

CHMP, INC.  
5198 TERRITORIAL ROAD  
GRAND BLANC, MICHIGAN 48439  
(810) 695-5910

PROJECT: Genesee County Animal Shelter  
Site & Building Improvements

ADDENDUM NO: Two

PROJECT NO.: 17001700

LOCATION: 4351 Pasadena Avenue  
Flint, MI 48505

DATE: June 4, 2018

I. INSTRUCTIONS

- A. The proposed Contract Documents dated May 22, 2018 for the project noted above are modified as noted in this Addendum No. Two.
- B. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Proposal Form.
- C. All work performed under this Addendum shall be subject to the General Conditions of the Contract and Specifications for similar work in connection with this project. Include all incidental work required to properly complete the work.
- D. This addendum to the Construction Documents is issued prior to receipt of bids. All work covered in this Addendum shall be included in the original quotation and the Addendum will be considered one of the Contract Documents.

II. MODIFICATIONS TO THE CONTRACT DOCUMENTS

A. General Information

- 1. Refer to attached Mandatory Pre-Bid Meeting Minutes dated May 30, 2018 and sign-in sheet.

B. Refer to the Project Manual

- 1. Section 003100, Pages 1 thru 6 (Re-issued)

Item A: Document 003100 – Bid/Tender Form

- a. Modified Page 2 to include Alternate No. 7.

- 2. Section 012113 – Cash Allowances, Page 1, Part 1.1D (Not Re-issued)

Item A: Genesee County has paid for the Building Permit Fee of \$26,681.65. The General Contractor is not required to include this amount in their bid.

3. Section 012300 – Pages 1 and 2 (Re-issued)  
Item A: Alternates
  - a. Part 3 – Execution, 3.1 SCHEDULE OF ALTERNATES, add Item G. Deduct Alternate No. 7.
4. Section 084113 – Aluminum Windows and Curtain Wall, Page 1 (Not Re-issued)  
Item A: 1.1.B. “Refer to Section 084213 – Aluminum Doors for exterior and interior doors” has been added to the specification.  
Item B: 1.2.B. has been changed as follows: “Aluminum entrances, curtain wall types required for the project include:
  1. Entrance, curtain wall, and window framing.”
5. Section 084213 – Aluminum Doors has been added to the specifications in its entirety. See attached document.
6. Section 221319, Page 3, Paragraph 2.3 (Not Re-issued)  
Item A: Trench Drains
  - a. Dura Trench is an acceptable supplier for the trench drains.
  - b. The correct model number for trench drains TD-1 thru 17 is Z886-HPP-2E1-U4 with 4” bottom outlet (no catch basin).
  - c. The correct model number for trench drain TD-18 is Z886-CGC-2E1-U6 with 6” bottom outlet.
7. Section 221323, Page 2, Paragraph 2.1 (Not Re-issued)  
Item A: Oil Interceptors
  - a. MI-Fab is approved supplier for the oil interceptor.
8. Section 233600, page 1, paragraph 2.1 (Not Re-issued)  
Item A: Shutoff, single-duct air terminal units (not re-issued)
  - a. Johnson Controls is an approved supplier for the air terminal units.

C. Refer to the Contract Drawings

CIVIL

1. Sheet C5 (Not Re-issued)  
Item A: Revised sidewalk grades at southeast corner of building patio and breakroom to match existing first floor.

2. Sheet C6 (Not Re-issued)

Item A: Size of water service to freeze-proof hydrant at south side of building shall be 1" diameter.

DEMOLITION

1. Sheet D-1.1 (Not Re-issued)

Item A: Deleted Demolition Reference Note D30 from soffits which are required to be totally demolished.

STRUCTURAL

1. Sheet S-1.1 (Re-issued)

Item A: Added Note 4A to Reference Notes.

Item B: Modified Foundation Plan Legend to include Note 4A.

Item C: Added dimension and slab elevation in Police Drop-Off 155.

Item D: Added underslab insulation symbol and Reference Note 7 to stoops at Police Drop-off 155, Sallyport 157, and Breakroom 159.

2. Sheet S-2.1 (Re-issued)

Item A: Changed size of BM-34 on Beam Schedule.

Item B: Added Note 5 under General Notes.

Item C: Modified Note 3 under Roof Framing Plan Notes.

Item D: Modified Roof Framing and added symbol for building section L-L above Toilet 182, Janitor 183 and Meet & Greet 184.

ARCHITECTURAL

1. Sheet A-1.1 (Re-issued)

Item A: Revised layout of Janitor 183.

Item B: Pipe chase revised to show two (2) roof sumps at Meet & Greet 184 and added symbol for building section L-L.

2. Sheet A-2.1 (Re-issued)

Item A: Added section cut symbol at roof hatch above Stray Dog 3, Room 126.

- Item B: Modified roof and added symbol for building section L-L above Toilet 182, Janitor 183, and Meet & Greet 184.
  - Item C: Added new Reference Note 18.
3. Sheet A-3.1 (Re-issued)
- Item A: Changed light fixtures at Cat Porch.
  - Item B: Added section cut symbol at bulkhead in Cat Adopt 142.
  - Item C: Added section cut symbol at roof hatch in Stray Dog 3, Room 126.
  - Item D: Added soffit and building section symbol L-L at Meet & Greet 184.
  - Item E: Changed exterior soffit outside of Corridor 185.
  - Item F: Revised ceiling in Janitor 183.
4. Sheet A-4.1 (Re-issued)
- Item A: Revised layout of Janitor 183 on Enlarged Partial Floor Plan 10.
  - Item B: Added Note 4 to Detail 6.
5. Sheet A-4.3 (Not Re-issued)
- Item A: Reference Note 5 modified to read "Stainless steel base cabinetry with stainless steel countertop. Refer to Specification Section 123570 Health Care Casework."
  - Item B: Added Note 26 to Detail 3.
6. Sheet A-4.4 (Re-issued)
- Item A: Modified and added Reference Notes 9-22.
  - Item B: Modified Ladder and Roof Hatch Details 8 and 9, and added Roof Hatch/Ladder Detail 10.
7. Sheet A-5.2 (Re-issued)
- Item A: Modified several notes on Door and Frame Schedule.
  - Item B: Revised dimensions on Frame Type III.
  - Item C: Added Type GL-6 to Schedule of Glass Types.
8. Sheet 5.4 (Re-issued)
- Item A: Modified EW1, EW9 and revised section cut symbols on several windows.

9. Sheet A-6.1 (Re-issued)
  - Item A: Modified partial north elevation to show new standing seam metal roofing and building section cut symbol above and through EW 13.
  - Item B: Modified partial north elevation to show new standing seam metal roofing to match existing above EW16.
  - Item C: Added Reference Notes 22-24.
  - Item D: Added section cut symbol on partial north elevation at building entrance.
  
9. Sheet A-6.2 (Re-issued)
  - Item A: Added Reference Notes 19-23.
  - Item B: Added reference notes and section cut symbol to Canopy Elevations.
  
10. Sheet A-7.1 (Re-issued)
  - Item A: Added title "Section M-M" to cross section through canopy pylon.
  - Item B: Added section cut symbol M-M to building section A-A.
  - Item C: Added ceiling and bulkhead dimensions to Section A-A.
  - Item D: Added Reference Note 18.
  - Item E: Added Reference Notes to building Section G-G.
  
11. Sheet A-7.2 (Re-issued)
  - Item A: Modified roof on building section C-C above Corridor 185.
  - Item B: Added building section L-L.
  - Item C: Revised ceiling height in detail.
  - Item D: Modified Reference Note 20.
  - Item E: Added Reference Note 24.
  
12. Sheet A-7.3 (Re-issued)
  - Item A: Added Reference Note 21.

13. Sheet A-7.4 (Re-issued)
  - Item A: Added Reference Notes and modified detail target symbols on Building Section E-E.
  - Item B: Modified and added Reference Notes on Building Section I-I.
14. Sheet A-8.1 (Re-issued)
  - Item A: Added Reference Notes 75-85.
15. Sheet A-8.2 (Re-issued)
  - Item A: Added Detail 5.
16. Sheet A-8.2a (Re-issued)
  - Item A: Added foamed-in-place R-30 insulation to Details 3 and 5.
  - Item B: Added Reference Note 86.
17. Sheet A-8.3b (Re-issued)
  - Item A: Revised Wall Section 2 and 3.
  - Item B; Added Reference Note 86.
18. Sheet A-9.1 (Re-issued)
  - Item A: Revised dimensions on Details 9 and 13.
  - Item B: Added Reference Note to Detail 8 and modified intermediate mullions to indicate butt glazing.
  - Item C: Modified Detail 14.
  - Item D: Changed Reference Note 10.
  - Item E: Added Reference Notes 23 and 24.

## MECHANICAL

1. Sheet M-8 (Not Re-issued)
  - Item A: Dura Trench is an acceptable supplier for the trench drains.
  - Item B: The correct model number for the trench drains TD-1 thru 17 is Z886-HPP-2E1-U4 with 4" bottom outlet (no catch basin).
  - Item C: The correct model number for trench drain TD-18 is Z886-GCG-2E1-U6 with 6" bottom outlet.

ELECTRICAL

1. Sheet E-11 (Re-issued)
  - Item A. Deleted type LK wall pack fixtures at exterior doors.
  - Item B: Added type LM exam light fixtures in Treatment Room No. 136.
  - Item C: Revised fixture type for Cat Porch on north side of building.
2. Sheet E-13 (Re-issued)
  - Item A. Added fixture type LM, exam lights for Treatment Room 136.
  - Item B: Revised fixture types LCB, LFB, LGB, and LJB to eliminate battery back-up and require UL-listed power transfer relay and emergency circuit.
  - Item C: Revised description of fixture type LI.

END OF ADDENDUM

**CHMP, INC.**  
5198 TERRITORIAL ROAD  
GRAND BLANC, MI 48439



TELEPHONE (810) 695-5910  
FACSIMILE (810) 695-0680

May 30, 2018

Genesee County Animal Shelter  
4351 Pasadena Avenue  
Flint, Michigan 48504

Site & Building Improvements  
CHMP Job No: 17001700

#### MANDATORY PRE BID MEETING MINUTES

Attendees: Refer to attached sign in sheet

Copies: Posted on Genesee County Purchasing Website

#### ITEMS DISCUSSED

1. Cindy Carnes, Purchasing Director opened the meeting.
2. Cindy stated the meeting was mandatory and participants needed to sign in.
3. Cindy noted all substitutions and questions are to go to the purchasing department attention Cindy Carnes via email: [ccarnes@co.genesee.mi.us](mailto:ccarnes@co.genesee.mi.us)
4. Cindy reviewed the County forms required to be submitted with the bid.
5. Gregory Mason, Architect with CHMP Inc. noted the original construction drawings were uploaded to the website for reference.
6. Greg noted the site parking and drive work will be conducted in 4 phases and building in 2 phases in order to allow the Agency to continue to function through all phases of construction.
7. Greg noted this was a lump sum bid for General Construction. Unit prices only become applicable of the scope of work changes.
8. Greg noted that there is a soils report along with recommendations for soil preparation and dewatering. Contractor will be held responsible for these recommendations.
9. Greg noted AIA Agreements are proposed with amendments.
10. Greg referenced the Insurance requirements in to document.
11. Greg reviewed the Summary of Work including the August 29<sup>th</sup> 2019 mandatory completion date along with the \$700 per day liquidated damages clause.
12. Greg noted there will be cutting and patching of the existing terrazzo flooring due to plumbing changes and referenced Section 096653 of the specifications.
13. Greg requested bidders include all of the items listed under section 012113-Cash Allowances in the bid with exception to the \$26,681.65 building permit allowance which the Count Paid.
14. Greg noted all of the plans have been reviewed and approved by the local municipal plan review agencies.
15. Greg noted the Contractor will need to coordinate material and soil testing requirements stipulated under section 001400 with the Owners Testing Consultant.
16. Eric Ostling, Civil Engineer with Huron Consultants reviewed all of the site drawings.

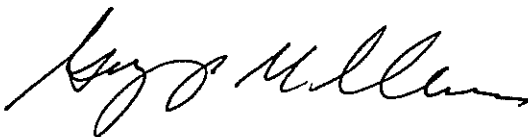


17. Greg began a review of the structural and architectural drawings.
18. Greg noted all of the existing roof panels will be cleaned, flashings repaired and re-caulked.
19. Greg noted all of the existing masonry will be repaired, repointed (where necessary), and cleaned.
20. Greg reviewed the specialized equipment, cages, and kennel, drawing and noted the specifications were in section 112000.
21. A question was issued on the purpose for the new metal liner panels in the Sally port and Mezzanine. Greg responded for aesthetics and to assist in support of the insulation.
22. Bob Sopko Mechanical Designer with DSD Engineers provided a review of the mechanical and electrical drawings.
23. Bob noted the majority of the existing systems will remain operational during phase I construction.
24. There was a question for clarifying the wording on the Bid Tender for Alternate No. 6. Greg clarified that the existing boilers will be reused under this alternate and is a deduct cost from the base bid.
25. A questions was raised regarding the existing fire alarm system and camera system, Bob thought these were to be removed but would research the drawings for a final determination.
26. A follow up tour of the facility was conducted after review of the drawings.

These meeting minutes constitute our understanding of the items discussed. All attendees are requested to review these minutes and notify our office if there are any discrepancies.

Respectfully Submitted,

CHMP, INC.



Gregory N. Mason, AIA

Wednesday, May 30, 2018 @ 10:00 a.m.

Sign-In Sheet  
Pre-Bid Meeting

Genesee County Animal Shelter  
Project No.: 17001700

CHMP, INC.  
5198 Territorial Road  
Grand Blanc, Michigan 48439  
(810) 695-5910

Name	Company	Telephone	Fax	E-Mail
Gregory Mason	CHMP INC	810 695 5910	810 695 0000	gmason@chmpinc.com
Kellogg Dippel	IBEW	810-280-7030		kdippel@local898.org
DesRae Soubran	ICC Construction	810 6584322	810 6584320	Eric@ICCConstruction.com
TERRY Flynn	FAULKNER ELECTRIC	989 615-2139	889 496 2628	t.flynn@faulknermi.com
KAREN KELLY	CCC	313-418-0905		Karen.Kelly@cccNetwork.com
JOE VELLA	COASANT	906-598-9700	906-598-9001	JVELLA@COASANTGROUP.COM
Rachel Mead	BLUE STAR DEMO			rmead@bluestardemo.com
Chuck Brai	Quality Winter Air	248 840 2198		chuck.qualitywinterair@44.com
Daniel Achsen	B2B Glass	248.852.8323		dachsen@bbconstruct.com
Miko Longo	Cipriano Coatings	506-243-1195		mlongo@cipriano-coatings.com
Jeff Chappelle	Midwestern Electric	8102325734		info@midwesternelec.com
Tim McLaughlin	Tri County Roofing	810 732 7700		Tim.tri-county-roofing@tymphoe.com
Michael Lynch	Bas Local 2	810 523 3851		Michael@lynch & Bricklayer.org
Tony Slattton	Johnson & Wood	810-569-4783	810-228-3619	Tony@Johnsonwoodllc.com
Thomas A Corey	Faulkner Cons. Co.	989-404-0754		t.corey@faulknermi.com
TOED FINSEBY	EIT CONST. GROUP	810 744 .4300	TODD FINSEBY	EIT CONST. GROUP, COM
Coltan Baker	Cross Renovation	734-589-8260		coltan@stark-enterprisesllc.com
CHRIS HONER	<del>CHRIS HONER</del>	810 691-1161	810-732-2063	chrishoner@comcast.net
John Niles	MMA Painting	810 893-4796		johnniles@midmichiganpaint.com

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Sign-In Sheet  
 Pre-Bid Meeting

Wednesday, May 30, 2018 @ 10:00 a.m.

Genesee County Animal Shelter  
 Project No.: 17001700

Name	Company	Telephone	Fax	E-Mail
JAMES KUGLER	CONSTRUCTION SOLUTIONS	734-741-0500	734-741-0602	JIM@CONSTRUCTIONSOLUTIONS.MI
Paul Rice	Ecker Mechanical	810-742-8652		bids@eckermechanical.com
Jose Perez	FELER Const.	810-233-8555	810-233-8558	J.P@FELER-CONSTRUCTION.COM
Rob Stewart	Vanguard Fire	248-207-0412		
Brian Glatz	Acme Enterprises	586-771-4800		Rstewart@Vanguard-fire.com
<del>Paul Stry</del>	<del>SPENSEL GROSS Co.</del>	<del>810-717-4821</del>		<del>lglatz@acme-</del>
Pearl Sly	SPENSEL GROSS Co.	810-717-4821	810-238-6222	PSLY@SGCS.NET
MIKE GARLAND	SCI TYCO	248-724-6155	248-745-3747	MICHAEL.GARLAND@SCITCO.COM
Mike Schumacher	Brix Corporation	313-965-0000	313-965-0253	mschumacher@brixcorporation.com
Danny Chise	Brix Corporation	313-965-0000	313-765-0253	dchise@brixcorporation.com
Mike Turvi	Brenca Contractor	586-758-6000	586-758-6006	mturvi@brenca.net
Wayne Corfell	IRONWORKERS 25	810-922-9055		WAYNE.CORFELL@IRONWORKERS25.ORG
Bob Long	DCIM - Glass B2G	810-569-6818		BLONG@DCIMPATDC.COM
Ken Penker	LA SACS	734-394-0658		KPENKER@LASACSLINE.COM
Kevin Sibbla	Blue Seader	734-394-0923		estimating@blueseader.com
Nick Keeler	Dee Cranner	810-579-5000		nickk@deecranner.com

Sign-In Sheet  
Pre-Bid Meeting

CHMP, INC.  
5198 Territorial Road  
Grand Blanc, Michigan 48439  
(810) 695-5910

Genesee County Animal Shelter  
Project No.: 17001700

Name	Company	Telephone	Fax	E-Mail
Dave Willert	Linnar Local 1075	810 357 3904		
Jeffrey Langstaff	Trane	989-513 3525		johoe.langstaff@trane.com
Todd Stringer	Trane	989-936-5432		Todd.Stringer@Trane.com
Ron Inman	Roofers local 149	810 687 1368		
Rick Baird	Roofers local 149	810 687 1368		RickBaird81@gmail.com
Rick Dipiero	Superior Contracting Group LLC	810-347-1537	810-471-4809	rick.dipiero@yahoo.com
MIKE BERKEY	MURPHY ELECTRICAL SERVICES	810-919-5552		mberkey.mes@gmail.com
Tom Stevers	Tri-County Roofing	810-722-7740		TriCountyRoofing@cs.ccsst.com
Larry Kurzie	Smuith	810-834-3552		LarryKurzie@gmail.com
Steven Schneider	Faulkner Const.	909-615-2110		S.Schneider@Faulkner.com
Burt Fowler	SD MECHANICAL	810-338-9333		STANB@SD-MECHANICAL.COM
MARK EONER	WOLVERINE F.P.	810 577-7585		megner@WOLVERINE FP.CO
Jacob Floty	DLA Smith 652	989-941-9180		JFloty@input.dclm.org
DALLOYN PARKS	ENGINEERED SOLUTIONS INC	248-478-4900	248-478-4901	DRANKSE@KORSE.COM



DOCUMENT 003100 - BID/TENDER FORM

FOR: Genesee County Animal Shelter  
Site and Building Improvements  
4351 Pasadena Avenue  
Flint, Michigan 48505

DATE: \_\_\_\_\_

NAME OF BIDDER: \_\_\_\_\_

ADDRESS \_\_\_\_\_

TELEPHONE: ( ) \_\_\_\_\_

TO: Genesee County Animal Shelter (hereinafter called "Owner")

Gentlemen:

The Bidder, in compliance with your invitation for bids for work on Genesee County Animal Shelter, Site and Building Improvements (CHMP Project No. 17001700) after having attended the **mandatory pre-bid** meeting on May 30, 2018, examined the Contract Documents prepared by CHMP, Inc., dated "Issued for Bidding May 22, 2018", respectively, and other related documents and being familiar with site of proposed work, and with all conditions surrounding construction of proposed project including availability of materials and labor, hereby propose to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, perform all work, provide all services, and to construct all work in accordance with Contract Documents, within time set forth herein, at prices stated below. These prices are to cover all expenses incurred in performing work required under Contract Documents, of which this Bid/Tender is a part.

Successful bidder agrees to provide performance, payment, and maintenance bonds written by surety acceptable to Owner. Made in favor of Owner as obligee.

BASE BID – GENESEE COUNTY ANIMAL SHELTER:

Bidder agrees to perform all work as described in the Contract Documents, for Lump Sum of

\_\_\_\_\_  
(\$ \_\_\_\_\_).

ALTERNATES:

The following Alternates shall be expressed in words and figures as an ADDITION or DEDUCTION to Base Bid as indicated. Refer to Section 012300.

Alternate No. 1, Add K1 Outdoor Dog Runs. ADD the sum of \_\_\_\_\_  
(\$ \_\_\_\_\_)

Alternate No. 2, Add K2 Dog Run Turf Detail (Initial). ADD the sum of \_\_\_\_\_  
(\$ \_\_\_\_\_)

Alternate No. 3, Add K2 Dog Run Turf Detail (Additional). ADD the sum of \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_ )

Alternate No. 4, Add K1 Dog Run Turf Detail (Additional). ADD the sum of \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_ )

Alternate No. 5, Add Sally Port Oil Interceptor. ADD the sum of \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_ )

Alternate No. 6, Reuse Boiler System B-1 & B-2. DEDUCT the sum of \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_ )

Alternate No. 7, Furnish and Install Minimum Code Compliant Fire Alarm System only. DEDUCT the sum of \_\_\_\_\_  
\_\_\_\_\_ (\$ \_\_\_\_\_ )

Bidder, if awarded a Contract, hereby agrees to commence and complete work under this contract in compliance with the project schedule provided within Section 011113 - "Summary of Work". Bidder also acknowledges that non-compliance with the project schedule is subject to liquidated damages.

UNIT PRICES:

If the following items of work are added or deducted from quantities required by the construction documents, unit prices will apply as stated. (Refer to section 012200 for detailed definitions of unit prices).

(Show amounts in both words and figures. In case of discrepancy, amount shown in words will govern)

	<u>ADD</u>	<u>DEDUCT</u>
Price No. 1:     Rock and Concrete Excavation and Removal	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 2:     Engineered Fill, C.I.P.	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 3:     Contaminated Earth Excavation and Removal (Class II Landfill)	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 4:     Unsuitable Soil Excavation & Removal	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 5:     Site Clearing	\$ _____ /EA.	\$ _____ /EA.
Price No. 6:     Remove Sewer	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 7:     Reconstruct Drainage Structure	\$ _____ /EA.	\$ _____ /EA.
Price No. 8:     Remove Concrete Curb & Gutter	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 9:     Remove Fence	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 10:    Remove Sign	\$ _____ /EA.	\$ _____ /EA.

Site & Building Improvements  
Genesee County Animal Shelter

Project No. 17001700

Price No. 11:	Remove Pavement	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 12:	Strip and Stockpile Topsoil	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 13:	Earthwork, Embankment	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 14:	Earthwork, Excavation	\$ _____ /C.Y.	\$ _____ /C.Y.
Price No. 15:	Erosion Control, Inlet Protection	\$ _____ /EA.	\$ _____ /EA.
Price No. 16:	Erosion Control, Silt Fence	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 17:	Geotextile Separator	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 18:	Aggregate Base, 4 inch	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 19:	Aggregate Base, 8 inch	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 20:	Edge Trimming	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 21:	Hot Mix Asphalt (HMA), 2C (2.5")	\$ _____ /TON.	\$ _____ /TON
Price No. 22:	Hot Mix Asphalt (HMA), 13A (3.5")	\$ _____ /TON	\$ _____ /TON
Price No. 23:	Hot Mix Asphalt (HMA), 36A (1.5")	\$ _____ /TON	\$ _____ /TON
Price No. 24:	Curb & Gutter, Concrete, Detail C-4	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 25:	Cold Milling Hot Mix Asphalt (HMA) Surface	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 26:	Curb & Gutter, Concrete, Detail C-4 (Modified)	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 27:	Detectable Warning Surface	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 28:	Sidewalk Ramp, Concrete, 4 inch	\$ _____ /S.F.	\$ _____ /S.F.
Price No. 29:	Sidewalk, Concrete, 4 inch	\$ _____ /S.F.	\$ _____ /S.F.
Price No. 30:	Sidewalk, Concrete, Integral Curb	\$ _____ /S.F.	\$ _____ /S.F.
Price No. 31:	Post, Steel, 3 Lb.	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 32:	Signs	\$ _____ /EA.	\$ _____ /EA.
Price No. 33:	Clean Drainage or Sewer Structure	\$ _____ /EA.	\$ _____ /EA.
Price No. 34:	Mulch	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 35:	Mulch, Blanket	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 36:	Topsoil, Surface, Salvaged (4 inch Min.)	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 37:	Seeding	\$ _____ /LB.	\$ _____ /LB.



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Price No. 38:	Sewer, HDPE (SLCCP), 8 inch, Perforated with Sock	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 39:	Sewer, PVC, 8 inch, Solid Wall	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 40:	Sewer, HDPE, SLCPP 12 inch, Solid Wall	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 41:	Sewer, HDPE, SLCPP, 12 inch, Perforated with Sock	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 42:	Drainage or Sewer Structure, Tap	\$ _____ /EA.	\$ _____ /EA.
Price No. 43:	Drainage Structure, Cover	\$ _____ /EA.	\$ _____ /EA.
Price No. 44:	Drainage Structure, 12 inch Dia. (NYLOPLAST)	\$ _____ /EA.	\$ _____ /EA.
Price No. 45:	Yard Hydrant	\$ _____ /EA.	\$ _____ /EA.
Price No. 46:	Fire Department Connection	\$ _____ /EA.	\$ _____ /EA.
Price No. 47:	Gate Valve and Box, 6 inch	\$ _____ /EA.	\$ _____ /EA.
Price No. 48:	Connect to Existing Water Main	\$ _____ /EA.	\$ _____ /EA.
Price No. 49:	Water Main, Ductile Iron, 6 inch	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 50:	Water Service, 2" Copper Type K	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 51:	Steel Handrail, ADA Ramp	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 52:	Great Fence Commercial Aluminum Fence	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 53:	Great Fence 4' Wide Gates	\$ _____ /EA.	\$ _____ /EA.
Price No. 54:	Coyote Rollers	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 55:	K9 Grass System, Detail "K01"	\$ _____ /S.Y.	\$ _____ /S.Y.
Price No. 56:	K9 Grass System, Detail "K02"	\$ _____ /EA.	\$ _____ /EA.
Price No. 57:	Steel Chain Link Fences and Gates	\$ _____ /L.F.	\$ _____ /L.F.
Price No. 58:	Cleanout and Riser	\$ _____ /EA.	\$ _____ /EA.

FEES FOR CHANGE IN WORK

The undersigned agrees that if awarded the contract for this work, it will, upon request by the Owner, perform additional work or omit specified work, or cause same to be performed or omitted by subcontractors, for the following percentage fees which have been computed in accordance with the requirements of Section 01:

	<u>Additions</u>	<u>Omissions</u>
Work By Contractor's Own Forces	_____ %	_____ %
Work By Subcontractor's Forces	_____ %	_____ %

It is agreed that in this context a subcontractor shall be as specified in Article 5 of the General Conditions.

PROPOSED SUBSTITUTIONS

The undersigned submits for consideration by the Owner and/or the Architect-Engineer the Proposed Substitutions as listed hereinafter, each item being offered as a substitute for the referenced specified item which was used in compiling the Lump Sum Price of this Proposal and each price having been computed in accordance with the requirements of Section 012500.

<u>Proposal Item</u>	<u>Proposed Substitution</u>	<u>Add</u>	<u>Deduct</u>
1. _____	_____	\$ _____	\$ _____
2. _____	_____	\$ _____	\$ _____
3. _____	_____	\$ _____	\$ _____

The bidder agrees that the Owner may accept or reject any or all of the above Proposed Substitutions, and that the work applicable to any items which are accepted will be performed in accordance with the requirements of the drawings and specifications.

Bidder understands that the Owner reserves right to reject any or all Bid/Tenders and to waive any informalities or irregularities herein.

Upon notice of acceptance of this Bid/Tender, bidder will execute Contract Agreement and deliver properly executed Performance and Payment Bonds to Owner within 15 days.

Bidder acknowledges receipt of following addenda:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If awarded a contract, bidder's surety will be (name of Surety Company).

\_\_\_\_\_

\_\_\_\_\_

CERTIFICATION OF SITE VISIT

The undersigned hereby affirms that is has complied with the requirements for visiting the site as detailed in the Instructions To Bidders.

ADDRESS, LEGAL STATUS, AND SIGNATURE OF BIDDER

The undersigned does hereby designate the address, given below, as the legal address to which all notices, directions, or other communications may be served or mailed.

P.O. Box (if applicable) \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

The undersigned does hereby declare that it has the legal status checked below.

\_\_\_\_\_ Individual

\_\_\_\_\_ Co-Partnership

\_\_\_\_\_ Corporation Incorporated under the laws and State of \_\_\_\_\_

The names and address of all persons indicated as partners in this Bid Proposal are as follows:

NAME

ADDRESS

\_\_\_\_\_

\_\_\_\_\_

This Bid Proposal is submitted in the name of:

\_\_\_\_\_  
(Name of Contractor)

By \_\_\_\_\_

Title \_\_\_\_\_

Signed and sealed this \_\_\_\_\_ Day of \_\_\_\_\_, 20 \_\_\_\_ .

INSTRUCTIONS: One (1) electronic copy.

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General 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 or deducted from 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 or credit for each alternate is the net addition to or deduction from 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. 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. ADD Alternate No. 1: Furnish and install five additional outdoor dog run areas with fencing, gates, and artificial turf, K9Grass Detail K01. Referenced drawings include: C3-Site Improvement Plan; C5-Building Plan Detail; C7- Landscape Plan Reference specifications include: Section 323119-Ornamental Aluminum Fencing System; Section 329300- Landscaping (artificial turf).
- B. ADD Alternate No. 2: Furnish and install Detail K02 in lieu of Detail K01 for K9Grass artificial turf detail for five additional outdoor dog runs adjacent to the building Referenced drawings include: C3-Site Improvement Plan; C5-Building Plan Detail; C7- Landscape Plan Reference specifications include: Section 329300- Landscaping (artificial turf).
- C. ADD Alternate No. 3: Furnish and install Detail K02 in lieu of Detail K01 for K9Grass artificial turf detail for initial five outdoor dog runs adjacent to the building Referenced drawings include: C3-Site Improvement Plan; C5-Building Plan Detail; C7- Landscape Plan Reference specifications include: Section 329300- Landscaping (artificial turf).
- D. ADD Alternate No. 4: Furnish and install artificial turf K9Grass Detail K01. Referenced drawings include: C3-Site Improvement Plan; C5-Building Plan Detail; C7- Landscape Plan Reference specifications include: Section 329300- Landscaping (artificial turf).
- E. ADD Alternate No. 5: Remove existing in ground concrete oil interceptor and install new 1500 gallon prefabricated Zurn Proceptor model OMC-1500-S24MA elliptical tank with heavy duty traffic rated manhole model FC24-CI cast iron cover and frame, EC2-1500 extension collar as required, 6" inlet and outlet. Install per manufacturer's recommendations with Anti-buoyance cast in place 3000 psi concrete slab, pea gravel, traffic rated concrete slab.
- F. DEDUCT Alternate No. 6: Reuse existing high efficiency boilers (B-1 & B-2). Remove all associated piping, pumps, etc. Provide new primary-secondary piping system, pumps, air separator, chemical treatment, etc. per plans and specifications.
- G. DEDUCT Alternate No. 7: Base Bid: Furnish and install an addressable fire alarm system in accordance with Specifications Section 28311 and related project plans. Deduct Alternate: Furnish and install minimum Code compliant fire alarm system only.

END OF SECTION 012300

SECTION 084113 - ALUMINUM WINDOWS AND CURTAIN WALL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Section 084213 – Aluminum Doors for exterior and interior doors.

1.2 SUMMARY

- A. Extent of aluminum entrances is indicated on drawings and schedules. Contractor shall verify in field all openings prior to fabrication.
- B. Aluminum entrances, curtain wall types required for the project include:
  - 1. Entrance, curtain wall and window framing.
- C. Glazing: Refer to “Glass and Glazing” Section of Division 8 for glazing requirements for aluminum entrances and storefronts, including doors specified to be factory-preglazed.

1.3 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide aluminum entrance and storefront assemblies that comply with specified performance characteristics. Each system shall be tested by a recognized testing laboratory or agency in accordance with specified test methods. Provide certified test results.
- B. Thermal Movement: Provide systems capable of withstanding thermal movements resulting from an ambient temperature range of 120E F (67EC), that could cause a metal surface temperature range of 180E F (100EC) within the framing system.
- C. Wind Loading: Provide assemblies capable of withstanding a uniform test pressure of 20 psf inward and 20 psf outward when tested in accordance with ASTM E 330.
- D. Fixed Framing Transmission Characteristics: Provide aluminum entrance and storefront framing system that complies with requirements indicated for transmission characteristics.
  - 1. Air Infiltration: Provide framing system with an air infiltration rate of not more than 0.06 CFM per sq. ft. of fixed area (excluding operable door edges) when tested in accordance with ASTM E 283 at an inward test pressure differential of 6.24 psf.
  - 2. Water Penetration: Provide framing system with no water penetration (excluding operable door edges) as defined in the test method when tested in accordance with ASTM E 331 at an inward test pressure differential of 6.24 lbf. per sq. ft.
  - 3. Condensation Resistance: Where framing systems are “thermal-break” construction, provide units tested for thermal performance in accordance with AAMA 1502 showing condensation resistance factor (CRF) of not less than 45.
  - 4. Thermal Transmittance: Provide framing systems that have an overall U-value of not more than 0.65 BTU/(hr. x sq. ft. X deg. F) at 15 mph exterior wind velocity when tested in accordance with AAMA 1503.

SECTION 084213 – ALUMINUM DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Refer to Section 084113 – Aluminum Windows and Curtain Wall for entrance framing.

1.2 SUMMARY

- A. Section Includes:
  - 1. Exterior manual-swing entrance doors and door-frame units.
  - 2. Interior manual-swing entrance doors and door-frame units.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: For aluminum-framed entrances. Include plans, elevations, sections, full-size details, and attachments to other work.
  - 1. Include details of provisions for assembly expansion and contraction and for draining moisture occurring within the assembly to the exterior.
  - 2. Show connection to and continuity with adjacent thermal, weather, air, and vapor barriers.
- C. Entrance Door Hardware Schedule: Prepared by or under supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams. Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

1.4 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace components of aluminum-framed entrances that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General Performance: Comply with performance requirements specified, as determined by testing of aluminum-framed entrances representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Structural Loads:
  - 1. Wind Loads: As indicated on Drawings.
- C. Structural: Test according to ASTM E 330 as follows:
  - 1. When tested at positive and negative wind-load design pressures, assemblies do not evidence deflection exceeding specified limits.
  - 2. When tested at 150 percent of positive and negative wind-load design pressures, assemblies, including anchorage, do not evidence material failures, structural distress, or permanent deformation of main framing members exceeding 0.2 percent of span.
  - 3. Test Durations: As required by design wind velocity, but not less than 10 seconds.
- D. Air Infiltration: Test according to ASTM E 283 for infiltration as follows:
  - 1. Entrance Doors:
    - a. Pair of Doors: Maximum air leakage of 1.0 cfm/sq. ft. at a static-air-pressure differential of 1.57 lbf/sq. ft.
    - b. Single Doors: Maximum air leakage of 0.5 cfm/sq. ft. at a static-air-pressure differential of 1.57 lbf/sq. ft.
- E. Water Penetration under Static Pressure: Test according to ASTM E 331 as follows:
  - 1. No evidence of water penetration through fixed glazing and framing areas when tested according to a minimum static-air-pressure differential of 20 percent of positive wind-load design pressure, but not less than 6.24 lbf/sq. ft. (300 Pa).
- F. Energy Performance: Certify and label energy performance according to NFRC as follows:
  - 1. Thermal Transmittance (U-factor): Fixed glazing and framing areas shall have U-factor of not more than 0.45 Btu/sq. ft. x h x deg F as determined according to NFRC 100.
  - 2. Solar Heat Gain Coefficient: Fixed glazing and framing areas shall have a solar heat gain coefficient of no greater than 0.35 as determined according to NFRC 200.
  - 3. Condensation Resistance: Fixed glazing and framing areas shall have an NFRC-certified condensation resistance rating of no less than 15 as determined according to NFRC 500.
- G. Noise Reduction: Test according to ASTM E 90, with ratings determined by ASTM E 1332, as follows.
  - 1. Outdoor-Indoor Transmission Class: Minimum 26.
- H. Blast Resistance:
  - 1. Hazard Rating: Minimal Hazard per ASTM F 1642.
  - 2. Performance Condition: 2 per GSA-TS01.



- I. Windborne-Debris Impact Resistance: Pass missile-impact and cyclic-pressure tests when tested according to ASTM E 1886 and testing information in ASTM E 1996 for Wind Zone 2.
  - 1. Large-Missile Test: For glazed openings located within 30 feet (9.1 m) of grade.
- J. Thermal Movements: Allow for thermal movements resulting from ambient and surface temperature changes:
  - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

## 2.2 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. Kawneer North America; an Alcoa company.
  - 2. Special Lite.
  - 3. United States Aluminum; a brand of C.R. Laurence.
  - 4. YKK AP America Inc.

## 2.3 ENTRANCE DOOR SYSTEMS

- A. Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing operation.
  - 1. Door Construction: 1-3/4-inch (44.5-mm) overall thickness, with minimum 0.125-inch- (3.2-mm-) thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods.
    - a. Thermal Construction: High-performance plastic connectors separate aluminum members exposed to the exterior from members exposed to the interior.
  - 2. Door Design: Medium stile; 3-1/2-inch (90-mm) nominal width.
  - 3. Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.
    - a. Provide nonremovable glazing stops on outside of door.
- B. Framing Members: Manufacturer's standard extruded aluminum, minimum 0.125 inch (3.2 mm) thick and reinforced as required to support imposed loads.
  - 1. Nominal Size: 1-3/4 by 4-1/2 inches (45 by 115 mm) or 2-1/2 x 7-1/2 inches (64 by 191 mm). See details on drawings.
- C. Backer Plates: Manufacturer's standard, continuous backer plates for framing members, if not integral, where framing abuts adjacent construction.
- D. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.
- E. Materials:
  - 1. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

- a. Sheet and Plate: ASTM B 209 (ASTM B 209M).
  - b. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221 (ASTM B 221M).
  - c. Extruded Structural Pipe and Tubes: ASTM B 429/B 429M.
  - d. Structural Profiles: ASTM B 308/B 308M.
2. Steel Reinforcement: Manufacturer's standard zinc-rich, corrosion-resistant primer complying with SSPC-PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM, and prepare surfaces according to applicable SSPC standard.
- a. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M.
  - b. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M.
  - c. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

#### 2.4 ENTRANCE DOOR SYSTEMS (INTERIOR SPACES)

- A. Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing operation.
1. Door Construction: 1-3/4-inch (44.5-mm) overall thickness, with minimum 0.125-inch- (3.2-mm-) thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods.
  2. Door Design: Medium stile; 3-1/2-inch (90-mm) nominal width.
  3. Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.
    - a. Provide nonremovable glazing stops on outside of door.
- B. Framing Members: Manufacturer's standard extruded aluminum, minimum 0.125 inch (3.2 mm) thick and reinforced as required to support imposed loads.
1. Nominal Size: 1-3/4 by 4-1/2 inches (45 by 115 mm).
- C. Backer Plates: Manufacturer's standard, continuous backer plates for framing members, if not integral, where framing abuts adjacent construction.
- D. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.
- E. Materials:
1. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
    - a. Sheet and Plate: ASTM B 209 (ASTM B 209M).
    - b. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221 (ASTM B 221M).
    - c. Extruded Structural Pipe and Tubes: ASTM B 429/B 429M.
    - d. Structural Profiles: ASTM B 308/B 308M.
  2. Steel Reinforcement: Manufacturer's standard zinc-rich, corrosion-resistant primer complying with SSPC-PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM, and prepare surfaces according to applicable SSPC standard.
    - a. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M.
    - b. Cold-Rolled Sheet and Strip: ASTM A 1008/A1008M.
    - c. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

## 2.5 ENTRANCE DOOR HARDWARE

- A. Entrance Door Hardware: Hardware not specified in this Section is specified in Section 087100 "Door Hardware".
- B. General: Provide entrance door hardware and entrance door hardware sets indicated in door and frame schedule for each entrance door to comply with requirements in this Section.

## 2.6 GLAZING

- A. Glazing: Comply with Section 088000 "Glazing."
- B. Glazing Gaskets: Manufacturer's standard sealed-corner pressure-glazing system of black, resilient elastomeric glazing gaskets, setting blocks, and shims or spacers.

## 2.7 ACCESSORIES

- A. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
  - 1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
  - 2. Reinforce members as required to receive fastener threads.
  - 3. Use exposed fasteners with countersunk Phillips screw heads, finished to match framing system.
- B. Anchors: Three-way adjustable anchors with minimum adjustment of 1 inch (25.4 mm) that accommodate fabrication and installation tolerances in material and finish compatible with adjoining materials and recommended by manufacturer.
  - 1. Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts complying with ASTM A 123/A 123M or ASTM A 153/A 153M requirements.
- C. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing compatible with adjacent materials.
- D. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos, formulated for 30-mil (0.762-mm) thickness per coat.

## 2.8 FABRICATION

- A. Form or extrude aluminum shapes before finishing.
- B. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.
- C. Fabricate components that, when assembled, have the following characteristics:
  - 1. Profiles that are sharp, straight, and free of defects or deformations.
  - 2. Accurately fitted joints with ends coped or mitered.
  - 3. Physical and thermal isolation of glazing from framing members.
  - 4. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.

5. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
- D. Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.
  1. At exterior doors, provide compression weather stripping at fixed stops.
  2. At interior doors, provide silencers at stops to prevent metal-to-metal contact. Install three silencers on strike jamb of single-door frames and two silencers on head of frames for pairs of doors.
- E. Entrance Doors: Reinforce doors as required for installing entrance door hardware.
  1. At pairs of exterior doors, provide sliding-type weather stripping retained in adjustable strip and mortised into door edge.
  2. At exterior doors, provide weather sweeps applied to door bottoms.
- F. Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.
- G. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

## 2.9 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Prepare surfaces that are in contact with structural sealant according to sealant manufacturer's written instructions to ensure compatibility and adhesion. Preparation includes, but is not limited to, cleaning and priming surfaces.

### 3.3 INSTALLATION

- A. General:
  1. Comply with manufacturer's written instructions.
  2. Do not install damaged components.
  3. Fit joints to produce hairline joints free of burrs and distortion.

4. Rigidly secure nonmovement joints.
5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration and to prevent impeding movement of moving joints.
6. Seal perimeter and other joints watertight unless otherwise indicated.

B. Metal Protection:

1. Where aluminum is in contact with dissimilar metals, protect against galvanic action by painting contact surfaces with materials recommended by manufacturer for this purpose or installing nonconductive spacers.
2. Where aluminum is in contact with concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.

C. Set continuous sill members and flashing in full sealant bed as specified in Section 079200 "Joint Sealants" to produce weathertight installation.

D. Install components plumb and true in alignment with established lines and grades.

E. Install glazing as specified in Section 088000 "Glazing."

F. Entrance Doors: Install doors to produce smooth operation and tight fit at contact points.

1. Exterior Doors: Install to produce weathertight enclosure and tight fit at weather stripping.
2. Field-Installed Entrance Door Hardware: Install surface-mounted entrance door hardware according to entrance door hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.

3.4 MAINTENANCE SERVICE

A. Entrance Door Hardware:

1. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of entrance door hardware.
2. Initial Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of entrance door hardware Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper entrance door hardware operation at rated speed and capacity. Use parts and supplies that are the same as those used in the manufacture and installation of original equipment.

3.5 ENTRANCE DOOR HARDWARE SETS

END OF SECTION 084213