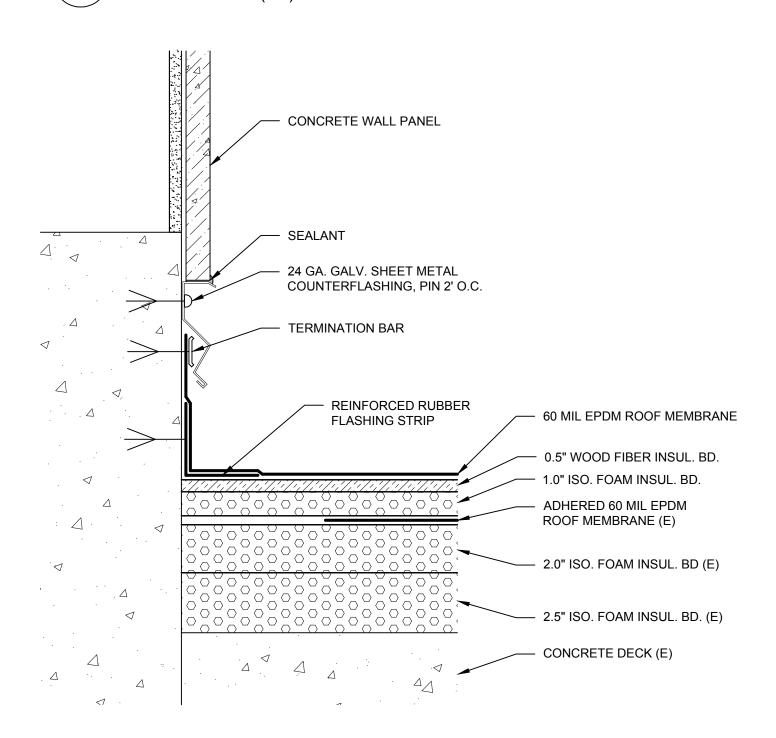
A1 PARAPET WALL FLASHING
R2.0 SCALE 3" = 1'-0" (1:4)



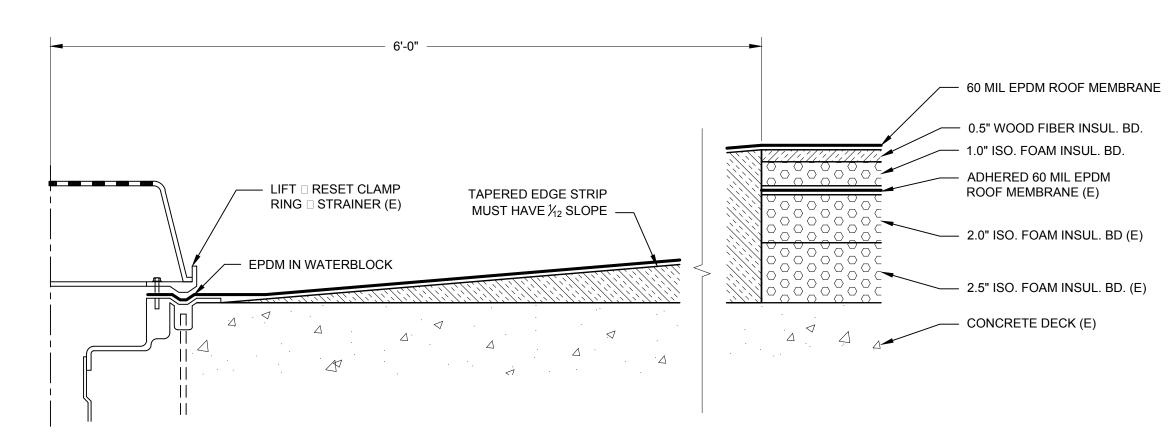
C2 FAN CURB FLASHING R2.0 SCALE 3" = 1'-0" (1:4)

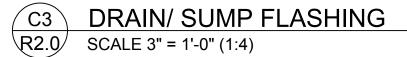


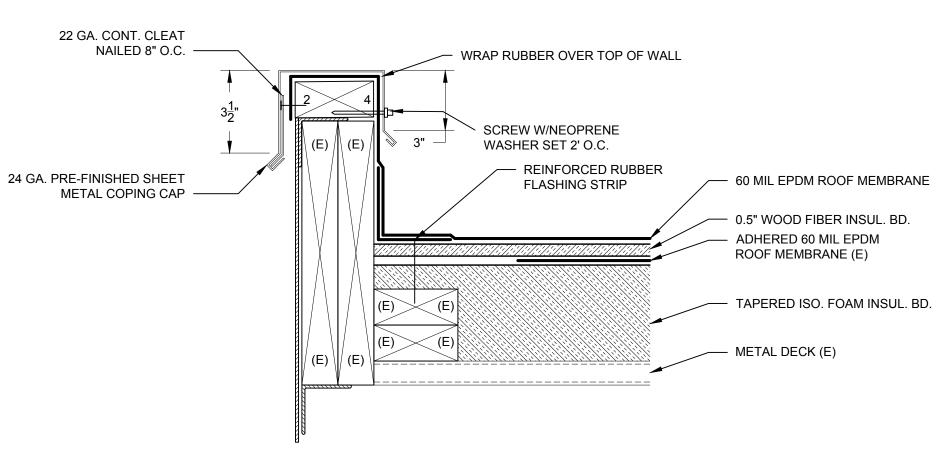
B2 WALL FLASHING R2.0 SCALE 3" = 1'-0" (1:4)



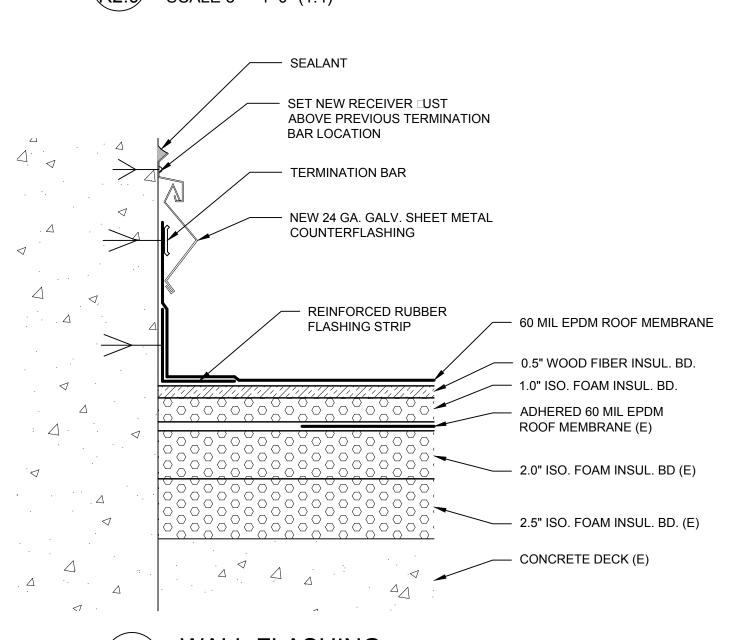
A2 WALL FLASHING R2.0 SCALE 3" = 1'-0" (1:4)







B3 PARAPET WALL FLASHING R2.0 SCALE 3" = 1'-0" (1:4)



A3 WALL FLASHING
R2.0 SCALE 3" = 1'-0" (1:4)



ARCHITECT

Page/

Page Southerland Page, Inc. 1530 15th St. Denver, Colorado 80202 Phone: (303) 595 0431

ROOFING CONSULTANT



RoofTech Consultants, Inc. 14828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205

4/11/2016

REPLACE ROOFING RICHARD T. CASTRO BUILDING

GT

1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO R2-0.DWG

ROOF DETAILS

DRAWING SCALE:

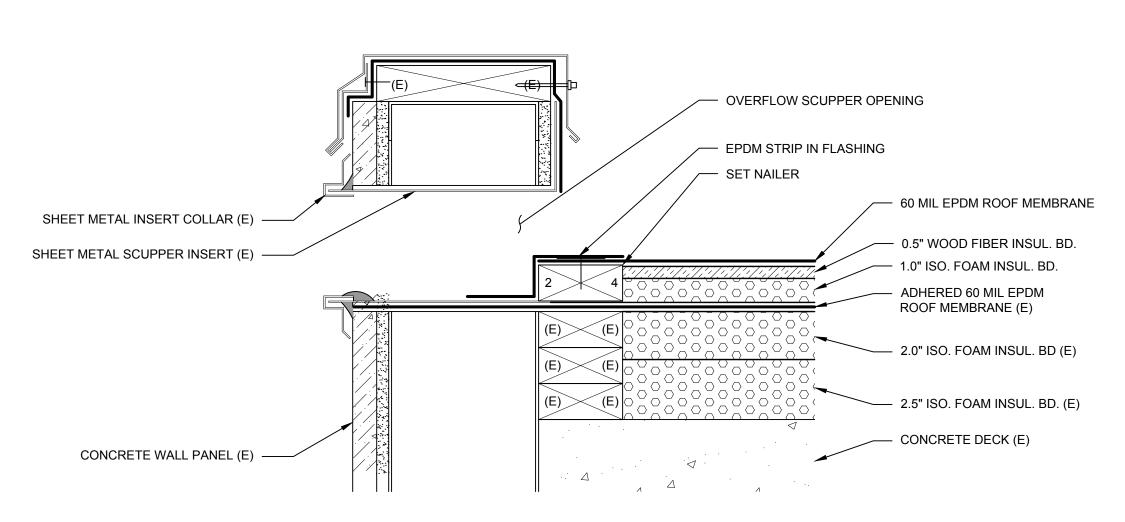
3" = 1'-0"

RAWING #:

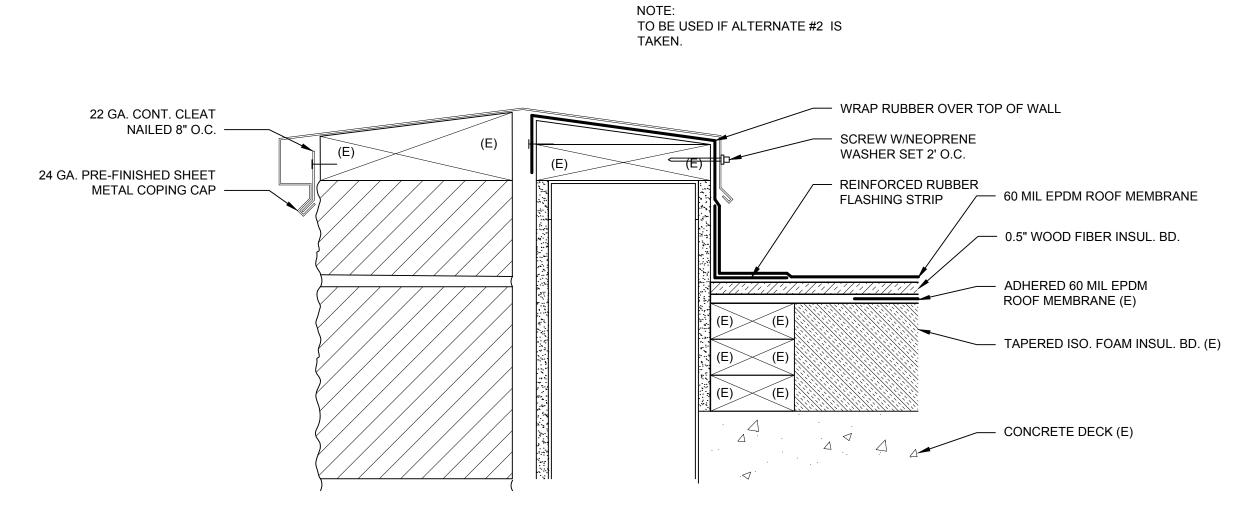
R2.0

2. (E) DENOTES EXISTING ITEMS TO REMAIN. ALL OTHER ITEMS ARE NEW.

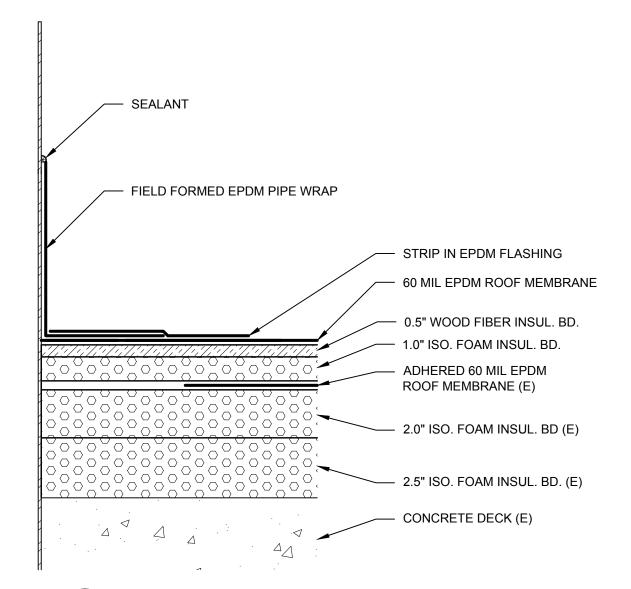
3. LAP SEALANT NOT SHOWN. FOLLOW MFR. REQUIREMENTS.



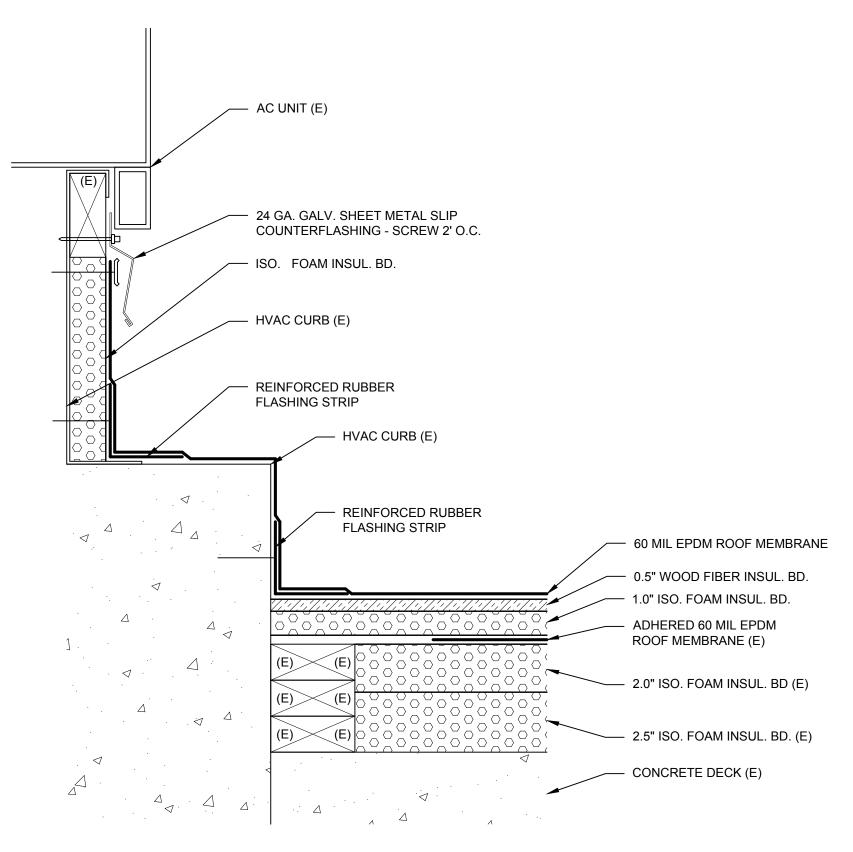
B1 OVERFLOW SCUPPER FLASHING R2.1 SCALE 3" = 1'-0" (1:4)

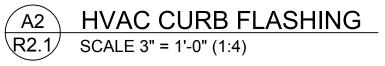


PARAPET WALL FASHING
SCALE 3" = 1'-0" (1:4)



B2 PIPE FLASHING
R2.1 SCALE 3" = 1'-0" (1:4)







ARCHITECT



Page Southerland Page, Inc. Denver, Colorado 80202 Phone: (303) 595 0431

ROOFING CONSULTANT



RoofTech Consultants, Inc. 14828 W. 6TH Avenue, Unit B-8 Golden, Colorado 80401 Phone: (303) 233-1092 Fax: (303) 233-2205

BID SET 4/11/16 RDS 95% DRAFT SUBMITTAL 1 REVISION BY/DATE DB

LB

CHECKED BY:

GT

REPLACE ROOFING RICHARD T. CASTRO BUILDING

4/11/2016

1200 FEDERAL BLVD. DENVER, CO 80204

CASTRO R2-1.DWG

ROOF DETAILS

3" = 1'-0"

R2.1