### **DOCUMENT 00 91 13**

### **ADDENDUM NO. 2**

### 10-21-2016

### PROJECT: WALTHAM POLICE STATION RENOVATION

### **CHANGES, CORRECTIONS AND CLARIFICATIONS**

The attention of bidders submitting proposals for the above subject project is called to the following addendum to the specifications. The items set forth herein, whether of omission, addition, substitution or clarification are all to be included in and form a part of the proposal submitted.

THE NUMBER OF THIS ADDENDUM (NO. 2) MUST BE ACKNOWLEDGED IN DOCUMENT 004100 – FORM FOR GENERAL BID, PARAGRAPH B and in DOCUMENT 004113 – FORM FOR SUB BID. PARAGRAPH B

- This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated 7-11-16 as noted below.
- Please advise all sub-contractors.
- Acknowledge receipt of this Addendum in the space provided on the Bid Form.
  - When returning Drawings and Project manual upon completion of bidding, please include this Addendum.

### **GENERAL**

- A. Attached is the Pre-Bid Sign-In sheet included for reference.
- B. Notes from the pre bid conference 10/13/16
  - a. General contractor questions will be allowed October 28, 2016
  - A trailer for the OPM was not specified and is not required. The GC shall provide a trailer for their need on site.
  - c. Access to the site DPW and fuel pumps must be maintained at all times.
  - d. All of the existing loose furniture will be removed prior to any work
  - e. The existing elevator will not be permitted to be used during construction
- C. The contract drawings are the full size drawings issued in addendum #1 dated July 11,2014

### **Answers to Questions**

- 1. What is the anticipated completion date for this project? 15 months
- 2. Are there Liquidated Damages that apply? Yes 1,000 / day

- 3. Specification section 011000, paragraph 1.14A.1 states "provide double-wide temporary trailer for police use during construction". Are there any special requirements associated with this trailer? Where will it be located? This requirement has been deleted from the project
- 4. The Specifications do not contain section 087100, Door Hardware. Please Advise. The sections have been included in this addendum
- 5. The drawings and specifications do not contain a door schedule. Please advise. The sections have been included in this addendum
- 6. The Basement Finish Plan on drawing A630 indicates Resinous Flooring at rooms 010 and 017. The finish schedule calls for CT-1, which is correct? Provide resinous flooring in both rooms 010 & 017
- 7. Drawing A120, Basement Floor Reflected Ceiling Plan indicates Spray Applied Acoustical Insulation at the ceiling of the Fitness Room 015. The finish schedule states exposed. Please advise. Provide the spray applied acoustical insulation in room 015
- 8. Please confirm that the transaction windows labelled BL-2 and BL-3 on A112 are not borrowed lites owned by Section 088000, but rather transaction windows to be provided by Section 116900. Provide the transaction windows labeled BL-2 and BL-3 on A112 under section 116900
- 9. Drawing A602 shows W1 as an Exterior Window. Please confirm that this is actually a field glazed storefront and not a factory glazed window, and that the glazing is owned by Section 088000.

  Confirmed
- 10. Section 088000 includes "Unframed Mirrors" in the scope of work. No unframed mirrors are shown in the elevations. Please confirm that this was included in error and that there are no unframed mirrors. Confirmed
- 11. Please confirm that the "reinforced aluminum impact resistant window assemblies" at the Booking Area are not owned under Section 088000. If they are owned by this section, then please provide a basis of design and two equals. The glazing is provided under section 088000 and the basis of design is provided in section 1.6 of the specifications. Safety glazing products
- 12. Elevation 8 on A704 shows a BL-4 on the east side of the interview room, room #139, and a notation calling it a "security window assembly," and the type BL-4 shown on the window elevations shows a much different window type. Please confirm that this is an error, and it is not a BL-4 owned by Section 088000, but rather a transaction window owned under section 116900. Confirmed

Waltham Police Station Renovation Waltham, Massachusetts

- 13. Please examine the list of joints below and confirm which ones should be included with Section 079200 Joint Sealants.
  - Perimeter of access panels in drywall confirmed
  - Perimeter of access panels in masonry not required
  - Cabinets to drywall-confirmed
  - Cabinets to masonry-confirmed
  - Perimeter of lockers to adjacent surfaces-confirmed
  - Sanitary caulking at bathrooms-confirmed
  - Security sealant in cells-confirmed
- 14. Who is responsible for removing existing caulking at doors, windows and existing precast? Demolition contactor
- 15. In Section 071300 is the new sheet waterproofing to be installed over the new concrete foundation walls below grade? Yes confirmed

### **PROJECT MANUAL**

## **SPECIFICATION SECTIONS**

### ITEM NO. 1 – Section 004100 – BID FORM

A. Delete the Bid Form in its entirety and substitute with the new Revised Document dated 10/21/16 attached to this Addendum.

### ITEM NO. 2 - Section 005100 - Notice of Award

A. Delete the Notice to Award in its entirety and substitute with the new Revised Document dated 10/21/16

attached to this Addendum.

### ITEM NO. 3 – Section 005200 – Form of Agreement Between Owner and Contractor

A. Delete the form of agreement between owner and contractor in its entirety and substitute with the new Revised Document dated 10/21/16 attached to this Addendum.

### ITEM NO. 4 – Section 006140 – Contractors Payment Bond

A. Delete the Contractors Payment Bond in its entirety and substitute with the new Revised Document dated 10/21/16 attached to this Addendum.

### ITEM NO. 5 – Section 087100 – Door Hardware

A. Insert new hardware section dated 10/21/16 attached to this Addendum.

### ITEM NO. 6- Section 107300 - Aluminum Canopy and Facia System

B. Duo-Gard canopy systems DG series 2500 translucent curved canopy system and DG series 3500 translucent wall systems are approved as an equal.

### **DRAWINGS**

### **ARCHITECTURAL**

## ITEM NO. 1 - COVERSHEET - SHEET LIST

A. Add the following drawings to the cover sheet list:

H600 - HVAC AUTOMATIC TEMPERATURE CONTROLS

H601 - HVAC AUTOMATIC TEMPERATURE CONTROLS

H602 - HVAC AUTOMATIC TEMPERATURE CONTROLS

H603 - HVAC AUTOMATIC TEMPERATURE CONTROLS

H604 - HVAC AUTOMATIC TEMPERATURE CONTROLS

H700 - HVAC DETAILS

H701 - HVAC DETAILS

H702 - HVAC DETAILS

H703 - HVAC DETAILS

E100 - ELECTRICAL SITE PLAN

**ES703 - SECURITY DETAILS** 

B. Rename the following drawings in the cover sheet list:

H102 - rename to HVAC FIRST FLOOR DUCTWORK PLAN

H103 - rename to HVAC FIRST FLOOR PIPING PLAN

H104 - rename to HVAC SECOND FLOOR PLAN

E101 - rename to ELECTRICAL SITE DETAILS

C. Move the following drawings from the architectural section of the sheet list to the plumbing section:

PD101 – PLUMBING BASEMENT FLOOR DEMO PLAN
PD102 – PLUMBING FIRST FLOOR DEMO PLAN

PD103 - PLUMBING SECOND FLOOR DEMO PLAN

### ITEM NO. 2 - REVISED DRAWINGS

A. Remove the following drawings and replace with revised drawings attached to this Addendum. A602 Window and Door Type Elevations, 10-21-16

### ITEM NO. 3 - NEW DRAWINGS

A. Include all SK drawings attached to this Addendum as an integral part of these Bidding Documents. A600 Door Schedule 10-21-16

### ITEM NO. 4 - DRAWING A101

A. Add fire extinguishers and cabinets to the following rooms:

LOBBY 115
CORRIDOR 151
MOTORCYCLE/BIKE STORAGE 150
BOOKING 145.

B. The walls enclosing the ANIMAL HOLD 148 room shall be constructed of wall type 6M.

### ITEM NO. 5 - DRAWING A102

A. Add fire extinguishers and cabinets to the following rooms:

CORRIDOR 220

**VESTIBULE** 

B. The walls enclosing the ANIMAL HOLD 148 room shall be constructed of wall type 6M.

### ITEM NO. 6 – DRAWING A103

A. Add note "All exposed gas piping and electrical conduits are to be painted."

### ITEM NO. 7 - DRAWING A632

A. Remove keynote "ETR" from the following rooms:

SERGEANT'S OFFICE 221
INTERVIEW ROOM 222
LIEUTENANT'S OFFICE 223
DETECTIVE 217
CONFERENCE 218
STORAGE 216
DETECTIVE OFFICE 215

DETECTIVE OFFICE 2.

**ADMIN 212** 

The rooms listed above shall get finishes as shown in the finish schedule on sheet A601

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## ITEM NO. 8 - DRAWING A702

A. The length of the display case shown in the enlarged plan #6 shall be 4'-0".

## ITEM NO. 9 – DRAWING A704

A. The wainscot in the lobby and shown in show in detail #19 shall be 42" high.

## **CIVIL**

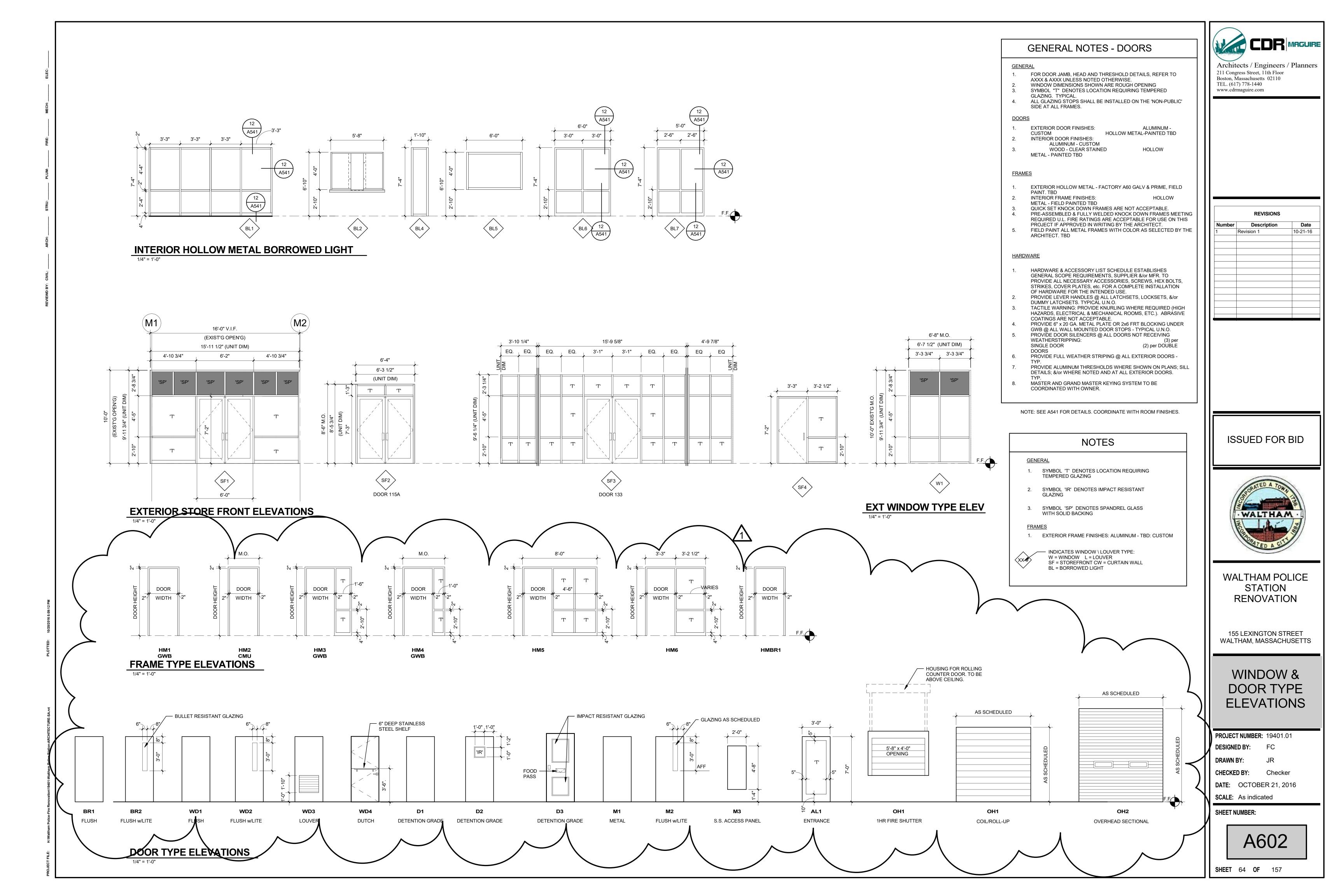
## ITEM NO. 1 – DRAWINGS C101 & C102

A. Add an 8'-0" wide double gate to the generator fence enclosure.

### **STRUCTURAL**

## ITEM NO. 1 – DRAWING SD102

A. Remove all references regarding the removal and disposal of the existing generator slab. This is covered on site demo plan CD100



						Do	OOR SCHEDU	JLE						
NUMBER	TO ROOM	WIDTH	HEIGHT	THICKNESS	DOOF ELEV	MATERIAL	FINISH	GLAZING	ELEV	FRAME MATERIAL	FINISH	FIRE RATING	HARDWARE	COMMENTS
001	EVIDENCE STORAGE	2' - 6"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	9	
002 003	EVIDENCE STORAGE EVIDENCE STORAGE	3' - 0"	7' - 0"	1 3/4"	ETR WD4	ETR WD	ETR S#F	ETR	ETR HM2	ETR HM	ETR PT	ETR	9 7	DUTCH DOOR
003	ARMORY	3' - 0"	7' - 2"	1 3/4"	WD1	WD	S&F	-	HM2	HM	PT	-	/ 8	DUTCH DOOK
005.1	CORR.	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		
005.2	RANGE OFFICE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		
006	STORAGE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		
007	MACHINE ROOM	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		
008	JAN	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S#F	-	HM2	HM	PT	-	9	
009 011	STORAGE F. TOILET	3' - 0"	7' - 2"	1 3/4"	WD1 WD3	WD WD	S&F 	-	HM2 HM1	HM HM	PT PT	-	<u> </u>	
012	MECHANICAL ROOM	3' - 0"	7' - 2"	1 3/4"	M I	HM	 РТ	-	HM2	HM	PT	60 MIN	5	
013	TEL/DATA	3' - 0"	7' - 2"	1 3/4"	ΜI	НМ	PT	-	НМІ	HM	PT	60 MIN	9	
014	ELECTRICAL	3' - 0"	7' - 2"	1 3/4"	МІ	НМ	PT	-	НМІ	НМ	PT	60 MIN	9	
015	FITNESS	3' - 0"	7' - 2"	1 3/4"	WD2	WD	S#F	TEMP	НМІ	НМ	PT	-	13	
016	M. TOILET	3' - 0"	7' - 2"	1 3/4"	WD3	WD	SŧF	-	HMI	HM	PT	-	5	
017	M. TOILET	3' - 0"	7' - 2"	1 3/4"	WD3	WD	S#F	TEN AD	HMI	HM	PT	-	13	
019	CORR.  VEHICLE BAYS	3' - 0"	7' - 0"	1 3/4"   1 3/4"	WD2 M4	WD HM	S&F  PT	TEMP FR/SFTY	HM3 HM2	HM HM	PT PT	60 MIN	<u>4</u> 5	
101.2	VEHICLE BAYS	10' - 0"	10' - 0"	3"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	-	 16	
101.3	VEHICLE BAYS	10' - 0"	10' - 0"	3"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	-	16	
101.4	VEHICLE BAYS	10' - 0"	10' - 0"	3"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	-	16	
102	STORAGE/SPRINKLER	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		
103	TRAINING ROOM	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S#F	-	HMI	HM	PT	-	10	
104.1	TRAINING ROOM	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S\$F	TEMP	HM6	HM	PT	-	4	
104.2	CORR. STORAGE	3' - 0" 6' - 0"	7' - 2"	1 3/4"   1 3/4"	WD2 WD1	WD WD	S&F 	TEMP -	HM I ETR	HM ETR	PT PT	-	17 14	
106	STAFF ENTRANCE	3' - 0"	7' - 2"	1 3/4"	WD1	WD	S\$F	TEMP	HM5	HM	PT	-	1-1	
107	REPORT	3' - 0"	7' - 2"	1 3/4"	WD2	WD	S#F	TEMP	HMI	НМ	PT	-	13	
108.1	ROLL CALL	3' - 0"	7' - 2"	1 3/4"	WD2	WD	S#F	TEMP	НМІ	НМ	PT	-	11	
108.2	ROLL CALL	3' - 0"	7' - 0"	1 3/4"	WD2	WD	SŧF	TEMP	НМ3	НМ	PT		11	
109.1	INTERVIEW	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S#F	-	HMI	HM	PT	-	5	
109.2	INTERVIEW BREAK ROOM/ KITCHEN	3' - 0"	7' - 0"	1 3/4"	WD I	WD WD	S&F S&F	-	HM3 HM3	HM HM	PT PT	-	9 13	
110.1	BREAK ROOM/ KITCHEN	3' - 0"	7 - 0	1 3/4	WDI	WD WD	5#1 	-	HM4	HM	PT	-	13	
111	TRAINING AUXILIARY OFF.	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S#F	_	HM3	HM	PT	_	10	
112.1	PATROL AREA	3' - 0"	7' - 2"	1 3/4"	WBRI	WD	S¢F	-	HMBRI	НМ	PT	-	5	
112.2	PATROL AREA	3' - 0"	7' - 2"	1 3/4"	WD2	WD	S#F	TEMP	HMI	НМ	PT	-	11	
113	FEMALE	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S\$F	-	HMI	HM	PT	-	12	
114	MALE	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S\$F	-	HMI	HM	PT	-	12	W.EATHERSTRIPPING
115.1	LOBBY	6' - 0" 3' - 0"	7' - 2"	1 3/4"   1 3/4"	ALI WBR2	ALUM WD	FF S&F	INSUL/TEMP BR/FR	SF1 HMBR1	ALUM HM	FF PT	- 60 MIN	<u> </u>	WEATHERSTRIPPING
115.3	LOBBY	3' - 0"	7' - 2"	1 3/4"	WBR2	WD	  S&F	BR/FR	HMBRI	HM	PT	60 MIN	4	
115.4	LOBBY	3' - 0"	7' - 2"	1 3/4"	WD2	WD	S#F	FR/SFTY	HMI	HM	PT	60 MIN	3	
115A	CORRIDOR	6' - 0"	7' - 2"	1 3/4"	ALI	ALUM	FF	INSUL/TEMP	SF2	ALUM	FF	-	ĺ	WEATHERSTRIPPING
117	CAPTAIN	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S#F	-	НМ3	НМ	PT	-	10	
118	SUPERVISORS OFFICE	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S\$F	-	НМ3	HM	PT	-	10	
119	GUN STOR.	3' - 0"	7' - 2"	1 3/4"	MI	HM	PT	-	HMI	HM	PT	-	5	
120	MALE FEMALE	3' - 0"	7' - 2"	1 3/4"   1 3/4"	WD I	WD WD	S&F 	-	HM I HM I	HM HM	PT PT	-	12	
124	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	WD1 WD2	WD	S&F	TEMP	HM3	HM	PT	_	1 2	
125	COMMUNITY SERVICE	3' - 0"	7' - 2"	1 3/4"	WD2	WD	S&F	TEMP	HMI	HM	PT	-	5	
126	STORAGE	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S¢F	-	HMI	НМ	PT	-	8	
127	CAPTAIN	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S#F	-	НМ3	НМ	PT	-	10	
128	LIEUTENANT	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S¢F	-	НМ3	НМ	PT	-	10	
129	ARCHIVE	3' - 0"	7' - 2"	1 3/4"	WDI	WD	S&F	-	HMI	HM	PT	-	5	
132 133	ELEC. STAFF ENTRANCE	3' - 0" 6' - 0"	7' - 2" 7' - 2"	1 3/4"   1 3/4"	WD I AL I	WD ALUM	S&F FF	INSUL/TEMP	HM I SF3	HM ALUM	PT FF	60 MIN		WEATHERSTRIPPING
134	JAN.	3' - 0"	7' - 2"	1 3/4"	WDI	WD	 S&F	-	HMI	HM	PT	- 60 MIN	9	WLATTICKSTRITTING
135	MAINTENANCE OFFICE	3' - 0"	7' - 2"	1 3/4"	WD1	WD	S\$F	FR/SFTY	HMI	HM	PT	60 MIN	5	
136.1	WOMEN	3' - 0"	7' - 2"	1 3/4"	D2	НМ	PT	IR/FR	HM2	НМ	PT	60 MIN		
136.2	WOMEN	1' - 6"	4' - 8"	3/4"	M5	ST. ST.	-	-	ST. ST.	-	-			
136.3	WOMEN	2' - 0"	4' - 8"	3/4"	M5	ST. ST.	-	-	ST. ST.	-	-			
136A	CELL 9	2' - 8"	7' - 0"	2"	D3	STEEL	PT	IR IR	HM2	HM	PT			
136B	CELL 10	2' - 8"	7' - 0"	2"	D2	STEEL	PT PT	IR IP	HM2	HM	PT PT	-		
136C 137	CELL I I SHOWER	2' - 8"	7' - 0"	1 3/4"	D3	STEEL HM	PT PT	IR -	HM2 HM2	HM HM	PT PT	-		
138	INTERV.	3' - 0"	7' - 2"	1 3/4"	WDI	WD	 S&F	-	HMI	HM	PT	60 MIN		
	INTERV.	3' - 0"	7' - 2"	1 3/4"	DI	HM	PT	-	HM2	НМ	PT	-		

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NUMBER	TO ROOM	WIDTH	HEIGHT	THICKNESS	DOOR ELEV	MATERIAL	FINISH	GLAZING	ELEV	FRAME MATERIAL	FINISH	FIRE RATING	HARDWARF	COMMENT
40	SHOWER	3' - 0"	7' - 2"	1 3/4"	DI	HM	PT	- GLAZING	HM2	HM	PT	TINE ISTING	TIANDWAIL	COMMINICIAT
41.1	VEST.	3' - 0"	7' - 2"	1 3/4"	D2	HM	PT	IR/FR	HM2	HM	PT	60 MIN		
41.2	VEST.	2' - 0"	4' - 8"	3/4"	M5	ST. ST.	-	-	ST. ST.	-	-	-		
42	JUVENILE/ ACCESS.	2' - 10"	7' - 0"	2"	D3	STEEL	PT	IR	HM2	HM	PT	_		
43.1	MALE	3' - 1"	7' - 2"	1 3/4"	D2	HM	PT	IR/FR	HM2	HM	PT	60 MIN		
43.2	MALE	2' - 0"	4' - 8"	3/4"	M5	ST. ST.		-	ST. ST.	-	-	-		
43.3	MALE	2' - 0"	4' - 8"	3/4"	M5	ST. ST.	_	_	ST. ST.	_	_	_		
43.4	MALE	2' - 0"	4' - 8"	3/4"	M5	ST. ST.	_	_	ST. ST.	_	_	_		
43.5	MALE	3' - 0"	7' - 2"	1 3/4"	DI	НМ	PT	_	HM2	НМ	PT	60 MIN		
43A	CELL I	2' - 10"	7' - 4"	2"	D3	STEEL	PT	IR	· · · · · · ·	HM	PT	-		
43B	CELL 2	2' - 10"	7' - 4"	2"	D3	STEEL	PT	IR		HM	PT	-		
43C	CELL 3	2' - 10"	7' - 4"	2"	D3	STEEL	PT	IR		HM	PT	_		
43D	CELL 4	2' - 10"	7' - 0"	2"	D3	STEEL	PT	IR		НМ	PT	_		
44.1	MALE	3' - 1"	7' - 2"	1 3/4"	D2	НМ	PT	IR	HM2	НМ	PT	60 MIN		
44.2	MALE	2' - 0"	4' - 8"	3/4"	M5	ST. ST.	_	_	ST. ST.	_	-	_		
44.3	MALE	2' - 0"	4' - 8"	3/4"	M5	ST. ST.	_	_	ST. ST.	_	-	_		
44A	CELL 5	2' - 10"	7' - 0"	2"	D3	STEEL	PT	IR	· - · •	НМ	PT	-		
44B	CELL 6	2' - 10"	7' - 0"	2"	D3	STEEL	PT	IR		HM	PT	-		
144C	CELL 7	2' - 10"	7' - 0"	2"	D3	STEEL	PT	IR		HM	PT	_		
44D	CELL 8	2' - 10"	7' - 0"	2"	D3	STEEL	PT	IR		HM	PT	_		
145.1	CORR.	3' - 0"	7' - 2"	1 3/4"	D2	HM	PT	IR	HM2	HM	PT	60 MIN	4	
145.2	BOOKING	3' - 0"	7' - 0"	1 3/4"	D2	HM	PT	IR	HM2	HM	PT	60 MIN	4	
146	STORAGE	3' - 0"	7' - 2"	1 3/4"	DI	HM	PT	-	HM2	HM	PT	-	8	
47	PROCESSING	3' - 0"	7' - 2"	1 3/4"	DI	HM	PT	_	HM2	HM	PT			
147 148	ANIMAL HOLD	3' - 0"	7' - 2"	1 3/4"	M4	HM	PT	TEMP	HM2	HM	PT		9	
49.1	SALLY PORT	10' - 0"	10'-0"	3"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ı	
49.1	SALLY PORT	10'-0"	10 - 0"	3"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	<u> </u>	
50.1	MOTORCYCLE/BIKE STORAGE	8' - 0"	10' - 0"	2"	OH3	-	-	-	-	-	-	-	16	INSULATED
50.2	MOTORCYCLE/BIKE STORAGE	8' - 0"	8' - 0"	2"	OH2	-	-	-	-	-	-	-	16	
	CORR.	3' - 0"	7' - 0"	1 3/4"	WD2	WD	 S¢F	TEMP	HM3	HM	PT	_	4	
201	ASSIGNMENT AREA	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S\$F	TEMP	HMI	HM	PT	_		
202	CAPTAIN	3' - 0"	7' - 0"	1 3/4"	WDI	WD	5¢F	-	HM3	HM	PT		10	
203	FEMALE	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S&F		HMT	HM	PT		12	
203 204	MALE	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S&F	_	HMI	HM	PT	-	12	
205	JAN.	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S&F	_	HMI	HM	PT		9	
206	PLANNING	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S\$F	_	HMI	HM	PT		5	
	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S\$F		HMI	HM	PT		10	
207 208	DEPUTY CHIEF	3' - 0"	7' - 0"	1 3/4"	WDI	WD	5#F	-	НМЗ	НМ	PT	-	10	
208	ADMIN OFFICE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR		ETR	ETR	ETR	ETR	- ETR	10	
209		3' - 0"		· ·			ETR			+				
210	CHIEF'S OFFICE		7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	10	
211	ADMIN OFFICE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR S#E	ETR	ETR HM2	ETR	ETR	ETR	10	
212	VESTIBULE	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S¢F	TEMP	HM3	HM	PT	-	5	
213	STORAGE SUPPLY / STORAGE	3' - 0"	7' - 0"	1 3/4"	WDI	WD	S#F	-	HMI	HM	PT PT	-	<u>8</u>	
214	SUPPLY / STORAGE	3' - 0"	7' - 0"	1 3/4"	WD I	WD	S\$F ETP	- FTD	HM I	HM	PT	- FTD	8	
215	DETECTIVE OFFICE	2' - 10"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	10	
216	STORAGE	2' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8	
217.1	DETECTIVE	3' - 0"	7' - 0"	1 2/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	5	
217.2	DETECTIVE	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S#F	TEMP	HM2	HM	PT	-	5	
218.1	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR		
218.2	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	5	
219	LAB	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S&F	TEMP	HMI	HM	PT	-	10	
220	VESTIBULE	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S#F	TEMP	HM4	HM	PT	-	5	
221	SERGEANTS OFFICE	3' - 0"	7' - 0"	1 3/4"	WD2	WD	S#F	TEMP	HMI	HM	PT		10	
222	INTERVIEW ROOM	2' - 8"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	6	
223	LIEUTENANTS OFFICE	3' - 0"	7' - 0"	1 3/4"	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	10	
224	CORR.	3' - 0"	7' - 0"	1 3/4"	WD2	WD	SŧF	TEMP	HMI	НМ	PT	60 MIN	5	
	STAIR I	3' - 0"	7' - 0"	1 3/4"	M4	НМ	PT	FR/SFTY	HM2	HM	PT	60 MIN	3	
	STAIR I	3' - 0"	7' - 0"	1 3/4"	M4	НМ	PT	FR/SFTY	HM2	НМ	PT	60 MIN	3	
61.3	STAIR I	3' - 0"	7' - 0"	1 3/4"	M4	НМ	PT	FR/SFTY	HM2	НМ	PT	60 MIN	3	
51.4	STAIR I	ETR'	ETR_	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	2	
52.1	STAIR 2	3' - 0"	7' - 2"	1 3/4"	M4	НМ	PT	FR/SFTY	HM2	HM	PT	60 MIN	3	
52.2	LOBBY	3' - 0"	7' - 2"	1 3/4"	M4	НМ	PT	FR/SFTY	HM2	НМ	PT	60 MIN	4	
			7' - 2"	1 3/4"	M4	НМ	PT	FR/SFTY	HM2	НМ	PT	60 MIN	3	ı — — — — — — — — — — — — — — — — — — —

# DOOR SCHEDULE LEGEND

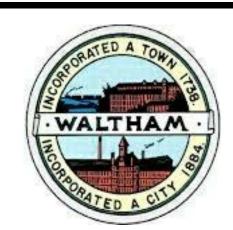
WD = WOOD

- = NO WORK NEEDED ALUM = ALUMINUM BR = BULLET RESISTANT ETR = EXISTING TO REMAINFF = FACTORY FINISHFR = FIRE RATEDHM = HOLLOW METAL
HMBR = HOLLOW METAL BULLET RESISTANT
INSUL = INSULATED IR = IMPACT RESISTANT PT = PAINTSFTY = SAFETY S&F = STAIN & FINISH ST. ST. = STAINLESS STEEL
TEMP = TEMPERED
WBR = WOOD BULLET RESISTANT

Architects / Engineers / Planners 211 Congress Street, 11th Floor Boston, Massachusetts 02110 TEL. (617) 778-1440 www.cdrmaguire.com

	REVISIONS				
Number	Description	Date			

ISSUED FOR BID



WALTHAM POLICE STATION RENOVATION

155 LEXINGTON STREET WALTHAM, MASSACHUSETTS

# DOOR SCHEDULE

PROJECT NUMBER: 19401.01 **DESIGNED BY**: Designer

DRAWN BY: Author

CHECKED BY: Checker **DATE**: OCTOBER 21, 2016

**SCALE**: 12" = 1'-0"

SHEET NUMBER:

A600

**OF** 157

# DOCUMENT 004100 FORM FOR GENERAL BID Rev.10-21-16

### TO THE AWARDING AUTHORITY

- A. The Undersigned proposes to furnish all labor and materials required for the City of Waltham called the Awarding Authority, according to the Contract Documents prepared by Maguire Group Inc., for Renovation to the Waltham Police Station, Waltham, Massachusetts for the Contract Price specified below, subject to Additions and Deductions according to the terms of the Specifications.
- B. This Bid includes Addenda Number(s):

- 11	ADDENDUM NUMBER	DATE	ADDENDUM NUMBER	DATE

C.	The proposed Contract Price is:						
		Dollars					
	(words)						
	\$						
	(figures)						

### 1. For Alternate:

ALTERNATE NUMBER	ADD	SUBTRACT
	\$	\$
	\$	\$
	\$	\$
	\$	\$
	\$	\$
(Insert price for each Alterna	te separately)	•

19401.01 CDR MAGUIRE INC.

- D. The subdivision of the proposed Contract Price is as follows:
  - 1. ITEM 1: The work of the General Contractor, being all work other than that covered by ITEM 2:

TOTAL OF ITEM 1: S	1
101/1601 116141 1. 5	,

2. ITEM 2: Sub-Bids as Follows:

SUBTRADE	NAME OF BIDDER	AMOUNT	BONDS REQUIRED YES OR NO
Section 040001 – Masonry Work		\$	
Section 050001 – Miscellaneous and Ornamental Iron		\$	
Section 070001 – Waterproofing, Dampproofing and Caulking		\$	
Section 070002 – Roofing and Flashing			
Section 080002 – Glass and Glazing		\$	
Section 090002 - Tile		\$	
Section 090003 – Acoustical Tile		\$	
Section 090005 – Resilient Floors		\$	
Section 090007 – Painting		\$	
Section 210000 – Fire Protection		\$	
Section 220000 – Plumbing		\$	
Section 230000 – Heating, Ventilating and Air Conditioning		\$	
Section 260000 – Electrical			

	TOTAL OF ITEM 2: \$	·
3.	GRAND TOTAL (ITEM 1 AND ITEM 2): \$	

E. The Undersigned agrees that each of the above named Sub-Bidders will be used for the work indicated, at the amount stated, unless a substitution is made. The Undersigned agrees to pay the premiums for the Performance and Payment Bonds furnished by Sub-Bidders as requested, and that all of the cost of all such premiums is included in the amount set forth in Item I of this Bid.

- F. The Undersigned agrees that, if selected as General Contractor, it will promptly confer with the Awarding Authority on the question of Sub-Bidders; and that the Awarding Authority may substitute for any Sub-Bid listed above a Sub-Bid filed with the Awarding Authority by another Sub-Bidder for the subtrade against whose standing and ability the Undersigned makes no objection; and that the Undersigned will use all such finally selected Sub-Bidders at the amounts named in their respective Sub-Bids and be in every way as responsible for the m and their work as if they had been originally named in this General Bid, the total Contract Price being adjusted to conform thereto.
- G. The Undersigned agrees that, if selected as General Contractor, it will, within five days (Saturdays, Sundays, and legal Holidays excluded) after presentation by the Awarding Authority, execute a Contract according to the terms of this Bid and furnish a Performance Bond and a Labor and Materials or Payment Bond, each of a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the Awarding Authority and each in the Sum of the Contract Price, the premiums for which are to be paid by the General Contractor and are included in the Contract Price.
- H. The Undersigned hereby certifies it can furnish labor, that it can work in harmony with all other elements of labor employed or to be employed on the work, and that it will comply fully with all laws and regulations applicable to awards made subject to M.G.L. c.149, §44A.
- I. The Undersigned certifies under the penalties of perjury that this Bid is in all respects bo na fide, fair, and made without collusion or fraud with any other person. As used in this Subsection the word "person" shall mean natural person, joint venture, partnership, corporation, or other business or legal entity.
- J. The Undersigned certifies under penalty of perjury that it is not currently debarred from doing public construction work in the Commonwealth under the provisions of M.G.L. c.29, §29F, or any other applicable debarment provisions of any other chapter of the General Laws, or any rule or regulation promulgated thereunder.
- K. The Undersigned agrees and warrants that complete familiarization with the Contract Documents and existing conditions has been achieved for the submission of this Bid and the performance of the work of this Contract and that the Contract Documents are adequate to produce the required result.

 (Name of General Bidder)
(Signature and Title of
Person Signing Bid)

19401.01 CDR MAGUIRE INC.

	(Business Address)
_	(City, State, and Zip Code)
	(Telephone Number)
Date:	
	(Facsimile Number)
(called the Bidder, which is):	
check one of the following:	
a corporation, organized and existing duly authorized to sign for the corporation.	ng under the laws of the State of and oration as evidenced by Document 006100.
a partnership.	
an individual	
a joint venture (each joint venture sh	nall sign).
The manner of signing for each individual, venture shall be indicated and evidenced	, partnership, or corporation that is part of the joint as before.
and affix corporate seal and complete the	on, indicate state of incorporation under signature following information for items (a) through (c); if a al addresses if different from business addresses.
(a) Place of Business of the Corporation:	
Address	
END OF I	DOCUMENT

This Agre Massachu 'Contract	ement made the day of, 20, by and between the City of Waltham setts, called the "Awarding Authority," and, called the or."
Witnesse follows:	th, that the Awarding Authority and the Contractor, for the consideration named, agree as
1.	Article 1. Scope of Work: The Contractor shall perform all work required by the Contract Documents for Renovations to the Waltham Police Station prepared by CDR Maguire Inc. acting and referred to in the Contract Documents as the "Architect."
2.	Article 2. Time of Completion: The Contractor shall begin work under this Contract on the date specified in the written "Notice to Proceed" of the Awarding Authority and shall bring the work to Substantial Completion within 15 Months. Damages for delays in the performance of the work shall be in accordance with below.
	It is expressly understood and agreed, by and between the Contractor and Owner, that the time for the completion of the Work described herein is a reasonable time for the completion of same, taking into consideration the average climatic range and usual industrial and/or residential conditions prevailing in this locality.
	If the said Contractor shall neglect, fail or refuse to complete the Work within the times herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this Contract, to pay to the Owner the amount of One Thousand Dollars (\$1,000.00), not as a penalty, but as liquidated damages for such breach of contract, for each and every calendar day that the Contractor shall be in default after the time stipulated for completing the Work.
	The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be deducted by the Owner from periodic payments.
3.	Article 3. Contract Sum: The Awarding Authority shall pay the Contractor, in current funds for the performance of the work, subject to Additions and Deductions by Change Order, the Contract Sum of:
	(words) Dollars
	(words)
	\$(figures)

T SUBTRADE	NAME OF BIDDER	AMOUNT	BONDS REQUIRED YES OR NO
Section 040001 – Masonry Work		\$	
Section 050001 – Miscellaneous and Ornamental Iron		\$	
Section 070001 – Waterproofing, Dampproofing and Caulking		\$	
Section 070002 – Roofing and Flashing		\$	
Section 080002 – Glass and Glazing		\$	
Section 090002 - Tile		\$	
Section 090003 – Acoustical Tile		\$	
Section 090005 – Resilient Floors		\$	
Section 090007 – Painting		\$	
Section 210000 – Fire Protection		\$	
Section 220000 – Plumbing u		\$	
Section 230000 – Heating, Ventilating and Air Conditioning		\$	
Section 260000 – Electrical		\$	

ided as follows:

item 1: The work of the Contractor, being all wo	ork other than that covered by Item 2:
	Dollars
(words)	
\$	
(figures)	

Item 2. Subcontractor as follows:

### 4. Article 4. The Contract Documents:

The following, together with this Agreement, form the Contract and all are as fully a part of the Contract as if attached to this Agreement or herein repeated: the Advertisement, Bidding Documents, Contract Forms, Conditions of the Contract, and Specifications as enumerated in the Table of Contents, the Drawings as enumerated in the List of Contract Drawings, and all Modifications issued after execution of the Contract.

Terms used in this Agreement which are defined in the Conditions of the Contract shall have the meanings designated in those Conditions.

5.	Article 5. Alternates: The following Alternates have been accepted and their costs
	are included in the Contract Sum stated in Article 3 of this Agreement:

- 6. Article 6. REAP Certification: Pursuant to M.G.L. c62(c), §49(a), the individual signing this Contract on behalf of the Contractor certifies, under the penalties of perjury, that, to the best of his/her knowledge and belief, the Contractor has complied with any and all applicable state tax laws.
- 7. Article 7. Performance: The work performed under this Contract shall be rendered in conformity with the standards of the trade and shall be professional and of the highest fabrication and installation quality in all respects. Substandard fabrication and installation quality shall be deemed a breach of this Contract.
- 8. Article 8. Compliance: This Contract shall be construed in accordance with and shall be governed by the laws of the Commonwealth of Massachusetts. Any Contract provision inconsistent with state law shall be given no force or effect. In the event that a provision is deemed to be unlawful, it shall be severed from the Contract, and at the option of the Awarding Authority, the balance of the provision and/or Contract shall continue in full force and effect.
- 9. Article 9. Executive Order 195: The Governor, the Awarding Authority or Governor's designee, the Secretary of Administration and Finance, and the state Auditor or Auditor's designee shall have the right at reasonable times and on reasonable notice to examine the books, records, and other compilations of data of the Contractor which pertain to the performance of the provisions and requirements of this Contract.
- 10. The Awarding Authority shall have the right to examine the books.
- 11. Article 10. Contributions: I hereby certify, under the penalties of perjury, that, within the meaning of M.G.L. c151A, §19A, has complied with all Commonwealth of Massachusetts laws relating to contributions and payments instead of contributions.

In witness whereof, the Parties have caused this Instrument to be executed under seal.

(Name of Contractor)	(Awarding Authority)  By:
(Address)	(Name and Title)
Ву:	
(Name and Seal)	(Seal)
Witness:	Attest:

Note: If Contractor is a corporation, attach a notarized copy of the Certificate of Corporate Vote of Authorization authorizing Signatory to sign Contract.

**END OF DOCUMENT** 

(figures)

DOCUME	NT 005100 - NOTICE (	OF AWARD		
This Agre Massachu "Contract	usetts, called the "Av	day of varding Authority,"	, 20 ' and	by and between the City of Walthan called th
Witnesse follows:	ed, that the Awardin	g Authority and th	e Contractor,	for the consideration named, agree a
1.	•	Itham Police Statio	n Renovation	form all work required by the Contraction prepared by Maguire Group Inc., actir
2.	date specified in th	e written "Notice to stantial Completio	Proceed" of t n within 15	II begin work under this Contract on the Awarding Authority and shall brin Months. Damages for delays in the below.
	time for the comple	etion of the Work de to consideration the	escribed herei e average clir	een the Contractor and Owner, that the nisareasonable time for the completion matic range and usual industrial and/o
	herein specified, or does hereby agree Owner the amount	any proper extension, as a part consider of one thousand I preach of contract,	on thereof gra ation for the Dollars (\$1000 for each and	co complete the Work within the time inted by the Owner, then the Contractor awarding of this Contract, to pay to the D.OO), not as a penalty, but as liquidate every calendar day that the Contractor leting the Work.
	because of the imp damages the Own	oracticability and exer er would in such e s which the Owner	ktreme difficu event sustain	between the Contractor and the Ownerly of fixing and ascertaining the acturate and said amount is agreed to be the and said amount shall be deducted be and said amount shall be deducted be and said amount shall be deducted be a said amount shall be a said amount shall be a said a said amount shall be a said a said amount shall be a said a said amount shall be a said a
3.		-		nall pay the Contractor, in current fund. ns and Deductions by Change Order, th
	(words)		<del> </del>	Dollars
	\$			
	*			

NOTICE OF AWARD 19401.01 CDR MAGUIRE INC. 005100 - 1

The Contract Sum is subdivided as follows:	
Item 1: The work of the Contractor, being all work other than that covered by Item 2	2:
(words)	Dollars
\$(figures)	

Item 2. Subcontractor as follows:

SUBTRADE	NAME OF BIDDER	AMOUNT	BONDS REQUIRED YES OR NO
Section 040001 – Masonry Work		\$	
Section 050001 – Miscellaneous and		\$	
Ornamental Iron			
Section 070001 – Waterproofing,		\$	
Dampproofing and Caulking			
Section 070002 – Roofing and		\$	
Flashing			
Section 080002 – Glass and Glazing		\$	
Section 090002 - Tile		\$	
Section 090003 – Acoustical Tile		\$	
Section 090005 – Resilient Floors		\$	
Section 090007 – Painting		\$	
Section 210000 – Fire Protection		\$	
Section 220000 – Plumbing		\$	
Section 230000 – Heating, Ventilating		\$	
and Air Conditioning			
Section 260000 – Electrical		\$	

## 4. Article 4. The Contract Documents:

The following, together with this Agreement, form the Contract and all are as fully a part of the Contract as if attached to this Agreement or herein repeated: the Advertisement, Bidding Documents, Contract Forms, Conditions of the Contract, and Specifications as enumerated in the Table of Contents, the Drawings as enumerated

19401.01 NOTICE OF AWARD CDR MAGUIRE INC. 005100 - 2

in the List of Contract Drawings, and all Modifications issued after execution of the Contract.

Terms used in this Agreement which are defined in the Conditions of the Contract shall have the meanings designated in those Conditions.

5.	Article 5.	Alternates:	The following	Alternates h	ave been	accepted an	d their cost	S
	are includ	ded in the Cor	ntract Sum state	d in Article 3	of this Ag	reement:		

- 6. Article 6. REAP Certification: Pursuant to M.G.L. c62(c), §49(a), the individual signing this Contract on behalf of the Contractor certifies, under the penalties of perjury, that, to the best of his/her knowledge and belief, the Contractor has complied with any and all applicable state tax laws.
- 7. Article 7. Performance: The work performed under this Contract shall be rendered in conformity with the standards of the trade and shall be professional and of the highest fabrication and installation quality in all respects. Substandard fabrication and installation quality shall be deemed a breach of this Contract.
- 8. Article 8. Compliance: This Contract shall be construed in accordance with and shall be governed by the laws of the Commonwealth of Massachusetts. Any Contract provision inconsistent with state law shall be given no force or effect. In the event that a provision is deemed to be unlawful, it shall be severed from the Contract, and at the option of the Awarding Authority, the balance of the provision and/or Contract shall continue in full force and effect.
- 9. Article 9. Executive Order 195: The Governor, the Awarding Authority or Governor's designee, the Secretary of Administration and Finance, and the state Auditor or Auditor's designee shall have the right at reasonable times and on reasonable notice to examine the books, records, and other compilations of data of the Contractor which pertain to the performance of the provisions and requirements of this Contract.
- 10. The Awarding Authority shall have the right to examine the books.
- 11. Article 10. Contributions: I hereby certify, under the penalties of perjury, that, within the meaning of M.G.L. c151A, §19A, has complied with all Commonwealth of Massachusetts laws relating to contributions and payments instead of contributions.

19401.01 NOTICE OF AWARD CDR MAGUIRE INC. 005100 - 3

In witness whereof, the Parties have caused this Instrument to be executed under seal.

(Name of Contractor)	(Awarding Authority)  By:
(Address)	(Name and Title)
By:	
(Name and Seal)	(Seal)
Witness:	Attest:

Note: If Contractor is a corporation, attach a notarized copy of the Certificate of Corporate Vote of Authorization authorizing Signatory to sign Contract.

**END OF DOCUMENT** 

19401.01 NOTICE OF AWARD CDR MAGUIRE INC. 005100 - 4

## DOCUMENT 006140 - CONTRACTOR'S PAYMENT BOND

PROJECT:	WALTHAM POLICE STATIO	N RENOVATIONS	
PROJECT LOCATION:	WALTHAM, MASSA	CHUSETTS	
AWARDING AUTHORITY:	CITY OF WALTHAM	, MASSACHUSETTS	
KNOW ALL PERSONS BY T	HESE PRESENTS:		
That we,			
as Principal, and			
Surety, are held and firml	ly bound unto the Awarding	g Authority, as Obligee, in th	e sum of
			Dollars
(words)			
\$			
(figures)			
		vell and truly to be made, ors, and assigns, jointly and s	•
	oal has made a Contract with for the construction of the	h the Obligee, bearing the da Project.	ate of
shall pay for all labor perf in all duly authorized m Contract that may be mad changes, or additions bei in, and to be subject to,	formed or furnished and for nodifications, alterations, de, notice to the Surety of s ing hereby waived, the fore	Principal and all Subcontrac rall materials used or emplo extensions of time, change uch modifications, alteratio going to include any other po §39A, and M.G.L. c.149, §29 ain in full force and virtue.	yed in said Contract and es, or additions to said ns, extensions of time, urposes or items set out
In witness whereof, the P	rincipal and Surety have se	t their hands and seals this _	day of20

PRINCIPAL	SURETY
(Name and Seal)	(Attorney-in-Fact - Seal)
(Title)	
Attest:	Attest:
The rate for this Bond is% for the first \$ total Premium for this Bond is \$	and% for the next \$ Th

**END OF DOCUMENT** 

### **SECTION 08 71 00**

### **DOOR HARDWARE**

### 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.

### 1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
  - 1. Swinging doors.
  - 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
  - 1. Mechanical door hardware.
  - 2. Electromechanical door hardware.
  - 3. Automatic operators.
  - 4. Cylinders specified for doors in other sections.

### C. Related Sections:

- 1. Division 01 Section "Sustainable Design Requirements" for additional LEED documentation and requirements.
- 2. Division 06 Section "Rough Carpentry".
- 3. Division 08 Section "Steel Doors".
- 4. Division 08 Section "Steel Door Frames".
- 5. Division 08 Section "Wood Doors".
- 6. Division 08 Section "Aluminum-Framed Entrances and Storefronts".
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
  - 1. ANSI A117.1 Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC International Building Code.
  - 3. NFPA 70 National Electrical Code.
  - 4. NFPA 80 Fire Doors and Windows.
  - 5. NFPA 101 Life Safety Code.
  - 6. NFPA 105 Installation of Smoke Door Assemblies.
  - 7. UL/ULC and CSA C22.2 Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
  - 8. State Building Codes, Local Amendments.

- E. Standards: All hardware specified herein shall comply with the following industry standards:
  - 1. ANSI/BHMA Certified Product Standards A156 Series
  - 2. UL10C Positive Pressure Fire Tests of Door Assemblies

### 1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
  - 3. Content: Include the following information:
    - a. Type, style, function, size, label, hand, and finish of each door hardware item.
    - b. Manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    - e. Explanation of abbreviations, symbols, and codes contained in schedule.
    - f. Mounting locations for door hardware.
    - g. Door and frame sizes and materials.
    - h. Warranty information for each product.
  - 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
  - 1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

- a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
- b. Complete (risers, point-to-point) access control system block wiring diagrams.
- c. Wiring instructions for each electronic component scheduled herein.
- 2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. Proof of Certification: Provide copy of manufacturer(s) official certification or accreditation document indicating proof of status as a qualified and authorized provider of the primary Integrated Wiegand Access Control Products.
- E. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.

### 1.4 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- D. Integrated Wiegand, Wireless, and IP-Enabled Access Control Products Supplier Qualifications: Integrated access control products and accessories are required to be supplied and installed through current members of the ASSA ABLOY "Authorized Channel Partner" (ACP) and "Certified Integrator" (CI) programs. Suppliers are to be factory trained, certified prior to project bid, and a direct purchaser of the specified product. Installers are to be factory trained,

certified prior to project bid, and are responsible for commissioning, servicing, and warranting the installed equipment specified for the project.

- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
  - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
  - 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings," Keying conference to incorporate the following criteria into the final keying schedule document:
  - 1. Function of building, purpose of each area and degree of security required.
  - 2. Plans for existing and future key system expansion.
  - 3. Requirements for key control storage and software.
  - Installation of permanent keys, cylinder cores and software. 4.
  - Address and requirements for delivery of keys. 5.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
  - 1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
  - 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
  - 3. Review sequence of operation narratives for each unique access controlled opening.
  - 4. Review and finalize construction schedule and verify availability of materials.
  - 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

### 1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

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- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

### 1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.
- D. Note: General Contractor must insure the low voltage wiring associated with the electromagnetic locks is installed to and in coordination with existing building fire alarm wiring.
  - G.C. must also insure 120 VAC power is installed to electrify <u>all</u> power supply devices required to operate electromechanical devices.

### 1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
  - 1. Structural failures including excessive deflection, cracking, or breakage.
  - 2. Faulty operation of the hardware.
  - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  - 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

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### D. Special Warranty Periods:

- 1. Ten years for mortise locks and latches.
- 2. Five years for exit hardware.
- 3. Twenty five years for manual surface door closer bodies.
- 4. Two years for electromechanical door hardware.

### 1.8 MAINTENANCE SERVICE

A. 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 door hardware.

### **PART 2 - PRODUCTS**

### 2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
- C. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.
- E. All visible screws are to be of a theft resistant design.

### 2.2 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.
  - 1. Quantity: Provide the following hinge quantity, unless otherwise indicated:
    - a. Two Hinges: For doors with heights up to 60 inches.
    - b. Three Hinges: For doors with heights 61 to 90 inches.
    - c. Four Hinges: For doors with heights 91 to 120 inches.

- For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge d. for every 30 inches of door height greater than 120 inches.
- 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
  - Widths up to 3'0": 4-1/2" standard or heavy weight as specified. a.
  - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
- 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
  - Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated a. bearing hinges unless Hardware Sets indicate standard weight.
  - Interior Doors: Standard weight, steel, ball bearing or oil impregnated b. bearing hinges unless Hardware Sets indicate heavy weight.
- 4. Hinge Options: Comply with the following where indicated in the Hardware Sets or on Drawings:
  - a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
- 5. Acceptable Manufacturers:
  - Bommer Industries (BO). a.
  - Hager Companies (HA). b.
  - McKinney Products (MK). c.
  - Stanley Hardware (ST). d.
- B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge, with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cutouts.
  - Acceptable Manufacturers: 1.
    - Bommer Industries (BO). a.
    - Hager Companies (HA). b.
    - McKinney Products (MK). c.
    - Pemko Manufacturing (PE). d.
    - Stanley Hardware (ST).

### 2.3 POWER TRANSFER DEVICES

Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex<sup>TM</sup> A. standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

- 1. Acceptable Manufacturers:
  - a. Hager Companies (HA) ETW-QC (# wires) Option.
  - b. McKinney Products (MK) QC (# wires) Option.
  - c. Stanley Hardware (ST) C Option.
- B. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex<sup>TM</sup> standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.
  - 1. Acceptable Manufacturers:
    - a. McKinney (MK) EPTL.
    - b. Securitron (SU) EL-CEPT Series.
    - c. Von Duprin (VD) EPT-10 Series.
- C. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to throughdoor wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.
  - 1. Provide one each of the following tools as part of the base bid contract:
    - a. McKinney Products (MK) Electrical Connecting Kit: QC-R001.
    - b. McKinney Products (MK) Connector Hand Tool: QC-R003.
  - 2. Acceptable Manufacturers:
    - a. McKinney Products (MK) QC-C Series.
    - b. Stanley Hardware (ST) WH Series.

### 2.4 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified.
  - 1. Manual flush bolts to be furnished with top rod of sufficient length to allow bolt location approximately six feet from the floor.
  - 2. Furnish dust proof strikes for bottom bolts.
  - 3. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.

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- 4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
- 5. Acceptable Manufacturers:
  - a. Burns Manufacturing (BU).
  - b. Door Controls International (DC).
  - c. Ives (IV).
  - d. Rockwood Manufacturing (RO).
  - e. Trimco (TC).
- B. Door Push Plates and Pulls: ANS/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
  - 1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
  - 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
  - 3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
  - 4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
  - 5. Acceptable Manufacturers:
    - a. Burns Manufacturing (BU).
    - b. Hiawatha, Inc. (HI).
    - c. Ives (IV).
    - d. Rockwood Manufacturing (RO).
    - e. Trimco (TC).

### 2.5 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
- C. Cylinders: Original manufacturer cylinders complying with the following:
  - 1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
  - 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
  - 3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
  - 4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.

- D. Permanent Cores: Manufacturer's standard; finish face to match lockset; complying with the following:
  - 1. Owner to receive keyed Final Cores from Sargent Manufacturing. Owner, accompanied by hardware supplier shall install permanent Cores and return ALL Const Cores to hardware supplier.
  - 2. Interchangeable Cores: Core insert, removable by use of a special key; usable with other manufacturers' cylinders.
- E. Patented Cylinders: ANSI/BHMA A156.5, Grade 1, certified cylinders employing a utility patented and restricted keyway requiring the use of patented controlled keys. Provide bump resistant, fixed core cylinders as standard with solid recessed cylinder collars. Cylinders are to be factory keyed where permanent keying records will be established and maintained.
  - 1. Provide a 6 pin multi-level master key system comprised of patented controlled keys and security and high security cylinders operated by one (1) key of the highest level. Geographical exclusivity to be provided for all security and high security cylinders and UL437 certification where specified.
    - a. Level 3 Cylinders: Provide utility patented controlled keyway and side bar locking incorporating unique angled bottom pins for geographical exclusivity. Cylinders to be UL437 certified and constructed to provide protection against bumping, picking, and drilling.
  - 2. Acceptable Manufacturers:
    - a. Sargent Manufacturing (SA) Degree Series.
    - b. Substitutions: Under provisions of Section 01600.
- F. Key Quantity: Provide the following minimum number of keys:
  - 1. Change Keys per Cylinder: Three (3).
  - 2. Master Keys (per Master Key Level/Group): Five (5).
  - 3. Construction Keys (where required): Ten (10).
  - 4. Construction Control Keys (where required): Two (2).
  - 5. Permanent Control Keys (where required): Two (2).
- G. Construction Keying: Provide temporary keyed construction cores.
- H. Key Registration List (Bitting List):
  - 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
  - 2. Provide transcript list in writing or electronic file as directed by the Owner.
- I. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.
  - 1. Acceptable Manufacturers:

- a. Lund Equipment (LU).
- b. MMF Industries (MM).
- c. Telkee (TK).
- J. Key Control Software: Provide one network version of "Key Wizard" branded key management software package that includes one year of technical support and upgrades to software at no charge. Provide factory key system formatted for importing into "Key Wizard" software.
- K. Hardware consultant shall meet with owner/architect to determine specific keying requirements and functions of locks.

### 2.6 MECHANICAL LOCKS AND LATCHING DEVICES

- A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 certified. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.
  - 1. Acceptable Manufacturers:
    - a. Corbin Russwin Hardware (RU) ML2000 Series.
    - b. Sargent Manufacturing (SA) 8200 Series.
    - c. Schlage (SC) L9000 Series.
- B. Knurling: Where required by local code provide knurling or abrasive coating to all levers on doors leading to hazardous areas such as mechanical rooms, boiler and furnace rooms, and as otherwise required or specified.

### 2.7 ELECTROMECHANICAL LOCKING DEVICES

- A. Electromechanical Mortise Locksets, Grade 1 (Heavy Duty): Subject to same compliance standards and requirements as mechanical mortise locksets, electrified locksets to be of type and design as specified below.
  - Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified
    options including: outside door lock/unlock trim control, latchbolt and lock/unlock status
    monitoring, deadbolt monitoring, and request-to-exit signaling. Support end-of-line
    resistors contained within the lock case. Unless otherwise indicated, provide electrified
    locksets standard as fail secure.
  - 2. Acceptable Manufacturers:
    - a. Corbin Russwin Hardware (RU) ML20900 Series.
    - b. Sargent Manufacturing (SA) 8200 Series.
    - c. Schlage (SC) L9000 EL/EU/RX Series.

## 2.8 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
  - 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
  - 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
  - 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
  - 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
  - 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
  - 2. Strikes for Bored Locks and Latches: BHMA A156.2.
  - 3. Strikes for Auxiliary Deadlocks: BHMA A156.5.
  - 4. Dustproof Strikes: BHMA A156.16.

### 2.9 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
  - 1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
  - 2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
  - 3. Except on fire rated doors, provide all exit devices with keyed cylinder dogging device to hold the pushbar and latch in a retracted position.
  - 4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
  - 5. Electromechanical Options: Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified in hardware sets. Include any specific controllers when conventional power supplies are not sufficient to provide the proper inrush current.
  - 6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

- a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
- b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
- 7. Vertical Rod Exit Devices: Provide and install interior surface and concealed vertical rod exit devices as Less Bottom Rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
- 8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
- 9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
- 10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
- 11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.
  - 1. Acceptable Manufacturers:
    - a. Corbin Russwin Hardware (RU) ED4000 / ED5000 Series.
    - b. Sargent Manufacturing (SA) 80 Series.
    - c. Stanley Precision (PR) Apex 2000 Series.
    - d. Von Duprin (VD) 35A/98 XP Series.

### 2.10 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
  - 1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
  - 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
  - 3. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.
  - 4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.

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- 5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
- Closers shall not be installed on exterior or corridor side of doors; where possible install 6. closers on door for optimum aesthetics. See notes for Interview Rooms 033, 118, 123 and 127 hardware set for installation on Corridor side.
- 7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates, and through-bolt and security type fasteners as required for proper installation.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
  - 1. Acceptable Manufacturers:
    - Corbin Russwin Hardware (RU) DC6000 Series. a.
    - LCN Closers (LC) 4040 Series. b.
    - Sargent Manufacturing (SA) 351 Series. c.
    - Norton Door Controls (NO) 7500 Series. d.

### 2.11 **AUTOMATIC DOOR OPERATORS**

- A. General: Provide operators of size recommended by manufacturer for door size, weight, and movement; for condition of exposure; and for compliance with UL 325. Coordinate operator mechanisms with door operation, hinges, and activation devices.
  - 1. Fire-Rated Doors: Provide door operators for fire-rated door assemblies that comply with NFPA 80 for fire-rated door components and are listed and labeled by a qualified testing agency.
- В. Electromechanical Door Operators: Self-contained units powered by permanent magnet DC motor, with closing speed controlled mechanically by gear train, connections for power, activation and safety device wiring, and manual operation including spring closing when power is off.
- C. Brackets and Reinforcements: Manufacturer's standard, fabricated from aluminum with nonferrous shims for aligning system components.
- Standard: Certified ANSI/BHMA A156.19. D.
  - 1. Performance Requirements:

- a. Opening Force if Power Fails: Not more than 15 lbf required to release a latch if provided, not more than 30 lbf required to manually set door in motion, and not more than 15 lbf required to fully open door.
- b. Entrapment Protection: Not more than 15 lbf required to prevent stopped door from closing or opening.
- E. Configuration: Surface mounted. Door operators to control single swinging and pair of swinging doors.
- F. Operation: Power opening and spring closing operation capable of meeting ANSI A117.1 accessibility guideline. Provide time delay for door to remain open before initiating closing cycle as required by ANSI/BHMA A156.19. When not in automatic mode, door operator to function as manual door closer with fully adjustable opening and closing forces, with or without electrical power.
  - 1. On-off switch to control power to be key switch operated.
- G. Features: Operator units to have full feature adjustments for door opening and closing force and speed, backcheck, motor assist acceleration from 0 to 30 seconds, time delay, vestibule interface delay, obstruction recycle, and hold open time from 0 up to 30 seconds.
- H. Provide outputs and relays on board the operator to allow for coordination of exit device latch retraction, electric strikes, magnetic locks, card readers, safety and motion sensors and specified auxiliary contacts.
- I. Activation Devices: Provide recessed flush with wall activation devices in accordance with ANSI/BHMA A156.19 standard, for condition of exposure indicated and for long term, maintenance free operation under normal traffic load operation. Coordinate activation control with electrified hardware and access control interfaces. Activation switches are standard SPST, with optional DPDT availability.
- J. Signage: As required by cited ANSI/BHMA A156.19 standard for the type of operator.
  - 1. Acceptable Manufacturers:
    - a. Horton Automatics (HO) 4000 Series.
    - b. LCN Closers (LC) 4640 Series.
    - c. Norton Door Controls (NO) 5900 X-in Series.
    - d. Stanley Access (ST) Magic Force Series.

#### 2.12 ARCHITECTURAL TRIM

- A. Door Protective Trim
  - 1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
  - 2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width

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and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

- 3. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:
  - a. Stainless Steel: 300 grade, 050-inch thick.
- 4. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
- 5. Acceptable Manufacturers:
  - a. Burns Manufacturing (BU).
  - b. Hager Companies (HA).
  - c. Ives (IV).
  - d. Rockwood Manufacturing (RO).
  - e. Trimco (TC).

#### 2.13 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
  - 1. Acceptable Manufacturers:
    - a. Hiawatha, Inc. (HI).
    - b. Ives (IV).
    - c. Rockwood Manufacturing (RO).
    - d. Trimco (TC).

#### 2.14 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- C. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

- D. Acceptable Manufacturers:
  - 1. National Guard Products (NG).
  - 2. Pemko Manufacturing (PE).
  - 3. Reese Enterprises, Inc. (RS).
  - 4. Zero International (ZI)

#### 2.15 ELECTRONIC ACCESSORIES

- A. Key Switches: Key switches furnished standard with stainless steel single gang face plate with a 12/24VDC bi-color LED indicator. Integral backing bracket permits integration with any 1 1/4" or 1 1/2" mortise type cylinder. Key switches available as momentary or maintained action and in narrow face plate options.
  - 1. Acceptable Manufacturers:
    - a. Security Door Controls (SD) 800 Series.
    - b. Securitron (SU) MK Series.
- B. Push-Button Switches: Industrial grade momentary or alternate contact, back-lighted push buttons with stainless-steel switch enclosures. 12/24 VDC bi-color illumination suitable for either flush or surface mounting.
  - 1. Acceptable Manufacturers:
    - a. Schalge Electronic (SC) 630 Series
    - b. Security Door Controls (SD) 400 Series.
    - c. Securitron (SU) PB Series.
- C. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.
  - 1. Acceptable Manufacturers:
    - a. Sargent Manufacturing (SA) 3280 Series.
    - b. Security Door Controls (SD) DPS Series.
    - c. Securitron (SU) DPS Series.
- D. Power Supplies: Provide Nationally Recognized Testing Laboratory Listed 12VDC or 24VDC (field selectable) filtered and regulated power supplies. Include battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
  - 1. Acceptable Manufacturers:
    - a. Sargent Manufacturing (SA) 3500 Series.

- b. Substitutions: Under provisions of Section 01600.
- E. Switching Power Supplies: Provide UL listed or recognized filtered and regulated power supplies. Provide single, dual, or multi-voltage units as shown in the hardware sets. Units must be expandable up to eight Class 2 power limited outputs. Units must include the capability to incorporate a battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
  - 1. Acceptable Manufacturers:
    - a. Securitron (SU) AQ Series.
    - b. Substitutions: Under provisions of Section 01600.

#### 2.16 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

## 2.17 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

## **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

## 3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

#### 3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
  - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
  - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
  - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
  - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
  - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

## 3.4 FIELD QUALITY CONTROL

A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

## 3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

#### 3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

#### 3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

### 3.8 DOOR HARDWARE SCHEDULE

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
- B. The supplier is responsible for handing and sizing all products as listed in the door hardware sets. Quantities listed are for each pair of doors, or for each single door.
- C. Provide tactile warning on the levers leading into the rooms of the following door openings: 005A, 025, 030, 031 and 131.

# Waltham Police Station Renovation Waltham, Massachusetts

## D. Manufacturer's Abbreviations:

- 1. MK McKinney
- 2. PE Pemko
- 3. HA Hager
- 4. RO Rockwood
- 5. SA Sargent
- 6. SU Securitron
- 7. HS HES
- 8. 00 Other
- 9. NO Norton
- 10. RF Rixson

# **Door Hardware Schedule**

Set:	1.0
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Description: ALUM MAIN ENTRY

4 Core	DG3 6300 VKC	US15	SA
2 Position Switch	DPS-MorW-GY PER DOOR MATERIAL		SU
2 Door Switch	502		NO

## **Set: 2.0**

1 Continuous Hinge	CFM83HD1		PE
1 Storage Lockset	DG364 8226 LNL	US32D	SA
2 CoreS	DG3 6300 VKC	US15	SA
1 Closer	351 CPS	EN	SA
1 Position Switch	DPS-MorW-GY PER DOOR MATERIAL		SU

## **Set: 3.0**

Description: STAIR

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Exit Device	12 43 8813 ETL	US32D	SA
1 Closer	351 P10 or O10 AS SPECIFIED	EN	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO

## **Set: 4.0**

1 Continuous Hinge	CFM83HD1 EL-CEPTx32D		PE	
1 Electric Exit Device	DG364 LD 43 8876-24v ET	L US32D		SA
1 Core	DG3 6300 VKC	US15	SA	
1 Closer	351 CPS	EN	SA	
1 ElectroLynx Harness	QC-C1500P		MK	
1 ElectroLynx Harness	QC-Cxxx LENGTH AS REQUIRED		MK	
1 CARD READER	PROVIDED BY SECURITY VENDOR	US32D	00	
Position Switch	DPS-MorW-GY PER DOOR MATERIAL		SU	
1 Power Supply	AQD6		SU	

Notes: DOOR NORMALLY LOCKED AND CLOSED. ENTRY BY CARD ACCESS OR MANUAL KEY OVERRIDE. FREE EGRESS AT ALL TIMES.

## **Set: 5.0**

Description: CARD ACCESS HARDWIRED

1 Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK
2 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
Access 1 Control Mort Lock	DG364 91 IN120-7978 IPS MB BL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
1 Closer	351 P10 or O10 AS SPECIFIED	EN	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO
1 Power Supply	3267		SA

# **Set: 6.0**

Description: CLASSROOM SET

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Classroom Lock	DG364 8237 LNL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO

## **Set: 7.0**

Description: CARD ACCESS HARDWIRED, DUTCH DOOR

1 Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK
2 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
Access 1 Control Mort Lock	DG364 91 IN120-7978 IPS MB BL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO
1 Power Supply	3267		SA
Dead bolt			

Door Hardware

# **Set: 8.0**

Description: STOREROOM

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Storeroom Lock	DG364 8204 LNL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO

## Set: 9.0

Description: STOREROOM

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Storeroom Lock	DG364 8204 LNL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
1 Closer	351 P10 or O10 AS SPECIFIED	EN	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO

# **Set: 10.0**

Description: OFFICE SET

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Office Lock	DG364 8205 LNL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO

# **Set: 11.0**

Description: OFFICE SET with CLOSER

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFI	ED US26D	MK	
1 Office Lock	DG364 8205 LNL	US26D		SA
1 Core	DG3 6300 VKC	US15	SA	
1 Closer	351 P10 or O10 AS SPECIFIED	EN	SA	
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO	С

## **Set: 12.0**

Description: SINGLE USE RESTROOM

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Privacy Set	49 - 8265 LNL	US26D	SA
1 Closer	351 P10 or O10 AS SPECIFIED	EN	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO
1 Gasketing	S88W		PE

# **Set: 13.0**

Description: PUSH/PULL

3 Hinge (heavy weight)	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1 Push Pull	111x73C/73CL	US32D	RO
1 Closer	351 P10 or O10 AS SPECIFIED	EN	SA
1 Kick Plate	K1050 10" high 4BE CSK	US32D	RO
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO

# **Set: 14.0**

Description: PAIR LOCKABLE

5 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK
2 Flush Bolt	557	US26D	RO
1 Dust Proof Strike	570	US26D	RO
Access 1 Control Mort Lock	DG364 91 IN120-7978 IPS MB BL	US26D	SA
1 Core	DG3 6300 VKC	US15	SA
2 Closer	351 P10 or O10 AS SPECIFIED	EN	SA
2 Kick Plate	K1050 10" high 4BE CSK	US32D	RO
2 Overhead Door Stops	446 OR 401 AS CONDITIONS PERMIT	US26D	RO
1 Power Supply 3267			

# Set: 15.0

Description: PASSAGE SET

3 Hinge	TA2714 4-1/2" x 4-1/2" OPTIONS AS SPECIFIED	US26D	MK
1 Passage Set	DG364 8215 LNL	US26D	SA
1 Door Stop	446 OR 401 AS CONDITIONS PERMIT	US26D	RO

## **Set: 16.0**

Description: OVERHEAD DOOR - CYLINDER ONLY

1 Cylinder	DG364 42 112	US32D SA	
1 Core	DG3 6300 VKC	US15	SA

Notes: DOOR POSITION SWITCHES BY OVERHEAD DOOR SUPPLIER. COORDINATE CYLINDER SIZE FOR USE WITH OVERHEAD DOOR.

## **Set: 17.0**

3	Hinge	TA2714 4-1/2" x 4 OPTIONS AS SPECIFIED	l-1/2" US2	6D	MK 3
1	Access Control Mort Lock	DG364 91 IN120- IPS MB BL	7978 US2	6D SA	
1	Core	DG3 6300 VKC	US1	5 SA	
1	Autom Operat	atic 5930 or 5910 or 698	0 AS CONDI NO	TIONS REQ	UIRE
1	ElectroLyn: Harness	X Q	C-C1500P		MK
1	ElectroLyn: Harness	X L	C-Cxxx ENGTH AS EQUIRED		MK
1	Closer	351 CPS	EN	SA	
1	Kick Plate	K1050 10" high 4H	BE CSK US3	2D RO	
1	CARD READER	PROVIDED BY SECURITY VENI	OOR US3	2D 00	
1	Position Switch	DPS-MorW-GY P DOOR MATERIA		SU	
1	Power Supply	AQD6		SU	

Notes: DOOR NORMALLY CLOSED AND LOCKED. ENTRY BY MECHANICAL KEY, AUTO OPERATION WHEN OUTSIDE ACTUATOR IS ENGAGED BY SECURITY SYSTEM OR VIA CARD ACCESS WHICH ENERGIZES OUTSIDE LEVER. FREE EGRESS AT ALL TIMES.

END OF SECTION