674A4-21-108, G001, 02/23/21.pdf

Department of Veterans Affairs

Fire Alarm Campus Upgrade
100% BID SET
674A4-21-108

Waco VA Medical Center
4800 Memorial Drive
Waco, TX 76711
Volume 1

SHEET NUMBER	SHEET NAME	35%	65%	100%	100% FINAL
GENERAL:					
GI001	COVER SHEET		X	X	X
GI002	SITE ORIENTATION PLAN			X	X
GI003	PENETRATION DETAILS				X
FIRE PROTECTION:					
2-FA101	BUILDING 2 - FIRE ALARM PLAN - BASEMENT LEVEL		X	X	X
2-FA102	BUILDING 2 - FIRE ALARM PLAN - LEVEL 1		X	X	X
2-FA103	BUILDING 2 - FIRE ALARM PLAN - LEVEL 2		X	X	X
4-FA001	BUILDING 4 - FIRE ALARM GENERAL NOTES AND DETAILS		X	X	X
4-FA101	BUILDING 4 - FIRE ALARM PLAN - BASEMENT LEVEL		X	X	X
4-FA102	BUILDING 4 - FIRE ALARM PLAN - LEVEL 1		X	X	X
5-FA001	BUILDING 5 - FIRE ALARM GENERAL NOTES AND DETAILS		X	X	X
5-FA101	BUILDING 5 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
5-FA102	BUILDING 5 - FIRE ALARM PLAN - LEVEL 1			X	X
5-FA103	BUILDING 5 - FIRE ALARM PLAN - LEVEL 2			X	X
6-FA100	BUILDING 6 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
6-FA101	BUILDING 6 - FIRE ALARM PLAN - LEVEL 1			X	X
6-FA102	BUILDING 6 - FIRE ALARM PLAN - LEVEL 2			X	X
6-FA103	BUILDING 6 - FIRE ALARM PLAN - LEVEL 3			X	X
7-FA001	BUILDING 7 - FIRE ALARM GENERAL NOTES AND DETAILS			X	X
7-FA101-A&B	BUILDING 7 - FIRE ALARM PLAN - BASEMENT AREA A&B			X	X
7-FA101-C	BUILDING 7 - FIRE ALARM PLAN - BASEMENT AREA C			X	X
7-FA102-A&B	BUILDING 7 - FIRE ALARM PLAN - LEVEL 1 AREA A&B				X
7-FA102-C	BUILDING 7 - FIRE ALARM PLAN - LEVEL 1 AREA C				X
7-FA103-A&B	BUILDING 7 - FIRE ALARM PLAN - LEVEL 2 AREA A&B				X
7-FA103-C	BUILDING 7 - FIRE ALARM PLAN - LEVEL 2 AREA C			X	X
8-FA001	BUILDING 8 - FIRE ALARM GENERAL NOTES AND DETAILS			X	X
8-FA101	BUILDING 8 - FIRE ALARM PLAN – BASEMENT LEVEL			X	X
8-FA102	BUILDING 8 - FIRE ALARM PLAN – LEVEL 1			X	X
8-FA103	BUILDING 8 - FIRE ALARM PLAN – LEVEL 2			X	X
15-FA101	BUILDING 15 - FIRE ALARM PLAN - LEVEL 1			X	X
16-FA101	BUILDING 16 - FIRE ALARM PLAN - LEVEL 1			X	X
17-FA101	BUILDING 17 - FIRE ALARM PLAN - LEVEL 1			X	X
18-FA101	BUILDING 18 - FIRE ALARM PLANS			X	X
24-FA101	BUILDING 24 - FIRE ALARM PLAN - LEVEL 1			X	X
90-FA001	BUILDING 90 - FIRE ALARM GENERAL NOTES AND DETAILS			X	X
90-FA101	BUILDING 90 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
90-FA102	BUILDING 90 - FIRE ALARM PLAN - LEVEL 1			X	X
90-FA103	BUILDING 90 - FIRE ALARM PLAN - LEVEL 2			X	X
92-FA001	BUILDING 92 - FIRE ALARM GENERAL NOTES AND DETAILS			X	X
92-FA101	BUILDING 92 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
92-FA102	BUILDING 92 - FIRE ALARM PLAN - LEVEL 1			X	X
92-FA103	BUILDING 92 - FIRE ALARM PLAN - LEVEL 2			X	X
93-FA001	BUILDING 93 - FIRE ALARM GENARL NOTES AND DETAILS			X	X
93-FA101	BUILDING 93 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
93-FA102	BUILDING 93 - FIRE ALARM PLAN - LEVEL 1			X	X
93-FA103	BUILDING 93 - FIRE ALARM PLAN - LEVEL 2			X	X
94-FA001	BUILDING 94 - FIRE ALARM GENERAL NOTES AND DETAILS			X	X
94-FA101	BUILDING 94 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
94-FA102	BUILDING 94 - FIRE ALARM PLAN - LEVEL 1			X	X
99-FA101	BUILDING 99 - FIRE ALARM PLAN - BASEMENT LEVEL & LEVEL 1			X	X
202-FA101	BUILDING 202 - FIRE ALARM PLAN - LEVEL 1			X	X
216-FA101	BUILDING 216 - FIRE ALARM PLAN - BASEMENT & LEVEL 1			X	X
219-FA101	BUILDING 219 - FIRE ALARM PLAN - BASEMENT LEVEL			X	X
222-FA101	BUILDING 222 - FIRE ALARM PLAN - LEVEL 1			X	X
224-FA101	BUILDING 224 - FIRE ALARM PLAN - LEVEL 1			X	X
225-FA100	BUILDING 225 - FIRE ALARM PLAN – BASEMENT			X	X
225-FA101	BUILDING 225 - FIRE ALARM PLAN – LEVEL 1			X	X
225-FA102	BUILDING 225 - FIRE ALARM PLAN – LEVEL 2			X	X
226-FA001	BUILDING 226 - FIRE ALARM GENERAL NOTES AND DETAILS			X	X
226-FA101	BUILDING 226 - FIRE ALARM PLAN - LEVEL 1			X	X
226-FA102	BUILDING 226 - FIRE ALARM PLAN - MEZZANINE LEVEL			X	X
				X	X
ELECTRICAL:					X
2-E101	BUILDING 2 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
4-E101	BUILDING 4 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
5-E101	BUILDING 5 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
6-E101	BUILDING 6 - ELECTRICAL PLAN – LEVEL 1			X	X
7-E101	BUILDING 7 - ELECTRICAL PLAN – BASEMENT AREA			X	X
8-E101	BUILDING 8 - ELECTRICAL PLAN – LEVEL 1			X	X
15-E101	BUILDING 15 - ELECTRICAL PLAN – LEVEL 1			X	X
16-E101	BUILDING 16 - ELECTRICAL PLAN – LEVEL 1			X	X
17-E101	BUILDING 17 - ELECTRICAL PLAN – LEVEL 1			X	X
18-E101	BUILDING 18 - ELECTRICAL PLAN – LEVEL 1			X	X
24-E101	BUILDING 24 - ELECTRICAL PLAN – LEVEL 1			X	X
90-E101	BUILDING 90 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
92-E101	BUILDING 92 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
93-E101	BUILDING 93 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
94-E101	BUILDING 94 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
99-E101	BUILDING 99 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
202-E101	BUILDING 202 - ELECTRICAL PLAN – LEVEL 1			X	X
216-E101	BUILDING 216 - ELECTRICAL PLAN – LEVEL 1			X	X
219-E101	BUILDING 219 - ELECTRICAL PLAN – BASEMENT LEVEL			X	X
222-E101	BUILDING 222 - ELECTRICAL PLAN – LEVEL 1			X	X
224-E101	BUILDING 224 - ELECTRICAL PLAN – LEVEL 1			X	X
225-E101	BUILDING 225 - ELECTRICAL PLAN – LEVEL 1			X	X
226-E101	BUILDING 226 - ELECTRICAL PLAN – LEVEL 1			X	X

Above finished floor	AFF	Footing	FTG	Project	PROJ
Acoustic	ACST	Foundation	FDN	Property	PROP
Acoustic Panel Ceiling	APC	Furnish(ed), furniture	FURN	Public Address	PA
Addendum	ADD	Furring	FURR	Quality control	QC
Alternate	ALT	Gage (gauge)	GA	Quality	QUAL
Aluminum	AL	Galvanize(d)	GALV	Quantity	QTY
Angle	L	Galvanized Iron	GALVI	Quarry Tile	QT
Approximate	APPROX	Glazed Wall Tile	GWT	Radius	RAD
Architecture, architectural	ARCH	Grab Bar	GB	Rain Leader	RL
Asbestos	ASB	Grade	GR	Received	RCVD
Asphalt	ASPH	Gravel	GVL	Receptacle	RCPT
Assistant	ASST	Gypsum Wallboard	GWB	Receptionist	RECPT
Association	ASSN	Gypsum	GYP	Recess(ed)	REC
Automatic	AUTO	Handicapped	HC	Refer, reference	REF
Average	AVG	Hardware	HDW	Refrigerate, refrigerator	REFR
Base plate	BP	Heating ventilating and air conditioning	HVAC	Reinforce	REINF
Basement	BSMT			Reinforced concrete	RC
Beam	BM	Height	HGT	Remove	RMV
Bearing	BRG	High Point	HPT	Repair	RPR
Bedroom	BR	High Performance	HP	Required	REQD
Benchmark	BM	High Performance Coating	HPC	Revise, revison	REV
Board	BD	Hollow Metal	HM	Right hand	RH
Boiler	BLR	Horizontal	HORIZ	Road	RD
Bottom	BOT	Include(d), inclusive	INCL	Roof Drain	RD
Brick	BRK	Incorporated	INC	Roof	RF
Building line	BL	Information	INFO	Roofing	RFG
Building	BLDG	Inside diameter	ID	Room	RM
Built-up-roof	BUR	Install(ed), installation	INSTL	Rubber tile floor	RTF
Cabinet	CAB	Insulation	INSUL	Rubber	RBR
Carpet	CPT	Interior	INT	Schedule	SCHED
Catalog	CAT	Janitor	JAN	Schematic	SCHEM
Ceiling height	CH	Joint	JT	Section	SECT
Ceiling	CLG	Joist	J, JST	Service	SVCE
Center	CTR	Junction box	JB	"Sheet, sheeting"	SHT
Centerline	CL	Knock down	KD	Shower	SH
Ceramic Tile	CT	Laboratory	LAB	Siding	SDG
Ceramic	CER	Lavatory	LAV	Similar	SIM
Chalkboard	CB	Left Hand	LH	Slope	SL
Clear	CLR	Left	L	Sound-transmission class	STC
Closet	CLO	Length	LG	South	S
Coated	CTD	Level	LVL	Speaker	SPKR
Cold rolled	CR	Light	LT	Specification	SPEC
Column	COL	Machine	MACH	Sprinkler	SPR
Company	CO	Maintenance	MAINT	Square	SQ
Composition	COMP	Manager	MGR	Stainless steel	SS
Concrete Masonry Unit	CMU	Manual	MNL	Standard	STD
Concrete	CONC	Manufacturing	MFG	Standpipe	SP
Construction joint	CJ	Markerboard	MB	Steel	STL
Construction	CONSTR	Masonry opening	MO	Storage	STOR
"Continue, Continuous"	CONT	Masonry	MSNRY	Structural Glazed Facing Tile	SGFT
Corridor	CORR	Master bedroom	MBR	Structural, structure	STRUCT
Countersink	CSK	Material	MATL	Substitute	SUBST
Cubic	CU	Maximum	MAX	Surface	SURF
Curve(d)	CRV	Mechanical	MECH	Suspend(ed)	SUSP
Dampproofing	DP	Membrane	MEMB	Switch	SW
Degree	DEG	Men	M	Symmetrical	SYM
Department(al)	DEPT	Metal	MET, MTL	System	SYS
Detail	DET	Mezzanine	MEZZ	Tackboard	TB
Diagonal	DIAG	Minimum	MIN	Tackstrip	TS
Diameter	DIA	Mirror	MIR	Telephone	TEL
Dimension	DIM	Miscellaneous	MISC	Television	TV
Dishwasher	DW	Mounted	MTD	Temporary	TEMP
Dispenser	DISP	Mounting	MTG	Terrazzo	TER
Door	DR	Necessary	NEC	Thick	THK
Double	DBL	Noise-reduction coefficient	NRC	Through	THRU
Double-hung	DH	Nominal	NOM	Toilet	T
Down	DN	Non Combustible	NC, NONCOM	Tongue and groove	T&G
Downspout	DS	North	N	Top and bottom	T&B
Drain	DR	Not in Contract	NIC	Top chord	TC
Drawing	DWG	Not to scale	NTS	Top of Masonry Parapet	TMP
Each	EA	Not available	NA	Top of Bearing	TOFB
East	E	Number	NO	Top of Steel	T.O.S.
Electric Water Cooler	EWC	Office	OFF	Topping	TOPG
"Electric, electrical"	ELEC	On center	OC	Total	TOT
Elevation	EL	Opening	OPNG	Transformer	XFMR
Elevator	ELEV	Opposite	OPP	Transom	TR
Engineer	ENGR	Outside diameter	OD	Transparent	TRANS
Entrance	ENTR	Overall	OA	Tread	TRD
Equal	EQ	Overhead	OVHD	Threshold	THRESH
Equipment	EQUIP	Page	P	Typical	TYP
Exhaust	EXH	Painted	PTD	Underground	UG
Existing	EXIST	Pair	PR	Underwriters Laboratories	UL
Expansion joint	EXP JT	Panel	PNL	Unfinished	UNF
Exposed	EXP	Partition	PTN	Unit Ventilator	UV
Exterior	EXT	Percent	PCT	Unless Otherwise Noted	UON
Fabricate	FAB	Perforate(d)	PERF	Urinal	UR
Face of Stud	F. OF S.	Permanent	PERM	US Gypsum Company	USG
Fan Coil Unit	FCU	Perpendicular	PERP	Vertical	VERT
Fiberglass-reinforced plastics	FRP	Piece	PC	Vestibule	VEST, V
Finish	FIN	Plastic Laminate	PLAM	Vinyl Reducing Strip	VRS
Finished Floor	FF	Plastic Laminate	PLAS.LAM	Vinyl Composite Tile	VCT
Fire Extinguisher	FE	Plate	PL	Vinyl asbestos tile	VAT
Fire Extinguisher & Cabinet	FEC	Plumbing	PLMB	Wardrobe	WARD
Fire Retardant Treated	FRT	Plywood	PLYWD	Water closet	WC
Fireproof	FPRF	Point	PT	Waterproof	WP
Fixture	FXTR	Polyvinyl chloride	PVC	Weight	WT
Flange	FLG	Precast	PRCST	Welded	WLD
Flashing	FL	Prefabricated	PREFAB	Welded Wire Mesh	WWM
Floor	FL	Preliminary	PRELIM	With	WI
Floor drain	FD	Preparation, prepare	PREP	Without	W/O
Flooring	FLG	Program	PRGM	Women	W
Fluorescent	FLUOR	Projection Screen	PS	Wood	WD
				Wrought Iron	WI

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
136314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: COVER SHEET

Submission: 100% BID SET

Building:

Checked By: MAR

Drawn By: JLH

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: 4800 MEMORIAL DRIVE, WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

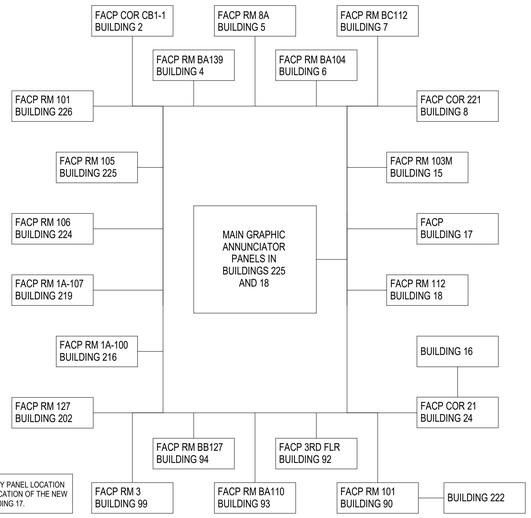
Drawing Number: G001

Drawing 1 of 83

674A4-21-108, G002, 06/25/21.pdf

Building #	Building Name
2	ADMINISTRATIVE
4	OUTPATIENT CLINIC/LAB CLINIC
5	PHARMACY/EDUCATION
6	AUDITORIUM
7	BLIND REHAB UNIT/VACANT
8	FUTURE ACUTE MENTAL HEALTH/PARTIAL OCCUPANCY
15	VBA
16	GARAGE MISC.
17	CONSOLIDATED LAUNDRY/FUTURE A&MM/VACANT
18	POLICE
24	F.M.S./SHOPS
90	PHARMACY CALL CENTER
92	VA FINANCIAL CENTER
93	FUTURE CENTER OF EXCELLENCE
94	INPATIENT PSYCH
99	FMS SHOPS
202	DIETETICS
216	CENTRAL CHILLER
219	PHYSICAL THERAPY
222	RADIO EQUIPMENT
224	SAFETY
225	ENERGY PLANT
226	LAUNDRY

N TRUE NORTH



NOTE: CONTRACTOR TO VERIFY PANEL LOCATION ON SITE AND COORDINATE LOCATION OF THE NEW PANEL WITH EXISTING IN BUILDING 17.

A5 CAMPUS RISER DIAGRAM

SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:

LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:

HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:

CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:

STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: SITE ORIENTATION PLAN

Submission: 100% BID SET

Building:

Checked By: MAR

Drawn By: JLH

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

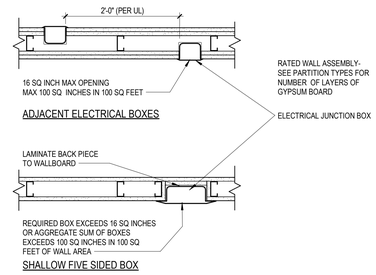
Project Location: 4800 MEMORIAL DRIVE, WACO, TX 76711

VA Project Number: 674A4-21-108

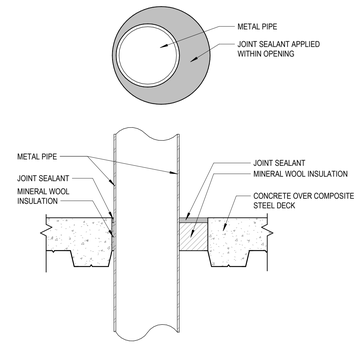
Issue Date: 6/25/2021

Drawing Number: G002

Drawing 2 of 83

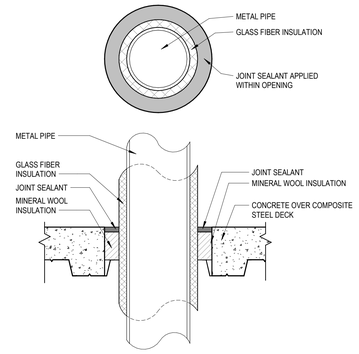


F9 ELECTRICAL JUNCTION BOX DETAIL
SCALE: NTS



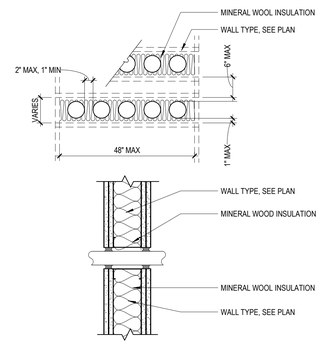
FLOOR PIPE PENETRATION
UL No: F-L-1020

F6 PENETRATION DETAIL
SCALE: NTS



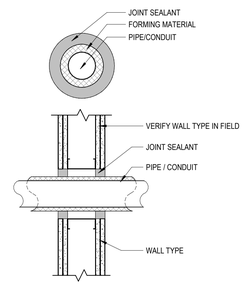
FLOOR PIPE PENETRATION
UL No: F-L-5014

F3 PENETRATION DETAIL
SCALE: NTS



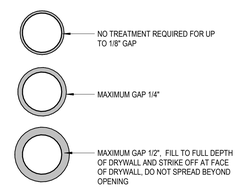
MULTIPLE CONDUIT/PIPE PENETRATIONS
UL No: W-L-1063

D9 PENETRATION DETAIL
SCALE: NTS



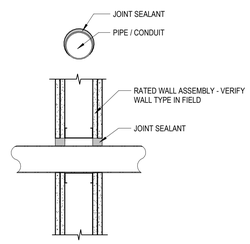
SINGLE CONDUIT/PIPE PENETRATION
UL No: W-L-5044

D6 PENETRATION DETAIL
SCALE: NTS



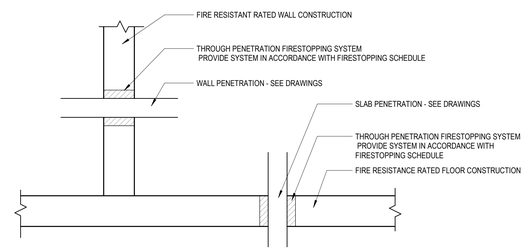
SMALL PENETRATIONS IN PARTITIONS
RATED UP TO 2 HOURS

D3 PENETRATIONS
SCALE: NTS



SINGLE CONDUIT/PIPE PENETRATION
UL No: W-L-1063

A9 PENETRATION DETAIL
SCALE: NTS



A5 THROUGH PENETRATION FIRESTOP SYSTEM KEY
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: PENETRATION DETAILS
Submission: 100% BID SET
Building:
Checked By: DLO
Drawn By: EWM

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: 4800 MEMORIAL DRIVE, WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: GI003
Drawing 3 of 83

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024-10122-000, 2, FA101, 08/31/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	PARTIALLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTION THROUGHOUT*, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

* SMOKE DETECTION IS SHOWN THROUGHOUT BUILDING BUT NEED ONLY BE INSTALLED WHERE THERE IS NO SPRINKLER DETECTION. ADDITIONALLY, IF FULL SPRINKLERED PROTECTION IS PROVIDED AS PART OF A SEPARATE PROJECT, SMOKE DETECTION DEVICES MAY BE REDUCED PER NFPA 72.

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
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14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
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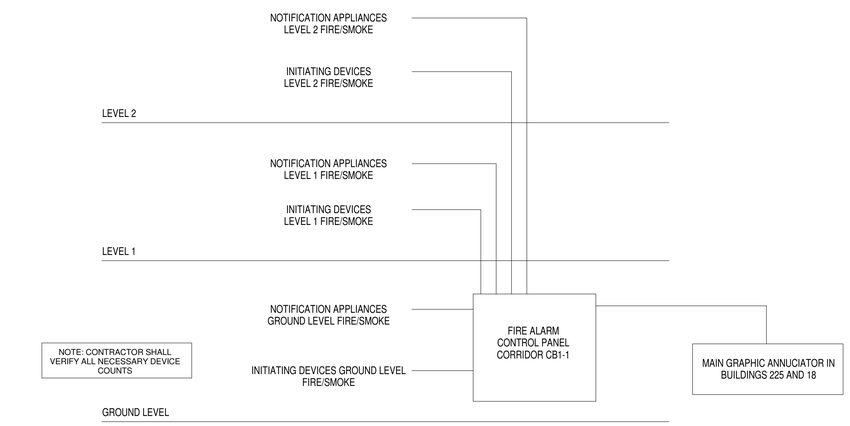
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.

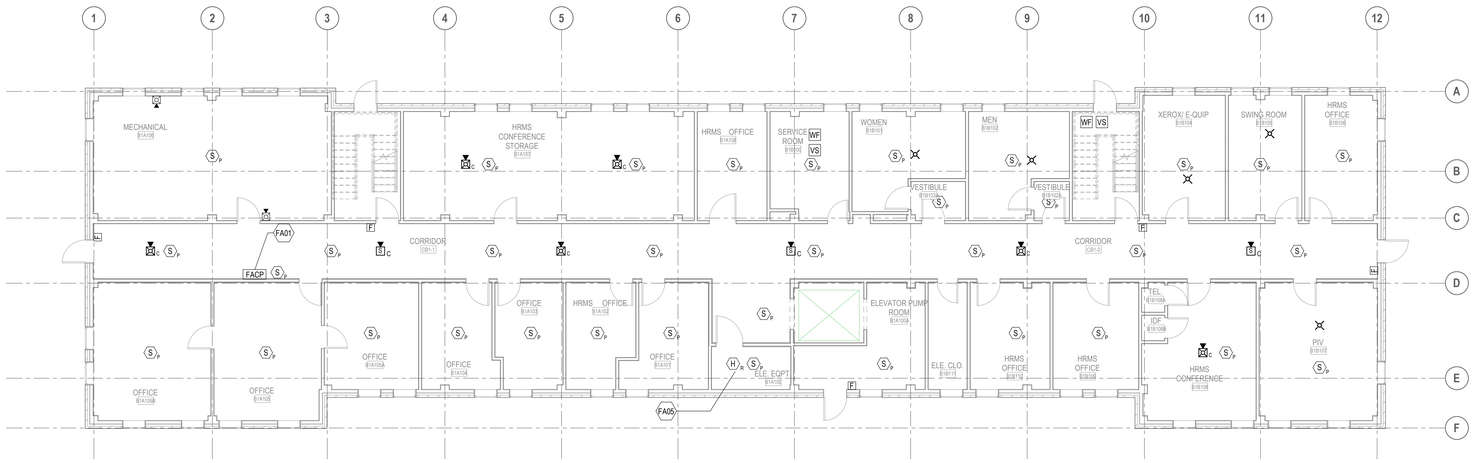
KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.



NOTE: CONTRACTOR SHALL VERIFY ALL NECESSARY DEVICE COUNTS

F11 **BUILDING 2 - FIRE ALARM RISER DIAGRAM**
SCALE: NTS



A13 **BUILDING 2 - FIRE ALARM PLAN - BASEMENT LEVEL**
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ 126314 6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
2	MAR	JLH	PARTIALLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 2 - ADMINISTRATIVE
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 2-FA101

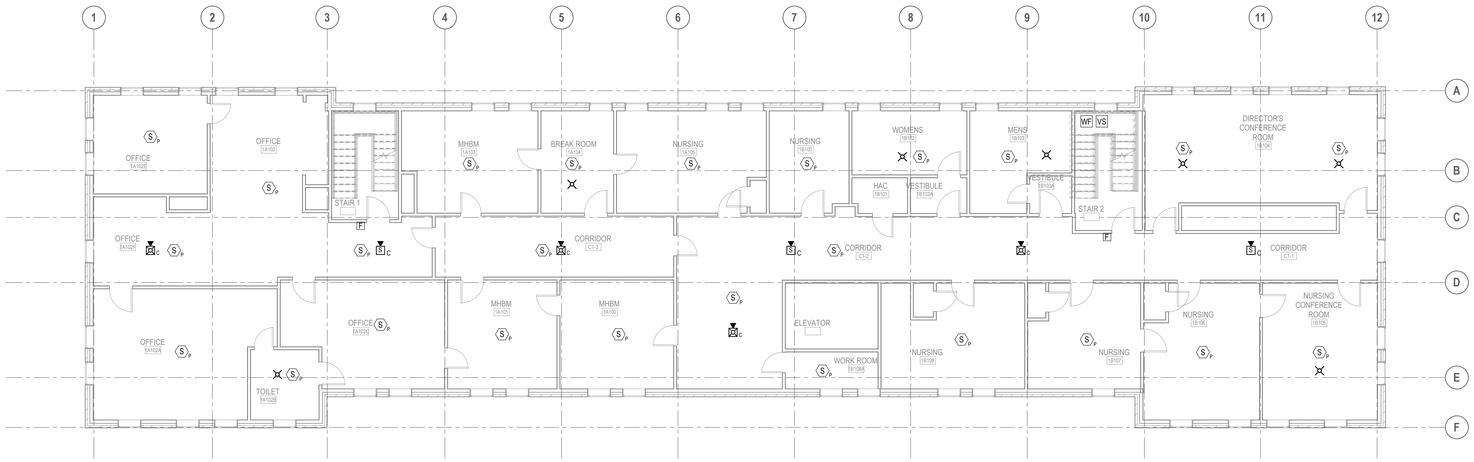
Drawing 4 of 83

024-10122-000, 2, FA102, 12/26/20.pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND



A13 BUILDING 2 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
1263114
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET	Project Location: BUILDING 2 - ADMINISTRATIVE, 4800 MEMORIAL DRIVE, WACO, TX 76711	Issue Date: 6/25/2021
Building: 2 · Checked By: MAR · Drawn By: JLH · PARTIALLY SPRINKLERED		Drawing Number: 2-FA102
		Drawing 5 of 83

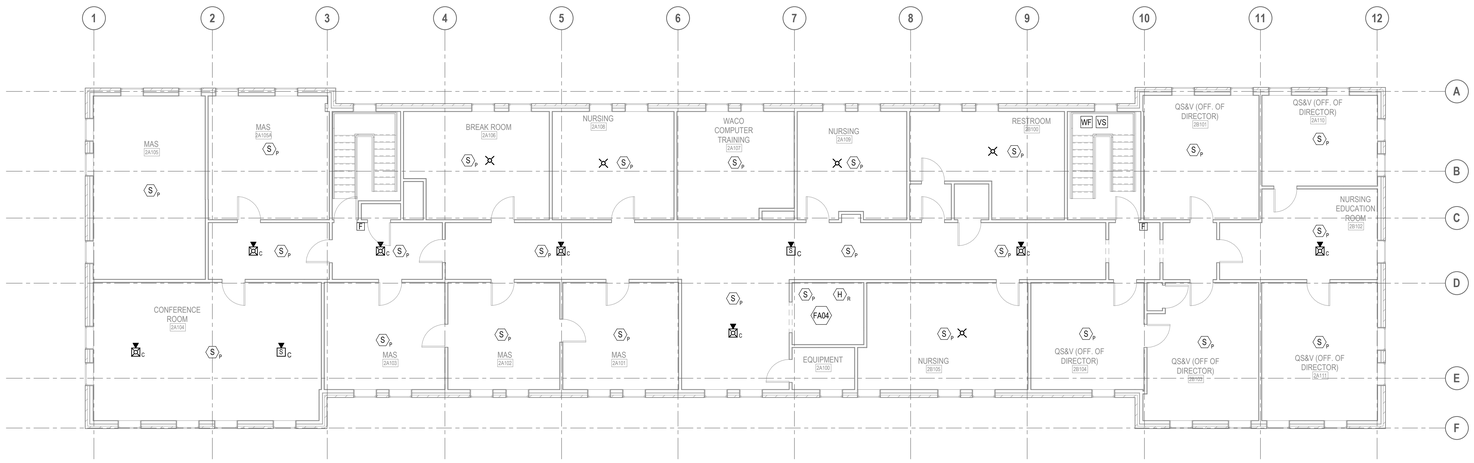
024-10122-000, 2, FA103, 12/26/20.pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS



A13 BUILDING 2 - FIRE ALARM PLAN - LEVEL 2
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

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ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 2	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 2 / Checked By: MAR / Drawn By: JLH / PARTIALLY SPRINKLERED	Project Location: BUILDING 2 - ADMINISTRATIVE 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 2-FA103
		Drawing 6 of 83

024-10122-000, 4, FA001, 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE ASSOCIATE FIRE DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
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	SWITCHES
WF	FLOW DETECTOR/SWITCH
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VS	VALVE SUPERVISORY SWITCH
	PANELS
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CODE DATA

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FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

* SMOKE DETECTION IS SHOWN THROUGHOUT BUILDING BUT NEED ONLY BE INSTALLED WHERE THERE IS NO SPRINKLER DETECTION. ADDITIONALLY, IF FULL SPRINKLERED PROTECTION IS PROVIDED AS PART OF A SEPARATE PROJECT, SMOKE DETECTION DEVICES MAY BE REDUCED PER NFPA 72.

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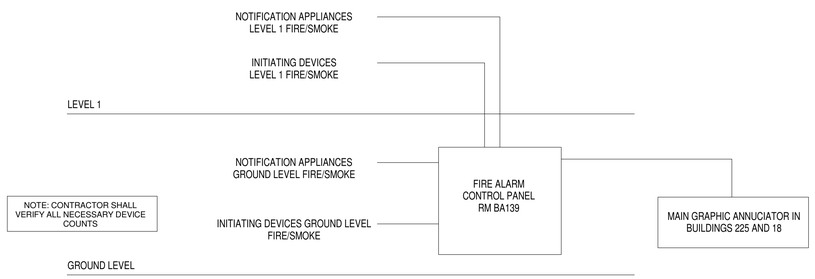

A6 BUILDING 4 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
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POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
12620114
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS

Submission: 100% BID SET

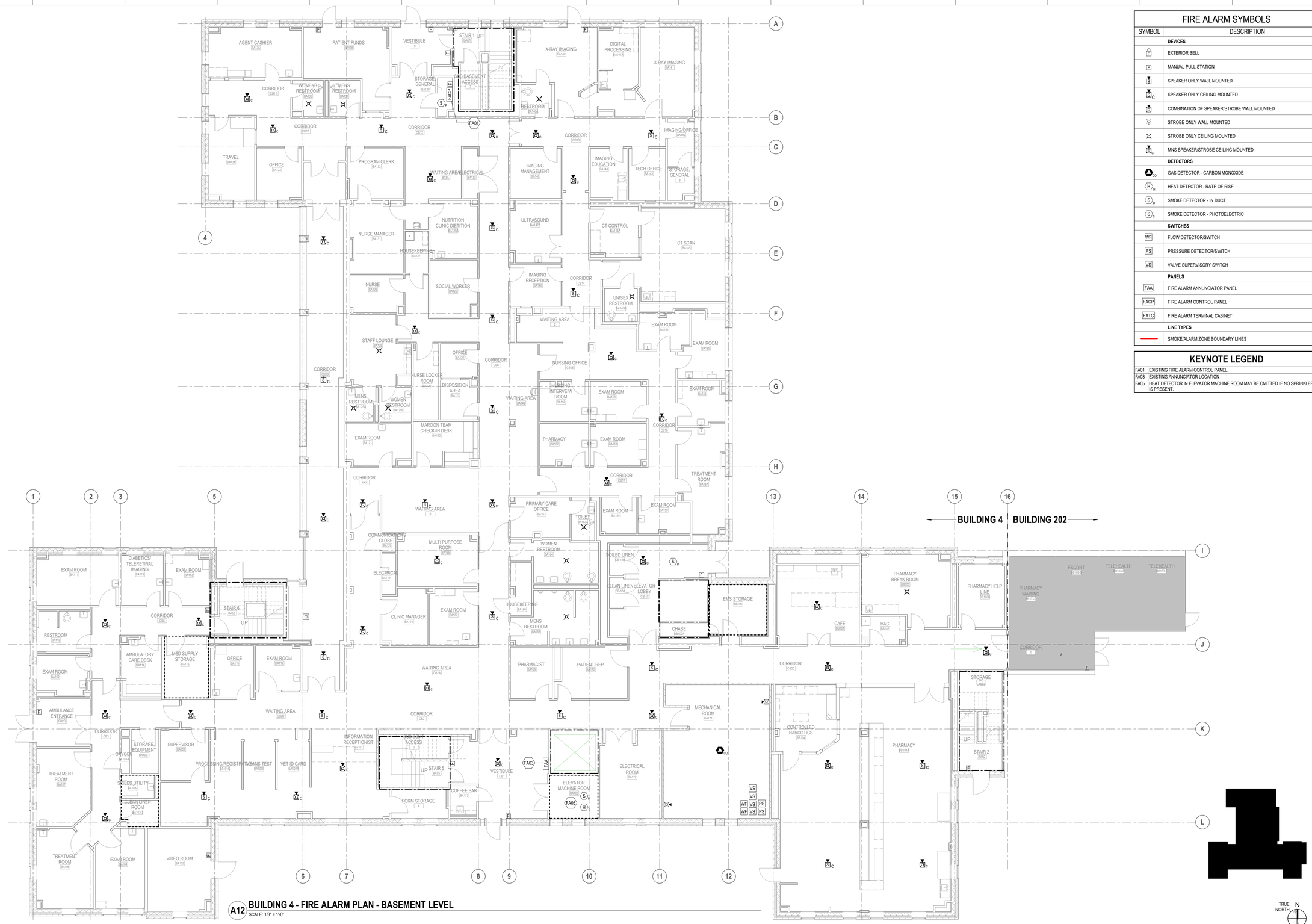
Building:	Checked By:	Drawn By:	
4	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 4 - OPC / PHARM. / LAB / RAD.
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 4-FA001
Drawing 7 of 83

024-10122-000, 4, FA101, 08/31/20.pdf



A12 **BUILDING 4 - FIRE ALARM PLAN - BASEMENT LEVEL**
SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA03	EXISTING ANNUNCIATOR LOCATION
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
REGISTERED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
4	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 4 - OPC / PHARM. / LAB / RAD.
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 4-FA101

Drawing 8 of 83

024-10122-000, 4, FA102, 12/08/20,pdf

A12 **BUILDING 4 - FIRE ALARM PLAN - LEVEL 1**
SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
	EXTERIOR BELL
	MANUAL PULL STATION
	SPEAKER ONLY WALL MOUNTED
	SPEAKER ONLY CEILING MOUNTED
	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
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	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.
FA06	PROVIDE FIRE ALARM DEVICES IN THE CEILING SPACE

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

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HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

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421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
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Drawing Number: 4-FA102

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024-10122-000, 5, FA001, 02/17/21.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

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	SMOKE/ALARM ZONE BOUNDARY LINES

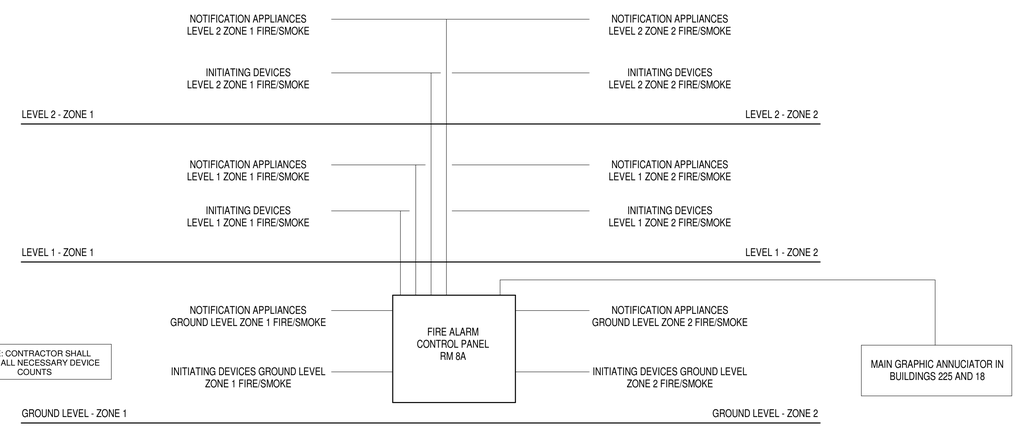
CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTION THROUGHOUT, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM ZONING TO MATCH EXISITNG SMOKE ZONES

* SMOKE DETECTION IS SHOWN THROUGHOUT BUILDING BUT NEED ONLY BE INSTALLED WHERE THERE IS NO SPRINKLER DETECTION. ADDITIONALLY, IF FULL SPRINKLERED PROTECTION IS PROVIDED AS PART OF A SEPARATE PROJECT, SMOKE DETECTION DEVICES MAY BE REDUCED PER NFPA 72.

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A8 **BUILDING 5 - FIRE ALARM RISER DIAGRAM**
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISSA A. RODRIGUEZ
1260314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS
Submission: 100% BID SET
Building: 5 | **Checked By:** MAR | **Drawn By:** JLH | **FULLY SPRINKLERED**

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
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4800 MEMORIAL DRIVE
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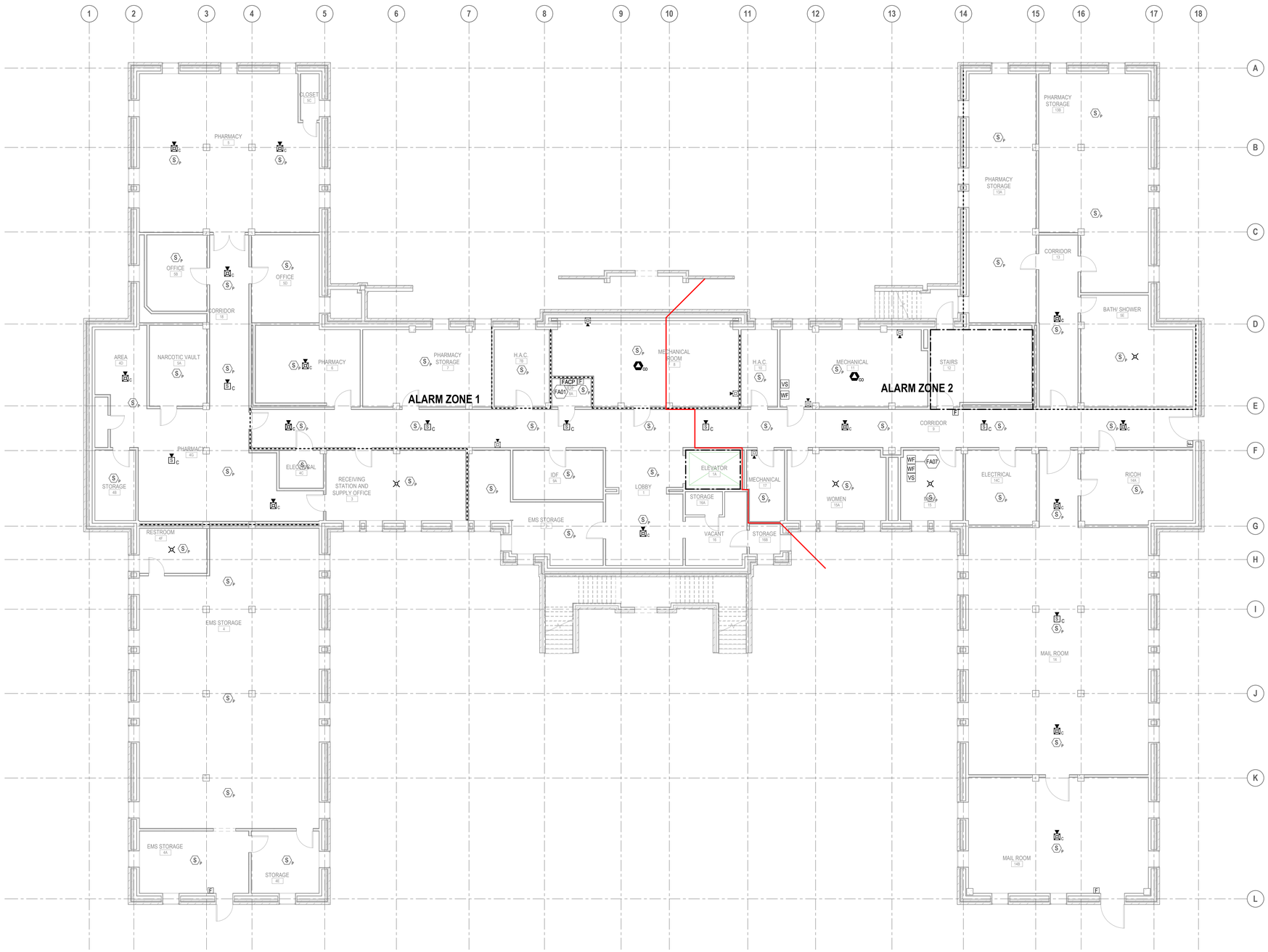

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	DEVICES
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	MANUAL PULL STATION
	SPEAKER ONLY WALL MOUNTED
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	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL
FA07	PROVIDE WATER FLOW SWITCH IN RESTROOM CLOSET AND ABOVE CEILING

A14 **BUILDING 5 - FIRE ALARM PLAN - BASEMENT LEVEL**
SCALE: 1/8" = 1'-0"

N TRUE NORTH

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
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ARCHITECT / ENGINEER OF RECORD:

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421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
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LICENSED
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6/25/21

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Submission: 100% BID SET
Building: 5 **Checked By:** MAR **Drawn By:** JLH

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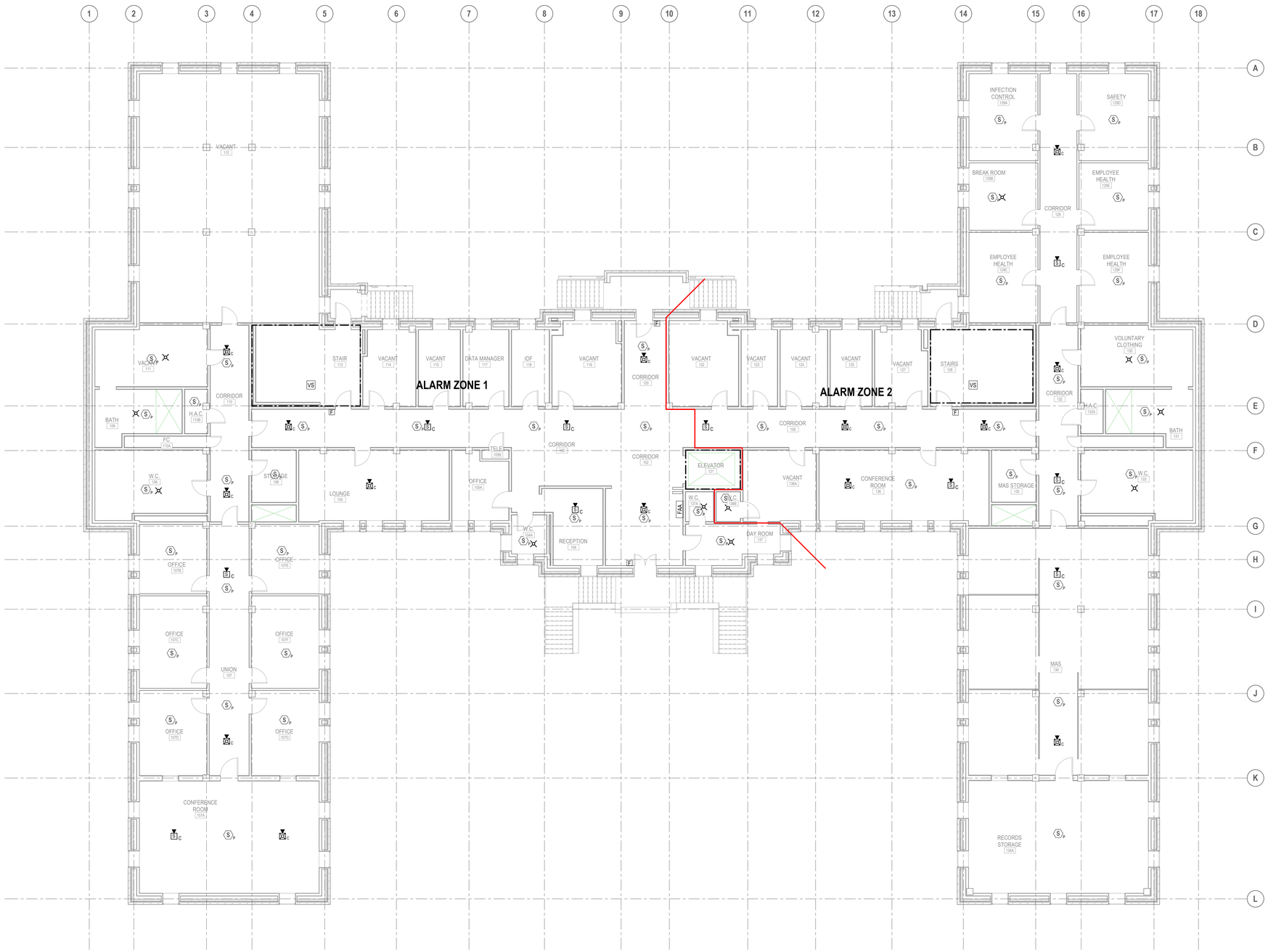
Drawing 11 of 83



A15 BUILDING 5 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

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	DEVICES
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LEO A DALY
730 Second Avenue South
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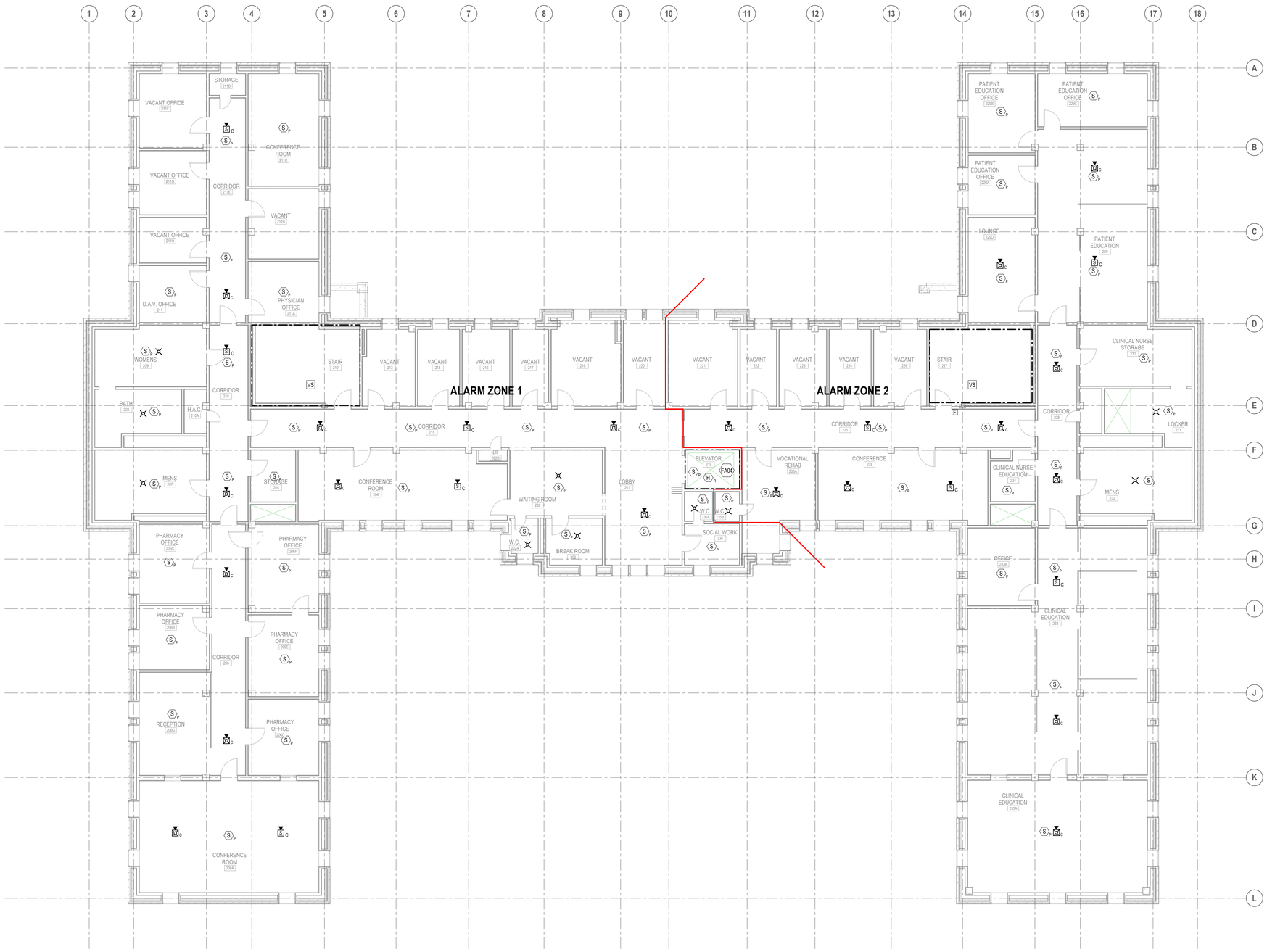
Drawing 12 of 83

024-10122-000. 5. FA103. 12/26/20.pdf



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A15 **BUILDING 5 - FIRE ALARM PLAN - LEVEL 2**
SCALE: 1/8" = 1'-0"

N TRUE NORTH

Revisions:	Date:

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FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
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817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 2
Submission: 100% BID SET
Building: 5 **Checked By:** MAR **Drawn By:** JLH

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 5 - PHARMACY/EDUCATION
4800 MEMORIAL DRIVE
WACO, TX 76711

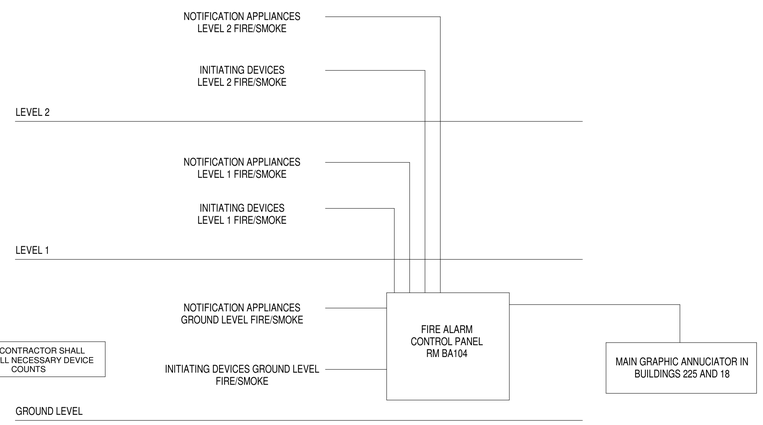
VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 5-FA103
Drawing 13 of 83

024-10122-000, 6, FA100, 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO FIA CENTER AND NOTIFY FDC FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PROXIMATE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	OPEN LOCKED EGRESS DOORS ON FLOOR OF FIRE ORIGIN	DISCONNECT FUEL SOURCE FROM COOKING EQUIPMENT
DUCT SMOKE DETECTOR				X		X	X[1]				
AREA SMOKE DETECTOR	X	X	X							X	
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X	
ELEVATOR SMOKE DETECTOR	X	X	X					X			
MANUAL PULL STATION	X	X	X		X					X	
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X		
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X	
WATER CONTROL VALVE TAMPER SWITCH					X						
KITCHEN HOOD SUPPRESSION SYSTEM	X	X	X		X					X	X

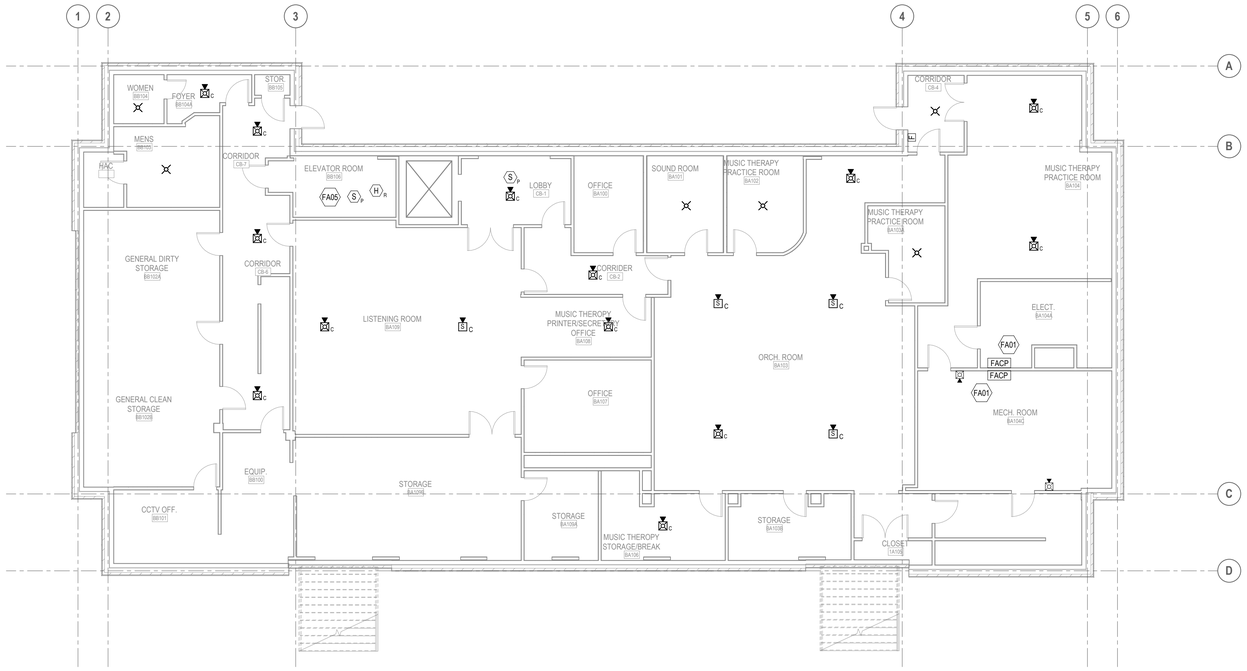
1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.



NOTE: CONTRACTOR SHALL VERIFY ALL NECESSARY DEVICE COUNTS

F10 BUILDING 6 - FIRE ALARM RISER DIAGRAM

SCALE: NTS



A12 BUILDING 6 - FIRE ALARM PLAN - BASEMENT

SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED*
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

*BUILDING WILL BE FULLY SPRINKLERED UNDER SEPARATE CONTRACT

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
136314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL
Submission: 100% BID SET
Building: 6 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 6 - AUDITORIUM
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 6-FA100
Drawing 14 of 83

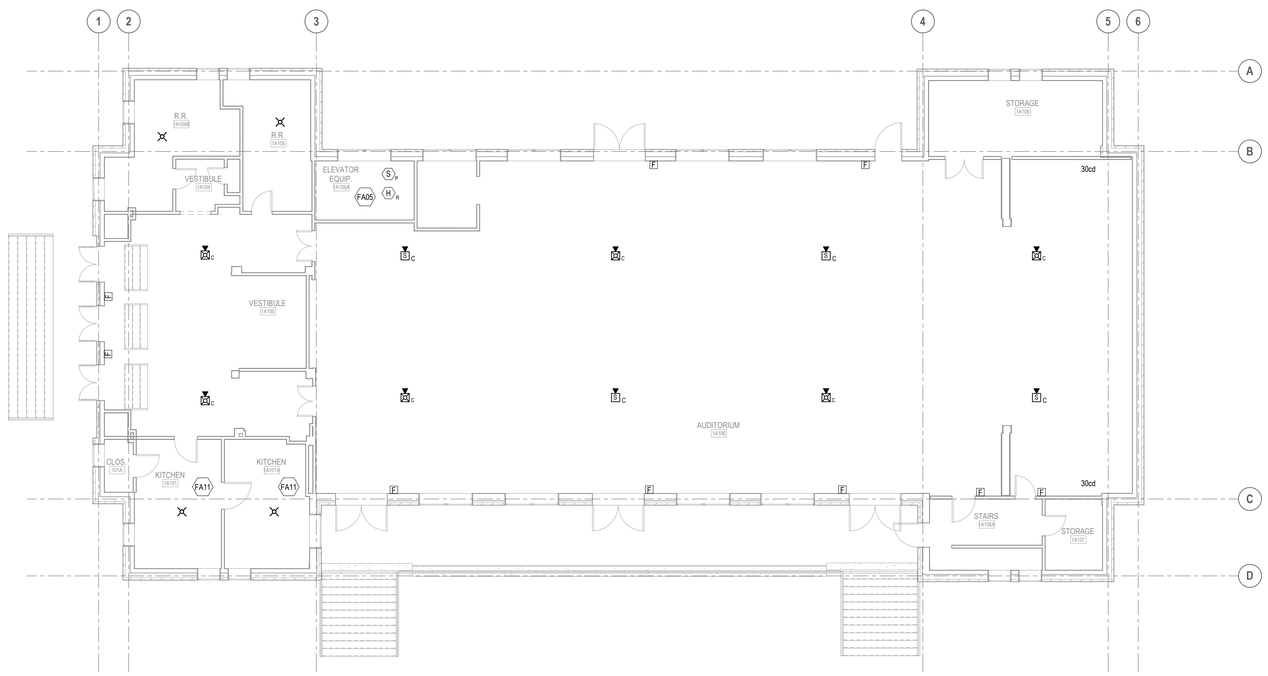
024-10122-000, 6, FA101, 12/26/2020.pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
S	STROBE ONLY WALL MOUNTED
S	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.



A12 BUILDING 6 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
	Project Location: BUILDING 6 - AUDITORIUM 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 6-FA101

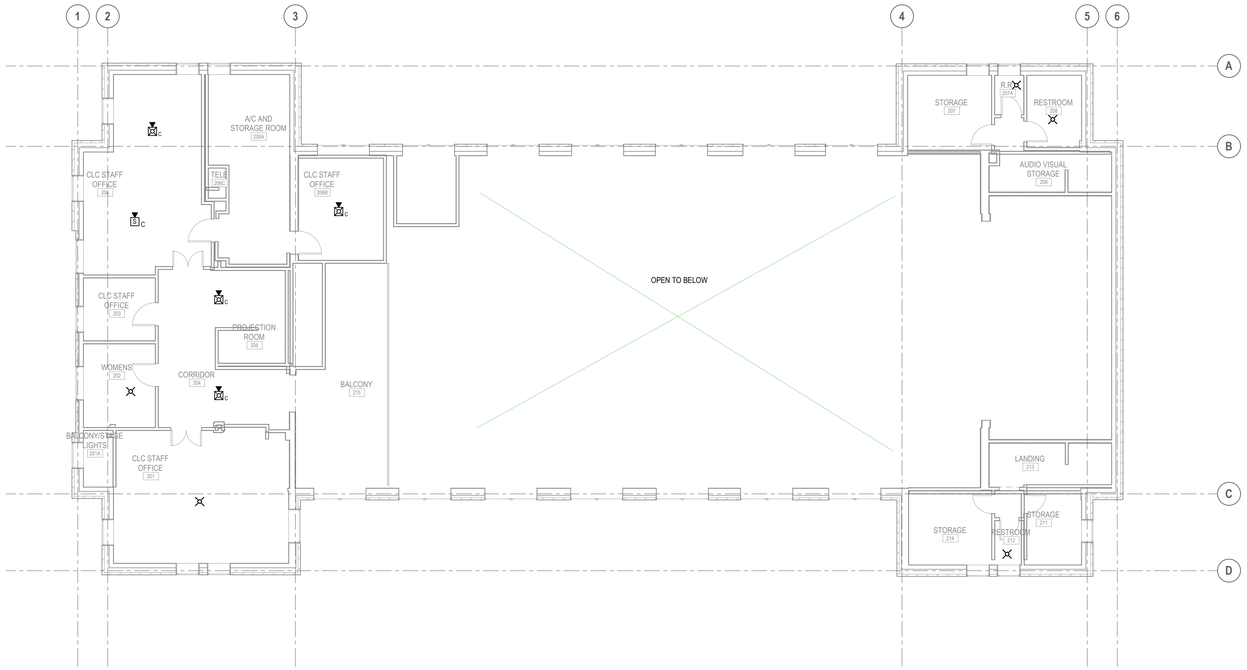
Building:	Checked By:	Drawn By:	
6	MAR	JLH	FULLY SPRINKLERED

024-10122-000. 6. FA102. 12/26/20.pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND



A13 BUILDING 6 - FIRE ALARM PLAN - LEVEL 2
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 2

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
6	MAR	JLH	FULLY SPRINKLERED
			PARITIALLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 6 - AUDITORIUM
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 6-FA102

Drawing 16 of 83

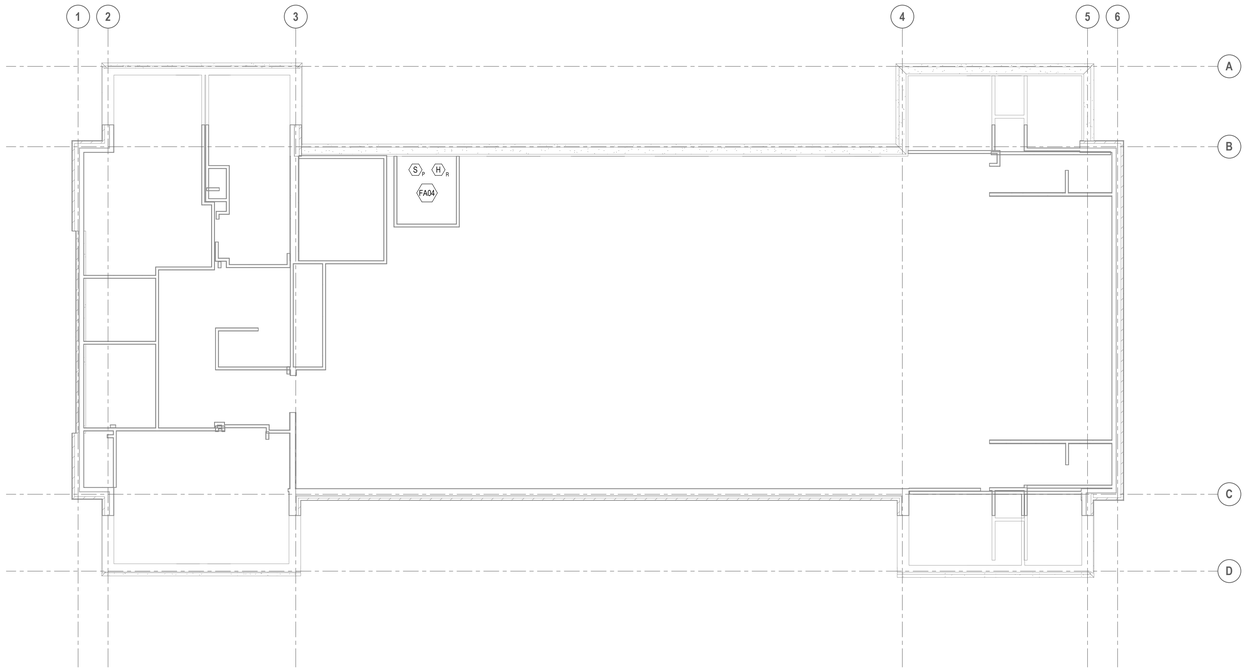
024-10122-000, 6, FA103, 12/26/20,pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS



A12 **BUILDING 6 - FIRE ALARM PLAN - LEVEL 3**
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

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STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 3	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
		Issue Date: 6/25/2021
Submission: 100% BID SET	Project Location: BUILDING 6 - AUDITORIUM 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 6-FA103

Building:	Checked By:	Drawn By:	
6	MAR	JLH	FULLY SPRINKLERED / PARITIALLY SPRINKLERED

Drawing 17 of 83

024-10122-000, 7, FA001, 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO FA SYSTEM AND PAGE FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PROXIMATE TO DETECTOR	SHUT DOWN AIR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	OPEN LOCKED EGRESS DOORS ON FLOOR OF FIRE ORIGIN	DISCONNECT FUEL SOURCE FROM COOKING EQUIPMENT
DUCT SMOKE DETECTOR				X		X	X[1]				
AREA SMOKE DETECTOR	X	X	X							X	
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X	
ELEVATOR SMOKE DETECTOR	X	X	X					X			
MANUAL PULL STATION	X	X	X		X					X	
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X		
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X	
WATER CONTROL VALVE TAMPER SWITCH				X							X
KITCHEN HOOD SUPPRESSION SYSTEM	X	X	X		X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
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S C	SPEAKER ONLY CEILING MOUNTED
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H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
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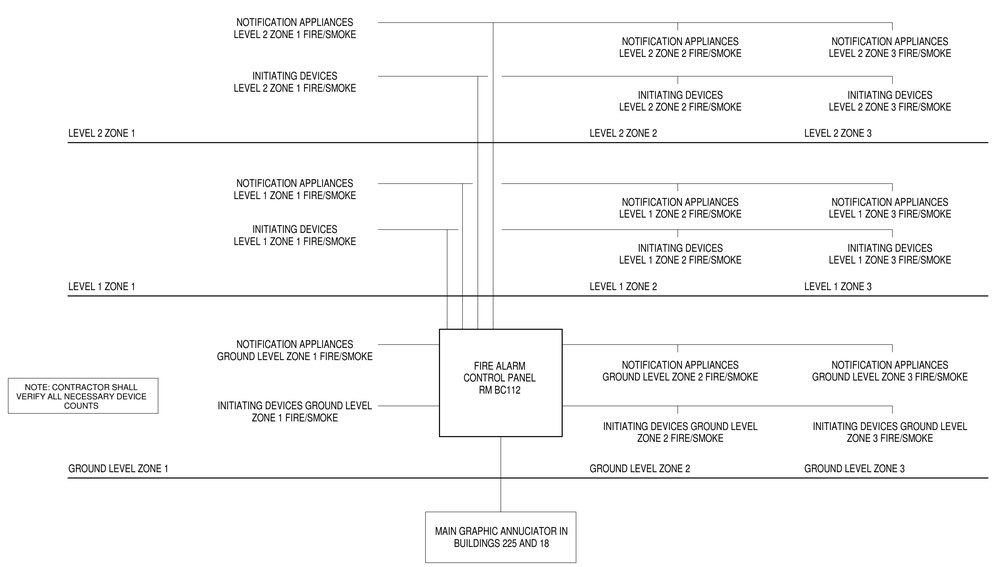
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

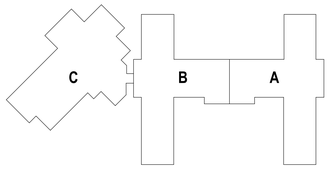
OCCUPANCY	BUSINESS AND HEALTHCARE
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM ZONING TO MATCH EXISITNG SMOKE ZONES

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



NOTE: CONTRACTOR SHALL VERIFY ALL NECESSARY DEVICE COUNTS



A9 BUILDING 7 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

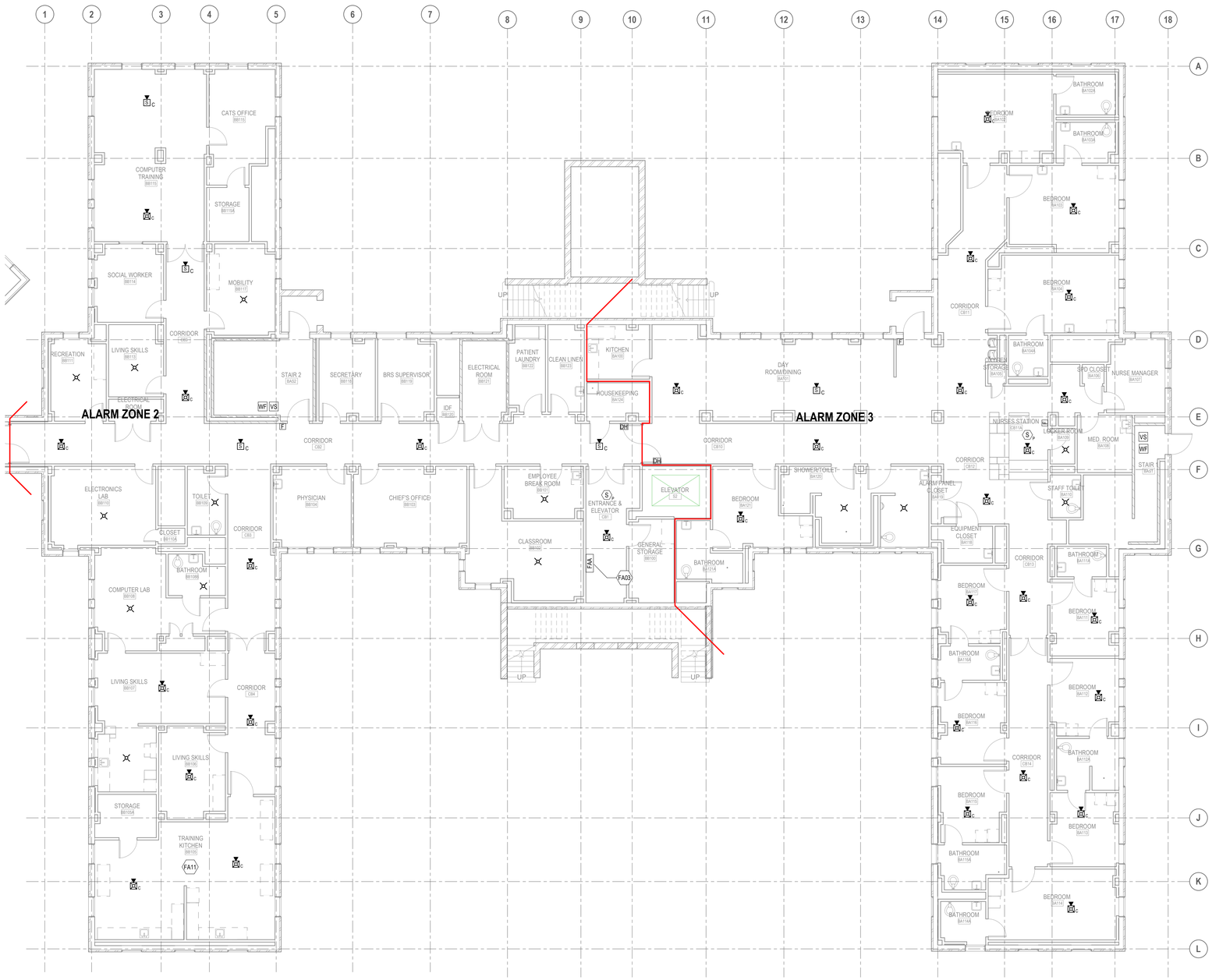
PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS
Submission: 100% BID SET
Building: 7 | **Checked By:** MAR | **Drawn By:** JLH | **FULLY SPRINKLERED**

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 7-FA001
Drawing 18 of 83

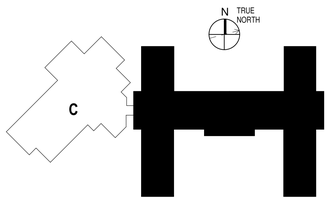


FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA03	EXISTING ANNUNCIATOR LOCATION
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.



A14 **BUILDING 7 - FIRE ALARM PLAN - BASEMENT AREA A&B**
SCALE: 1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

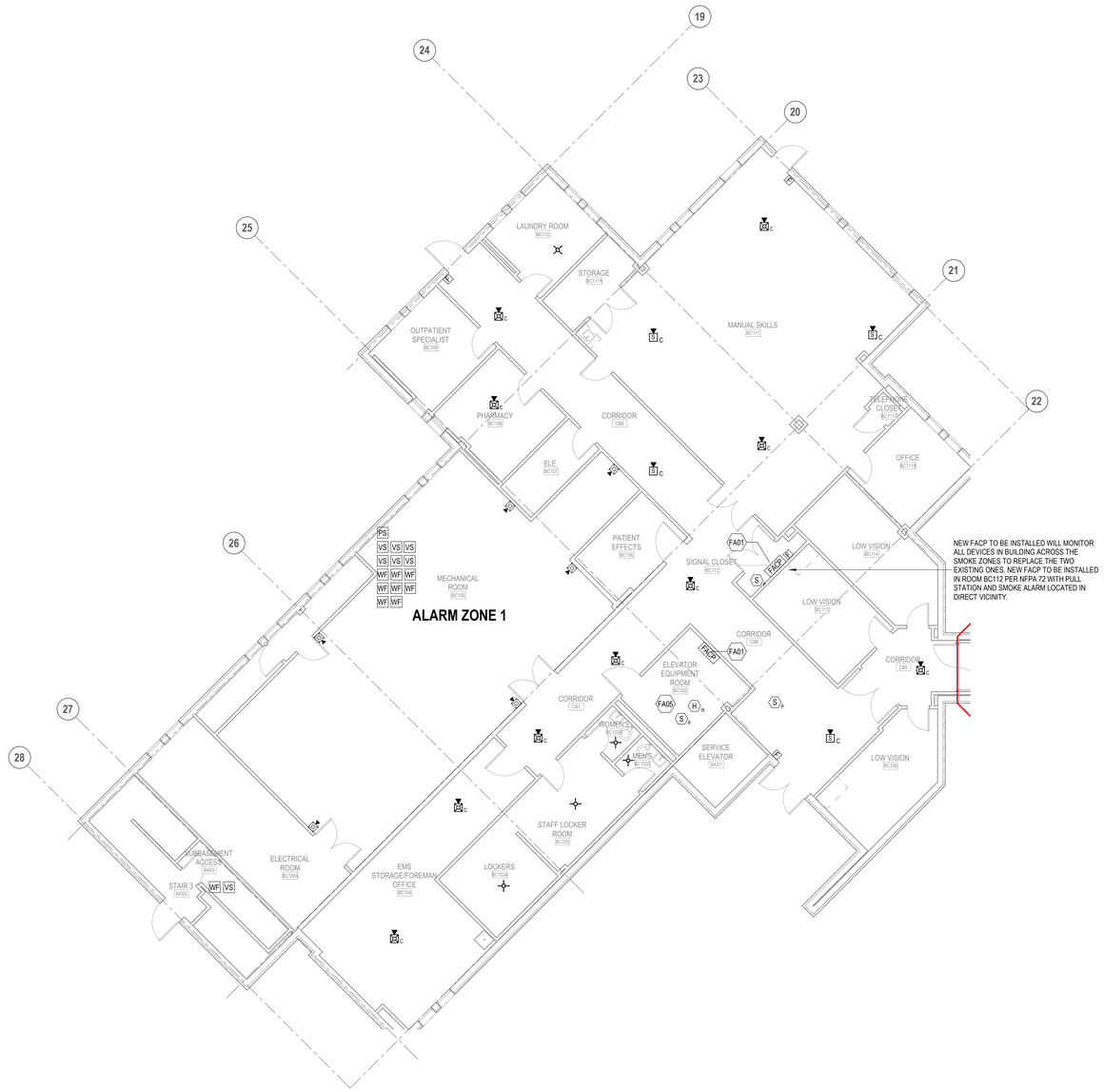
Drawing Title: FIRE ALARM PLAN - BASEMENT AREA
Submission: 100% BID SET
Building: 7 | **Checked By:** MAR | **Drawn By:** JLH | **FULLY SPRINKLERED**

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 7-FA101-A&B
Drawing 19 of 83

024-10122-000. 7. FA101-A&B. 12/26/20.pdf

024-10122-000, 7, FA101-C, 05/26/21.pdf

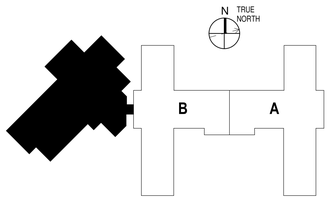


FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.



A12 BUILDING 7 - FIRE ALARM PLAN - BASEMENT AREA C
SCALE: 1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT AREA C

Submission: 100% BID SET

Building: 7 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

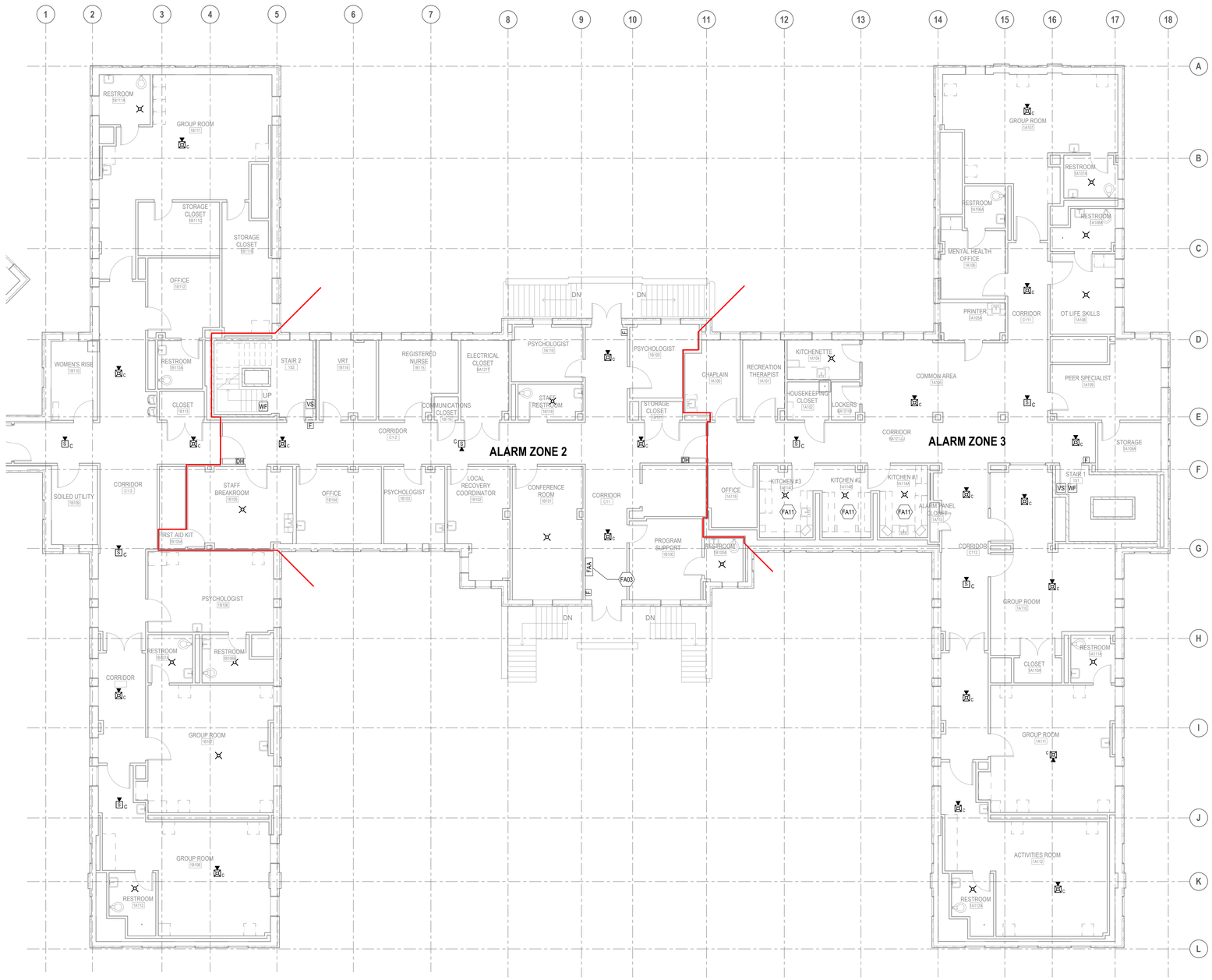
Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 7-FA101-C

024-10122-000. 7. FA102-A&B. 05/26/21.pdf

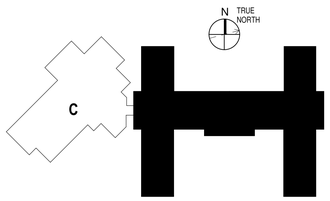


FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA03	EXISTING ANNUNCIATOR LOCATION
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.



A14 BUILDING 7 - FIRE ALARM PLAN - LEVEL 1 AREA A&B
SCALE: 1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
12601H
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1 AREA A&B

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
7	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 7-FA102-A&B

024-10122-000, 7, FA102-C, 05/26/21.pdf

A13 BUILDING 7 - FIRE ALARM PLAN - LEVEL 1 AREA C

SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
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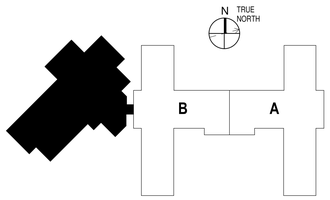
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND



Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
7/26/2021

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1 AREA C

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
7	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

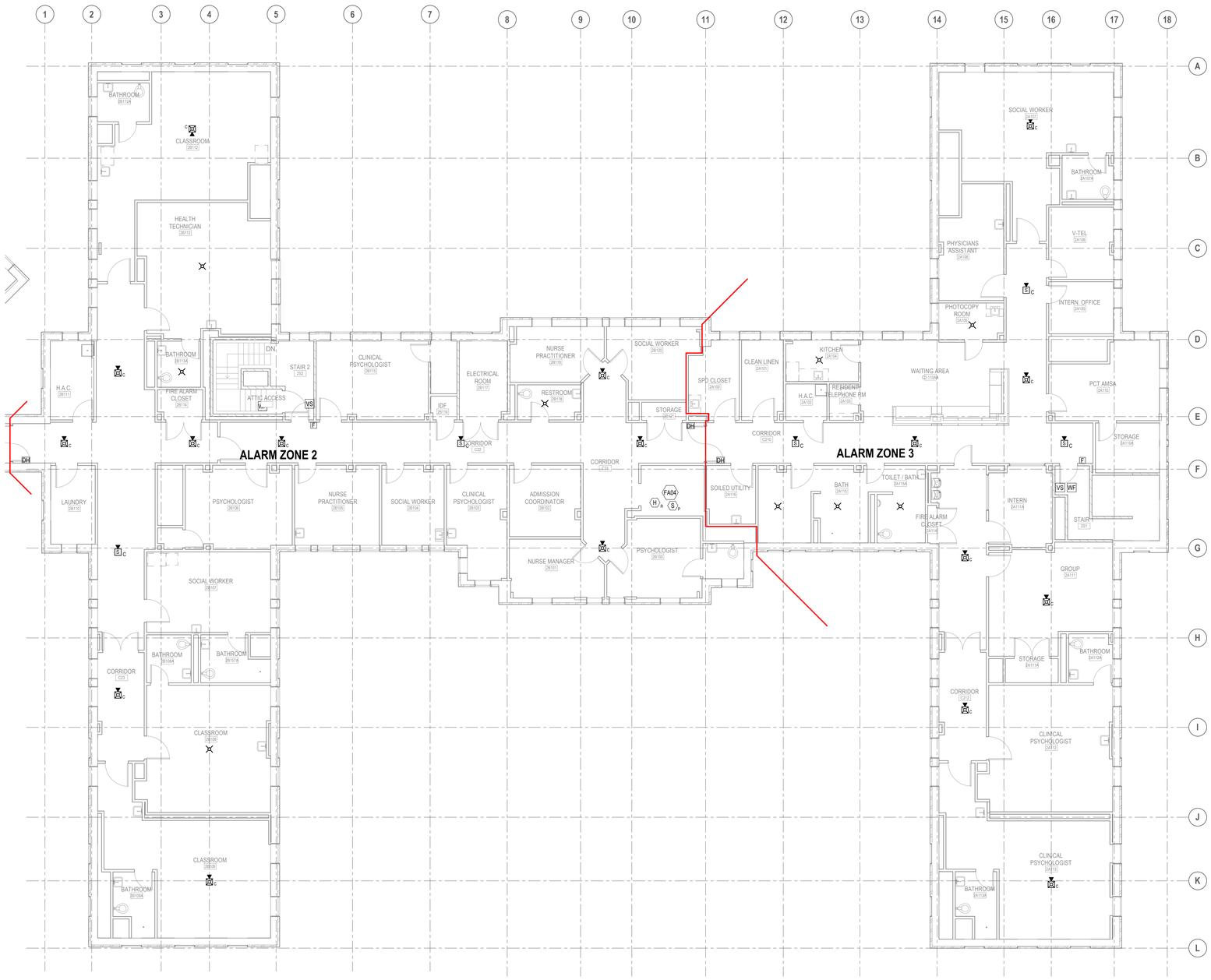
Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 7-FA102-C

Drawing 22 of 83



FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
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	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
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	SWITCHES
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FAA	FIRE ALARM ANNUNCIATOR PANEL
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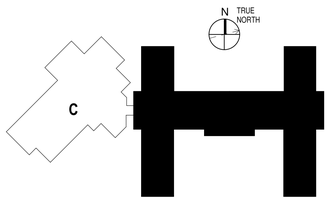
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS



A14 BUILDING 7 - FIRE ALARM PLAN - LEVEL 2 AREA A&B

SCALE: 1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
130314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 2 AREA A&B

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
7	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 7-FA103-A&B

Drawing 23 of 83

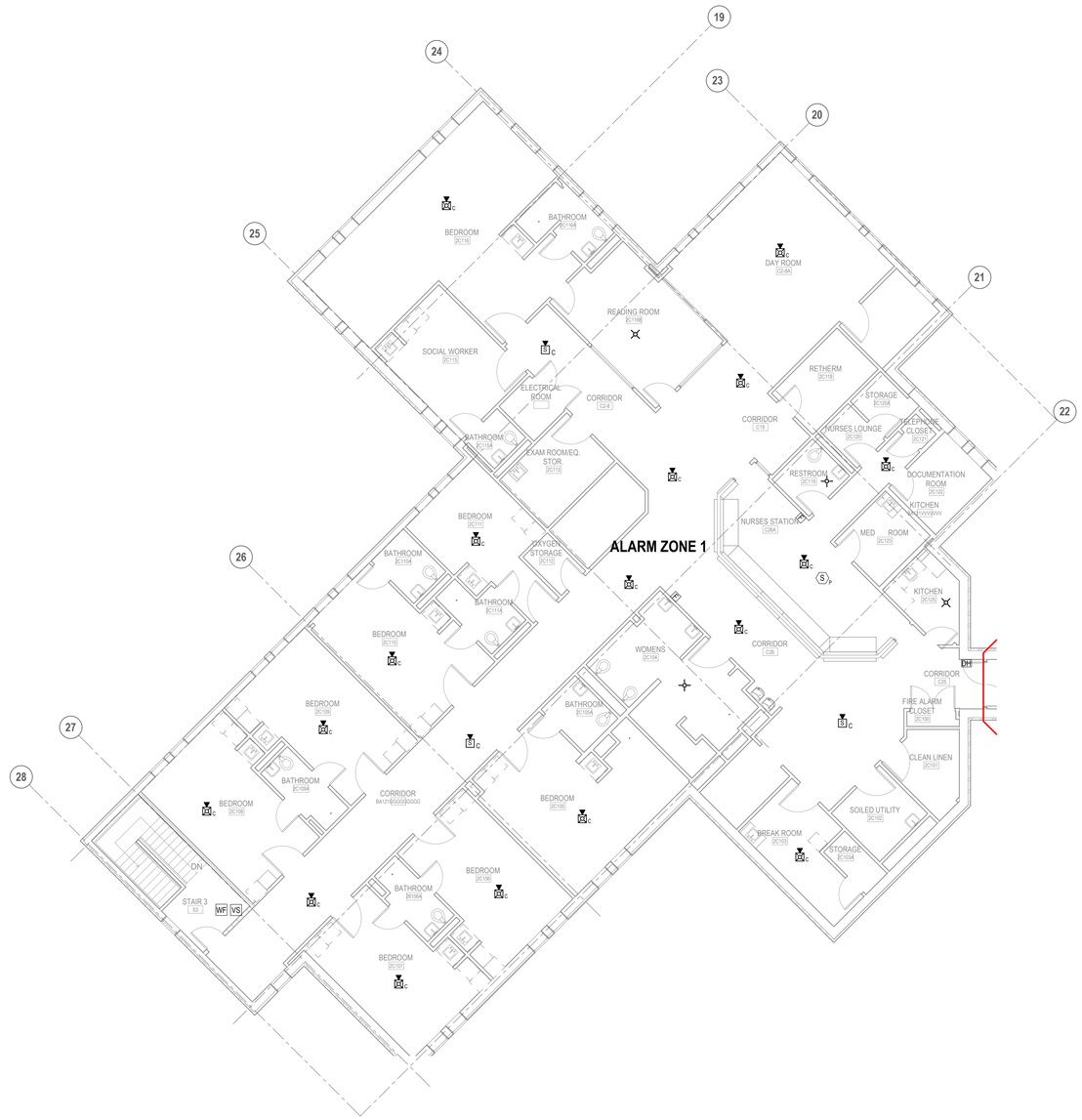
024-10122-000. 7. FA103-A&B. 05/26/21.pdf

024-10122-000, 7, FA103-C, 05/26/21.pdf

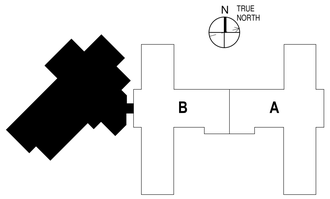
FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND



A13 **BUILDING 7 - FIRE ALARM PLAN - LEVEL 2 AREA C**
SCALE: 1/8" = 1'-0"



Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 2 AREA C
Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
7	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BLDG 7 - BLIND REHAB / RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 7-FA103-C
Drawing 24 of 83

024-10122-000, 8, FA001, 02/17/21.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE ASSOCIATE FIRE DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

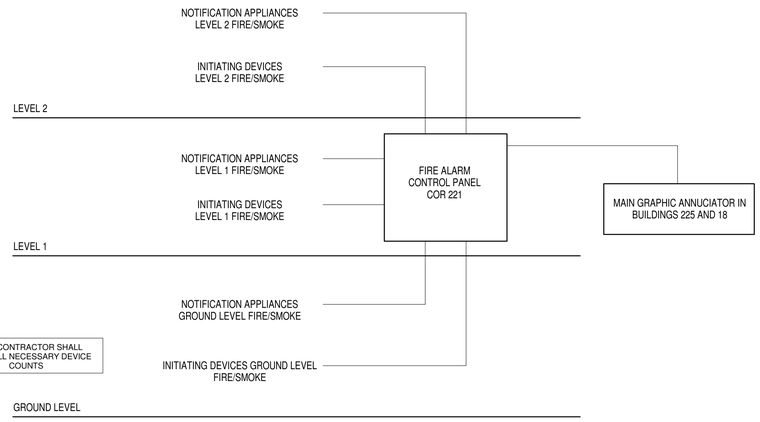
SYMBOL	DESCRIPTION
	DEVICES
SPK W	COMBINATION OF SPEAKER/STROBE WALL MOUNTED, WEATHERPROOF
F	MANUAL PULL STATION
SPK	SPEAKER ONLY WALL MOUNTED
SPK C	SPEAKER ONLY CEILING MOUNTED
SPK	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
SPK C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	HEALTHCARE
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A6 BUILDING 8 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
12631H
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS

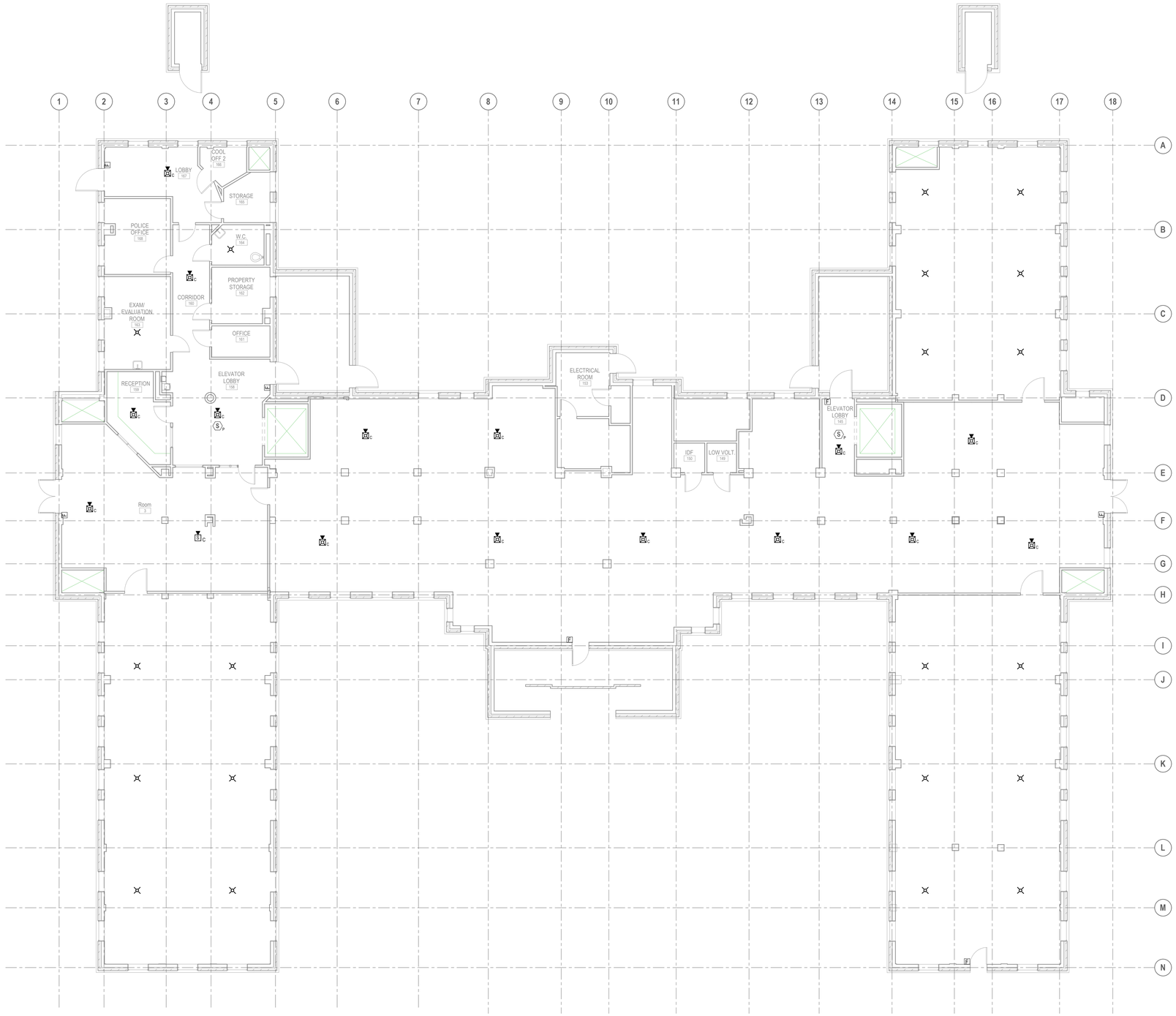
Submission: 100% BID SET

Building:	Checked By:	Drawn By:	FULLY SPRINKLERED
8	MAR	JLH	

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 8 - MHICM / FUT. ACUTE M.H.
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 8-FA001
Drawing 25 of 83



A14 BUILDING 8 - FIRE ALARM PLAN - BASEMENT

SCALE: 1/8" = 1'-0"

TRUE NORTH

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
C W	COMBINATION OF SPEAKER/STROBE WALL MOUNTED, WEATHERPROOF
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
C	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
C C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - BASEMENT	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
		Issue Date: 6/25/2021
Submission: 100% BID SET	Project Location: BLDG 8 - MHICM / FUT. ACUTE M.H. 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 8-FA101

Building:	Checked By:	Drawn By:	
8	MAR	JLH	FULLY SPRINKLERED

Drawing 26 of 83

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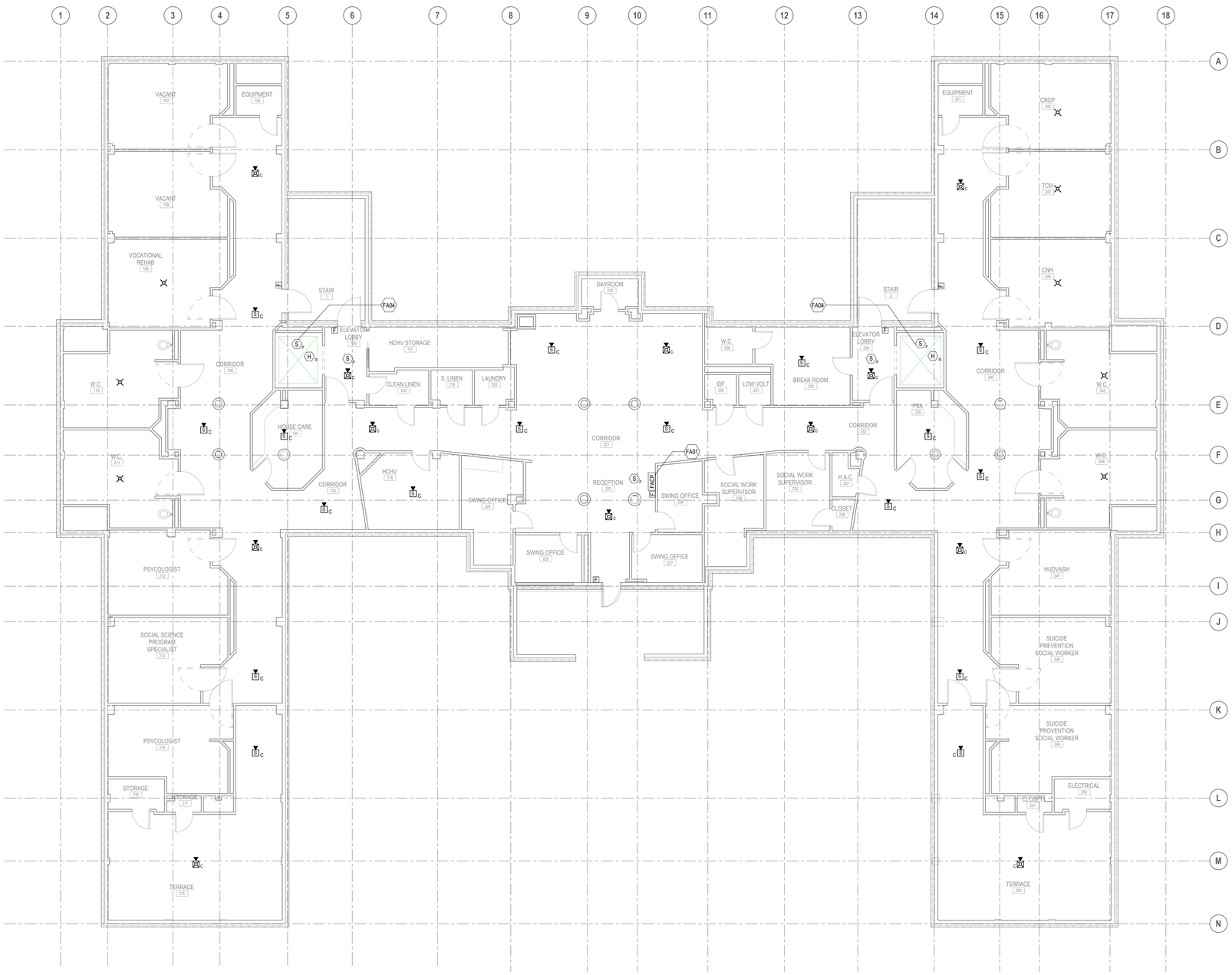


A14 BUILDING 8 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
SPK W	COMBINATION OF SPEAKER/STROBE WALL MOUNTED, WEATHERPROOF
F	MANUAL PULL STATION
SPK	SPEAKER ONLY WALL MOUNTED
SPK C	SPEAKER ONLY CEILING MOUNTED
SPK	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
SPK C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

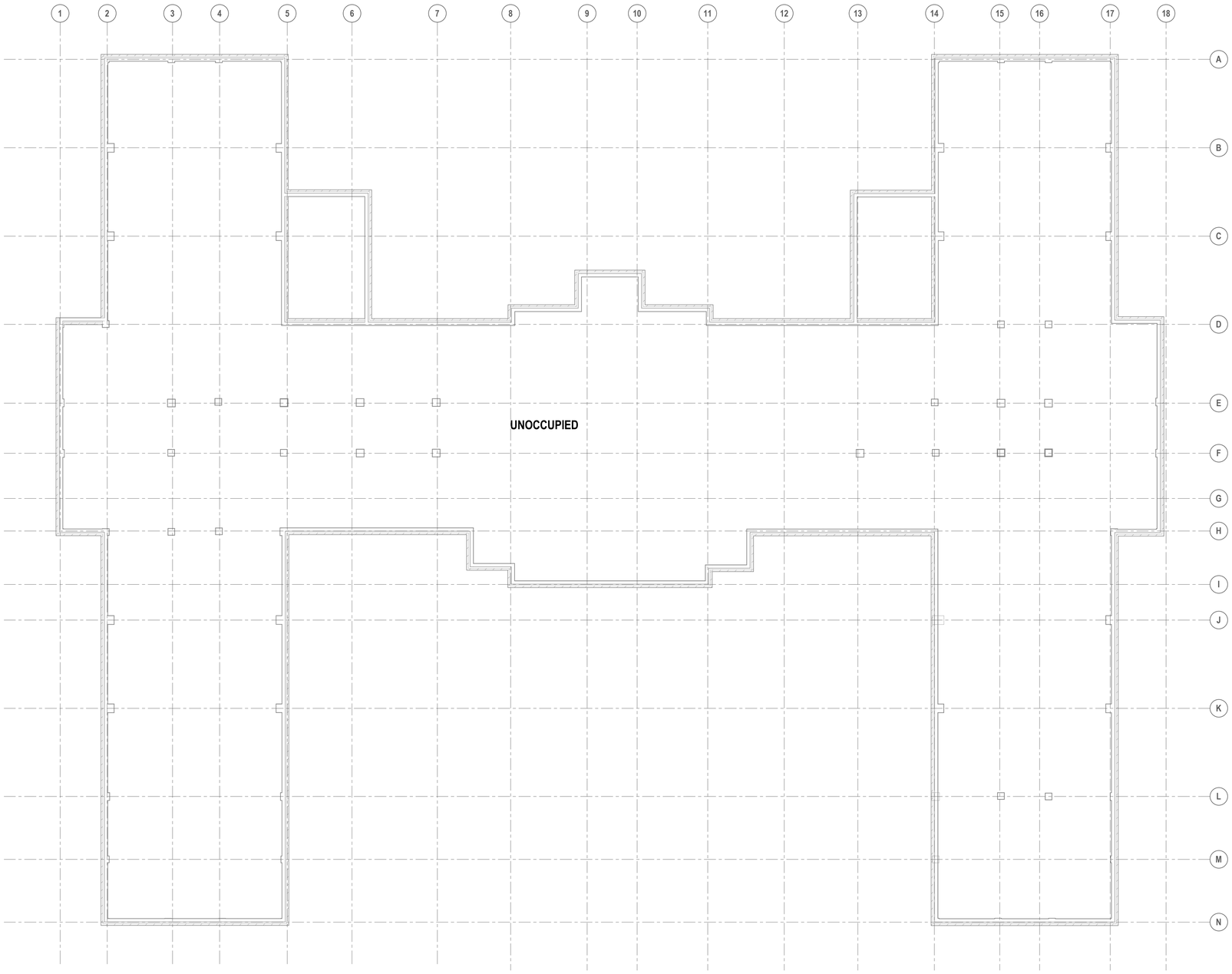
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 8 · Checked By: MAR · Drawn By: JLH · FULLY SPRINKLERED	Project Location: BLDG 8 - MHICM / FUT. ACUTE M.H. 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 8-FA102
		Drawing 27 of 83



A14 **BUILDING 8 - FIRE ALARM PLAN - LEVEL 2**
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
136314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 2

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
8	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 8 - MHICM / FUT. ACUTE M.H.
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 8-FA103

024-10122-000. 8. FA103. 12/26/20.pdf

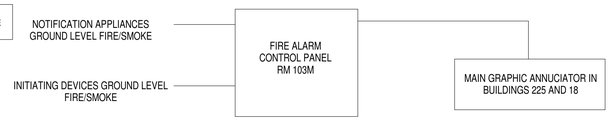
024-10122-000. 15. FA101. 12/26/20.pdf

FIRE ALARM MATRIX

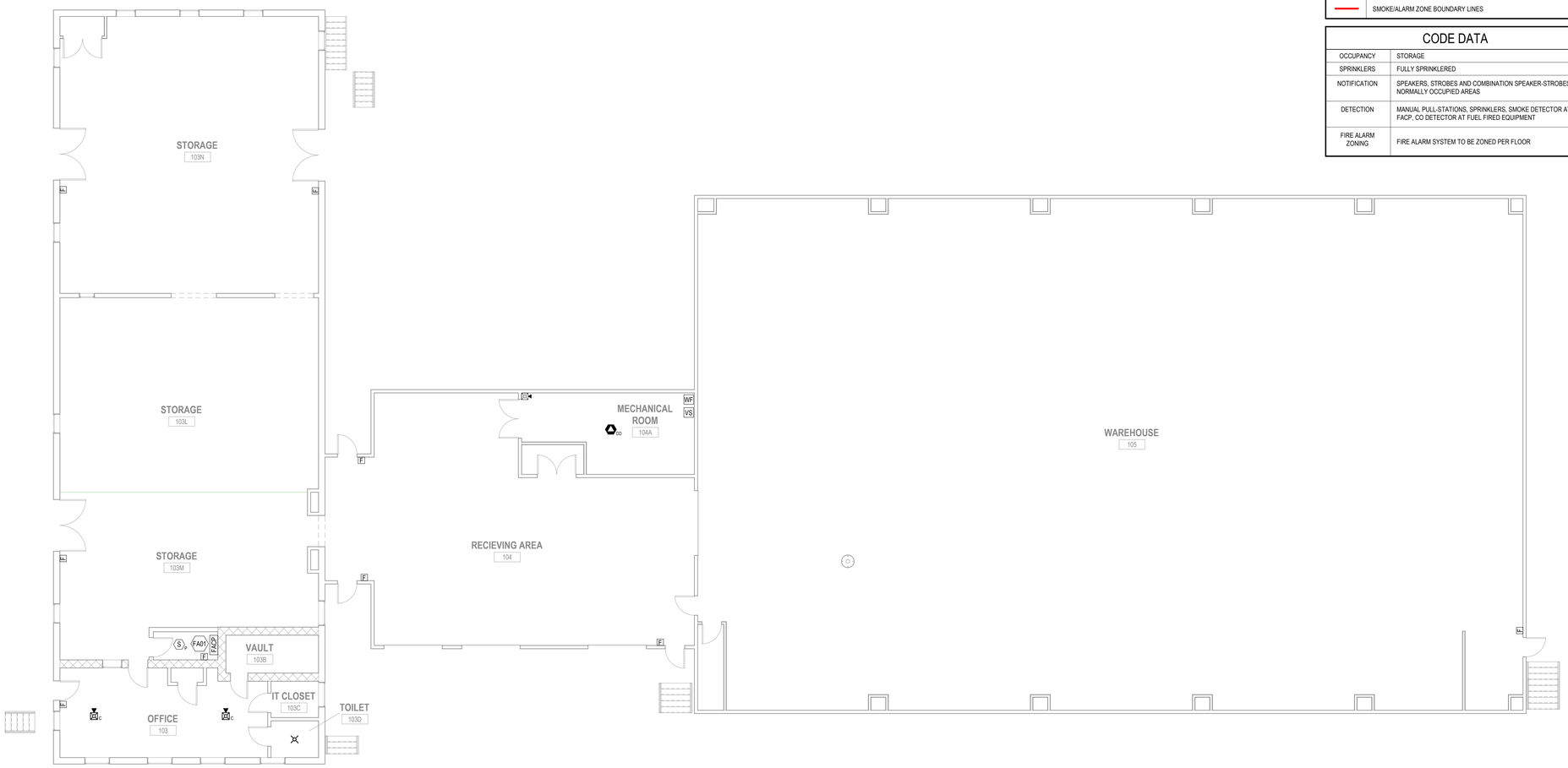
INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	RELEASE COORDINATED DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

NOTE: CONTRACTOR SHALL VERIFY ALL NECESSARY DEVICE COUNTS



H10 BUILDING 15 - FIRE ALARM RISER DIAGRAM
SCALE: NTS



A15 BUILDING 15 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	STORAGE
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1
Submission: 100% BID SET
Building: 15 | **Checked By:** JLH | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 15 - VBA, 4800 MEMORIAL DRIVE, WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 15-FA101
Drawing 29 of 83

024-10122-000. 16. FA101. 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
S	STROBE ONLY WALL MOUNTED
S	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
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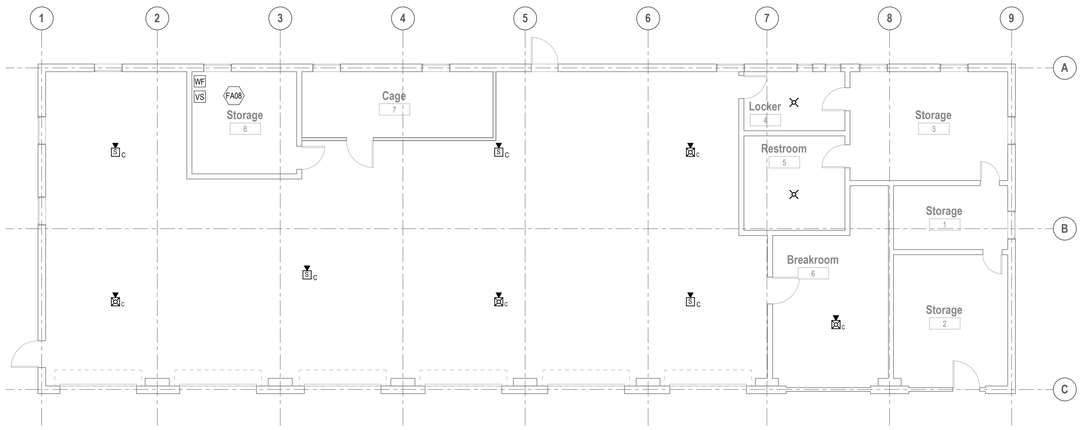
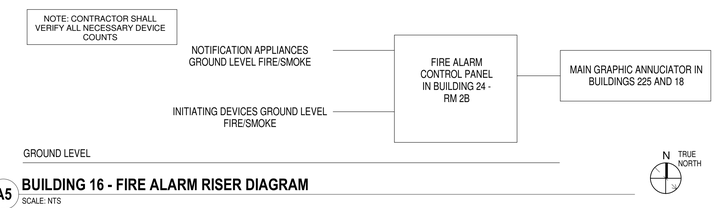
KEYNOTE LEGEND

FA08	FIRE ALARM DEVICES IN THIS BUILDING TO BE MONITORED BY THE FACP IN BUILDING 24, WHICH IN TURN WILL BE MONITORED BY THE MAIN GRAPHIC ANNUNCIATORS IN BUILDINGS 18 AND 225.



A13 BUILDING 16 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"



A5 BUILDING 16 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	FULLY SPRINKLERED
16	MAR	JLH	

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 16 -GARAGE MISC.
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 16-FA101
Drawing 30 of 83

024-10124-000. 17. FA101. 12/26/20.pdf

FIRE ALARM MATRIX

INPUT ↓ / OUTPUT →	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PRIVIDE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	ASSOCIATE DOOR ACCESS DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
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CO	GAS DETECTOR - CARBON MONOXIDE
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S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
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CODE DATA

OCCUPANCY	STORAGE
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
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FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
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3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
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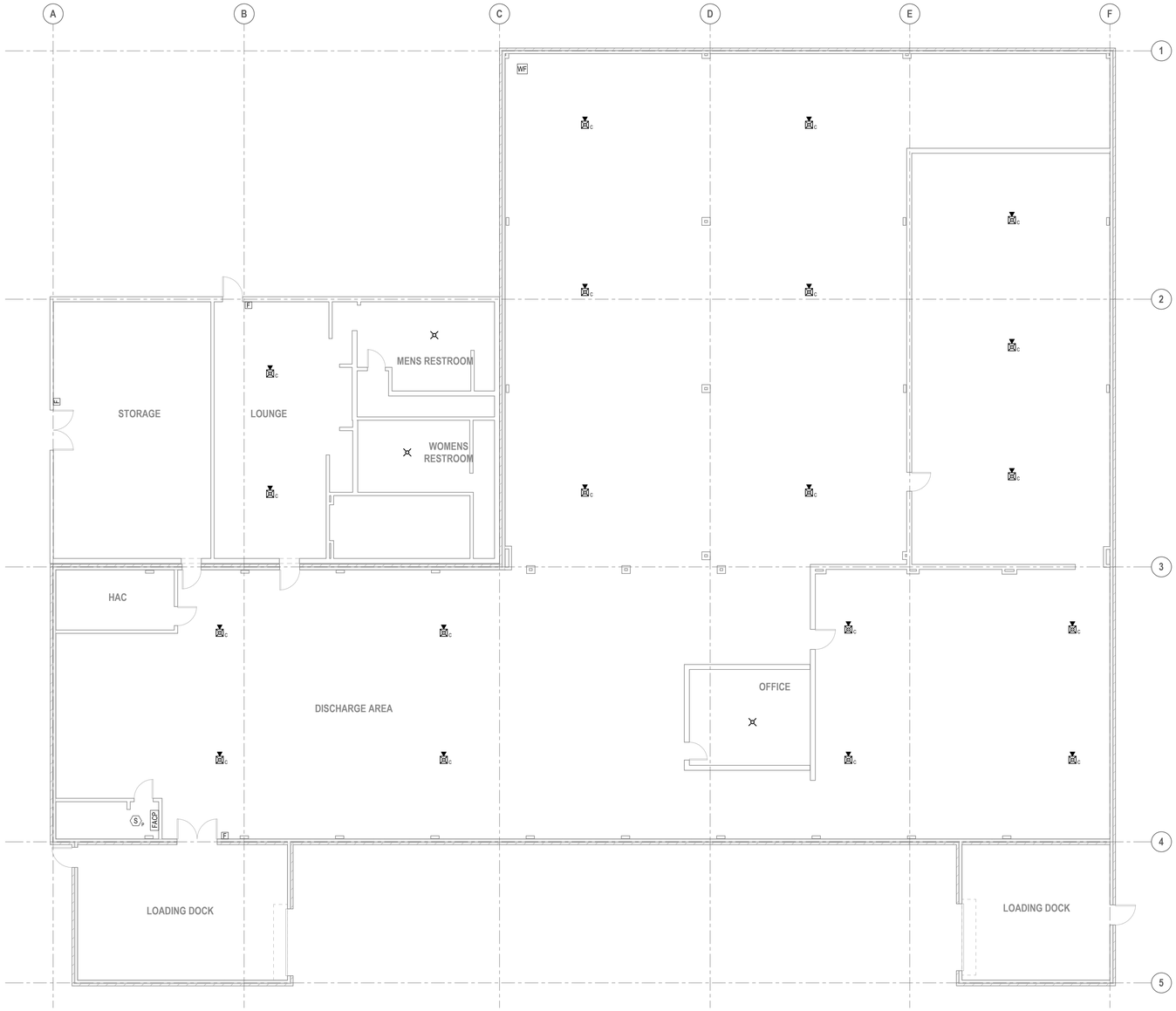
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A13 BUILDING 17 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

TRUE NORTH

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

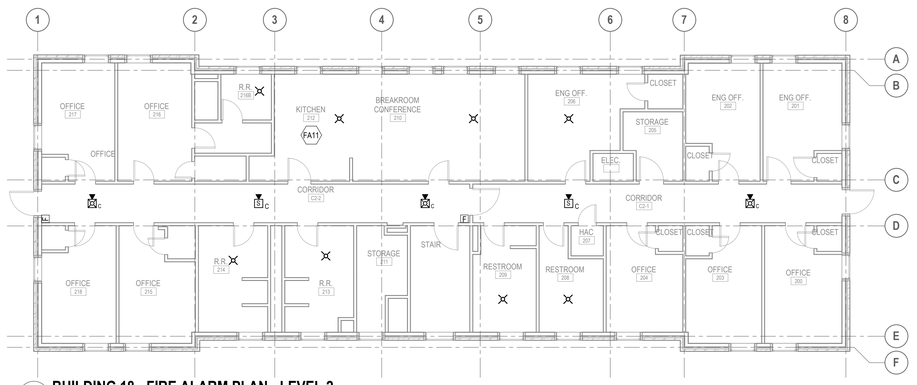
PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1
Submission: 100% BID SET
Building: 17 | **Checked By:** MAR | **Drawn By:** JLH

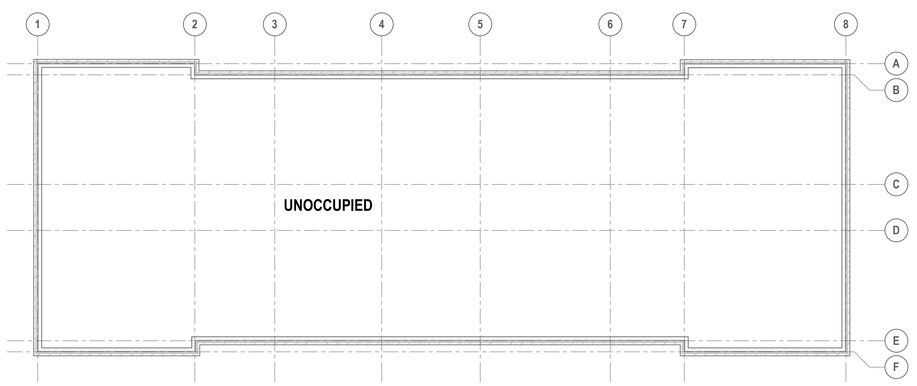
Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 17 - CONS. LAUNDRY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 17-FA101
Drawing 31 of 83



G15 **BUILDING 18 - FIRE ALARM PLAN - LEVEL 2**
SCALE: 1/8" = 1'-0"

D15 **BUILDING 18 - FIRE ALARM PLAN - LEVEL 1**
SCALE: 1/8" = 1'-0"



A15 **BUILDING 18 - FIRE ALARM PLAN - BASEMENT LEVEL**
SCALE: 1/8" = 1'-0"

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE ASSOCIATE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	ASSOCIATE ELEVATOR DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALL OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
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20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
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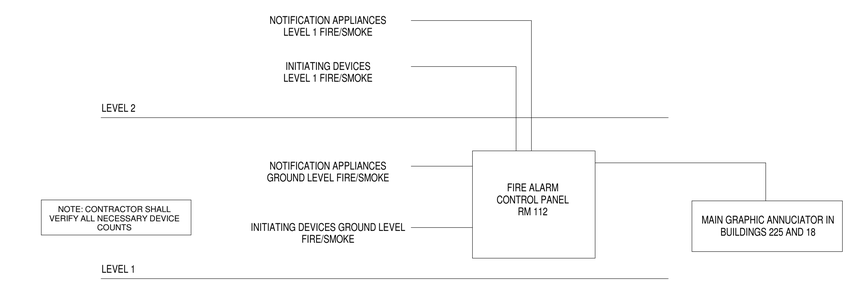

A8 **BUILDING 18 - FIRE ALARM RISER DIAGRAM**
SCALE: 12" = 1'-0"

TRUE NORTH N

Revisions:	Date:	CONSULTANTS:	ARCHITECT / ENGINEER OF RECORD:	PROFESSIONAL SEAL:
		FIRE PROTECTION: LEO A DALY, 730 Second Avenue South, Suite 1300, Minneapolis, MN, 612.338.8741, POC: Melisa Rodriguez	ARCHITECT: CB DESIGN GROUP, 421 KING ST., SUITE 301, ALEXANDRIA, VA 22314, POC: WES BRIDGES, 703.772.4213	MELISA A. RODRIGUEZ, 1260314, 6/25/21
		ELECTRICAL: HUITT-ZOLLARS, 500 West 7th Street, Suite 300, Fort Worth, TX, 817.335.3000, POC: Jeff Roberts		

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLANS	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 18 / Checked By: MAR / Drawn By: JLH / FULLY SPRINKLERED	Project Location: BUILDING 18 - Police, 4800 MEMORIAL DRIVE, WACO, TX 76711	Drawing Number: 18-FA101
		Drawing 32 of 83

024-10122-000. 24, FA101. 12/26/20.pdf

FIRE ALARM MATRIX

INPUT ↑ / OUTPUT →	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	ACCESS CONTROL DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
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16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
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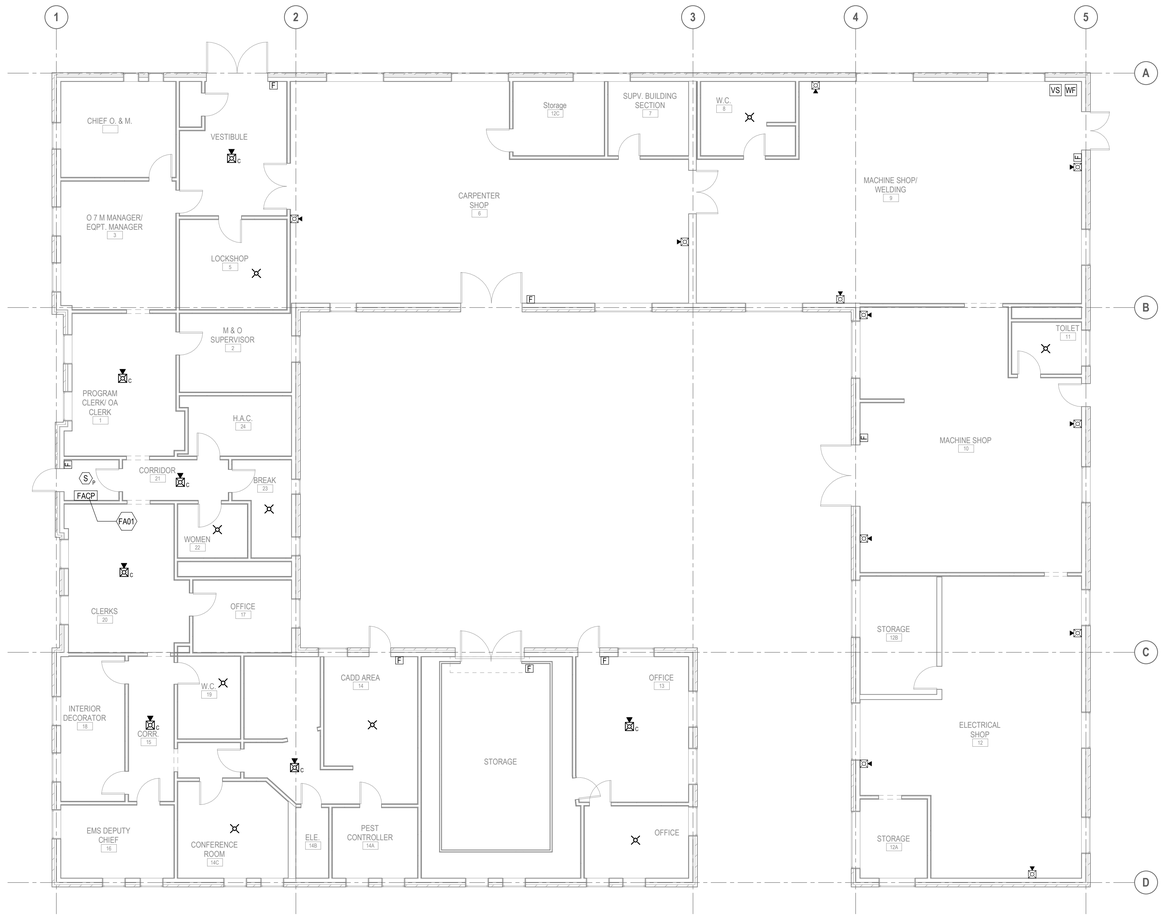
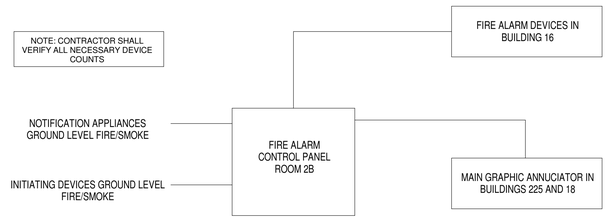
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A12 BUILDING 24 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"



A5 BUILDING 24 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1
Submission: 100% BID SET
Building: 24 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 24 - F.M.S./SHOPS
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 24-FA101
Drawing 33 of 83

024-10122-000, 90, FA001, 01/14/21.pdf

FIRE ALARM MATRIX

INPUT ↓ / OUTPUT →	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	OPEN CORRIDOR DOORS DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR						X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW SWITCH	X	X	X		X					X
SPRINKLER WATERFLOW SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
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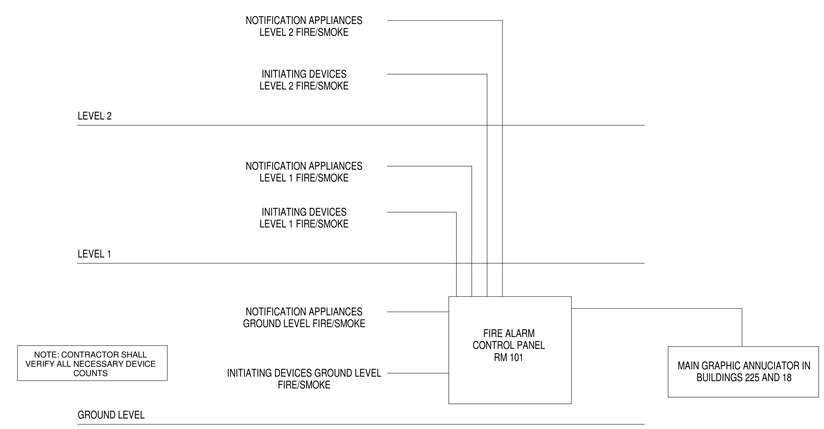


A6 BUILDING 90 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
12631H
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
90	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

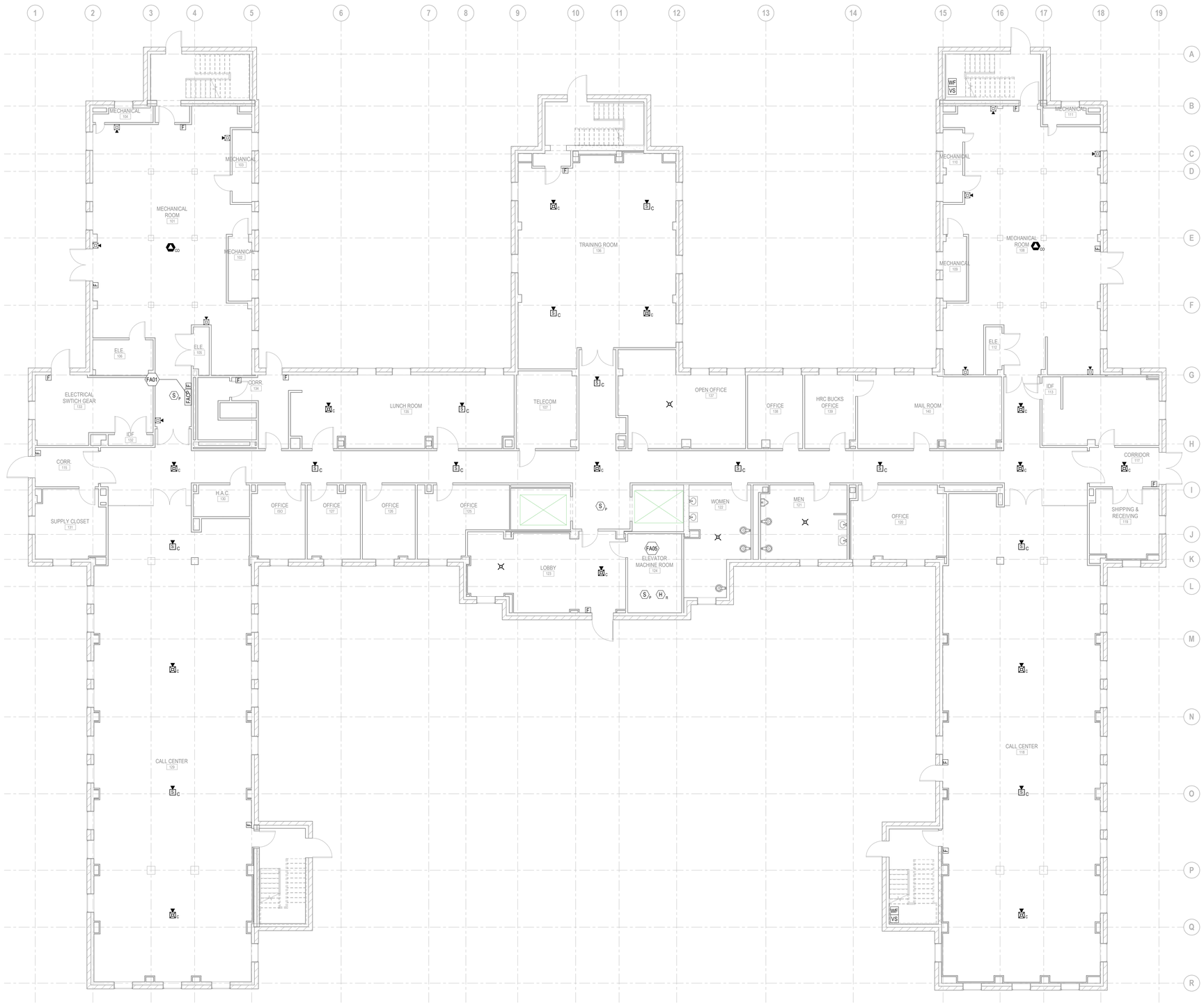
Project Location: BUILDING 90 - Pharmacy Call Center
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 90-FA001

024-10122-000. 90. FA101. 08/31/20.pdf



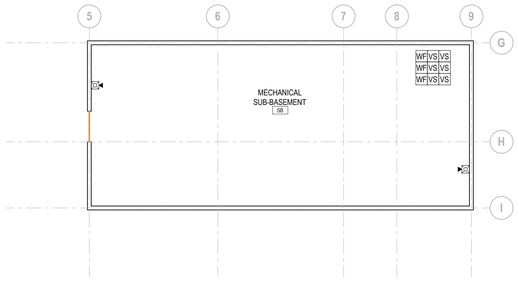
A15 BUILDING 90 - FIRE ALARM PLAN - BASEMENT LEVEL
SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.



A3 BUILDING 90 - SUB-BASEMENT
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

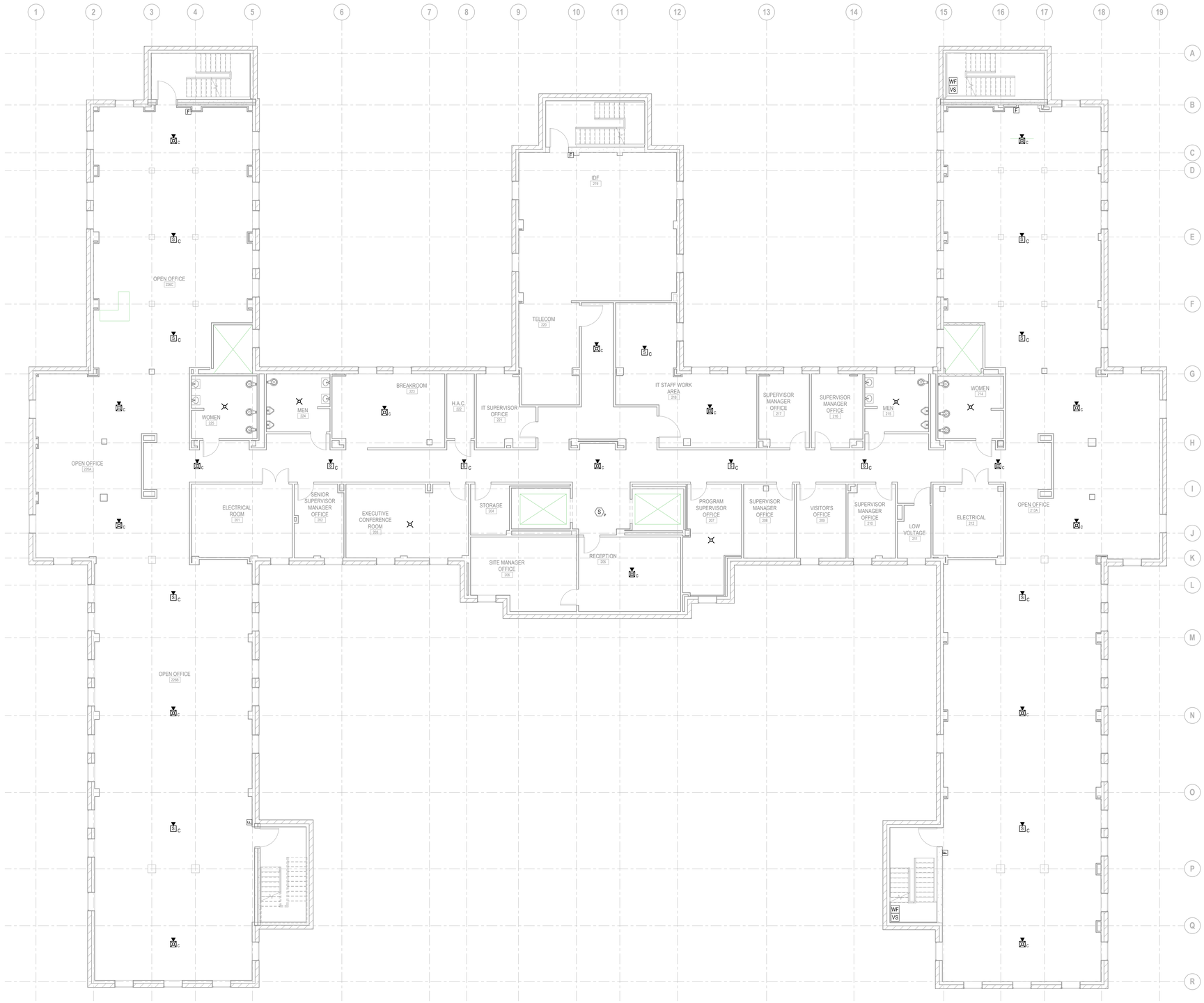
ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - BASEMENT LEVEL	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 90 / Checked By: MAR / Drawn By: JLH	Project Location: BUILDING 90 - Pharmacy Call Center 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 90-FA101
		Drawing 35 of 83



FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

A14 BUILDING 90 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

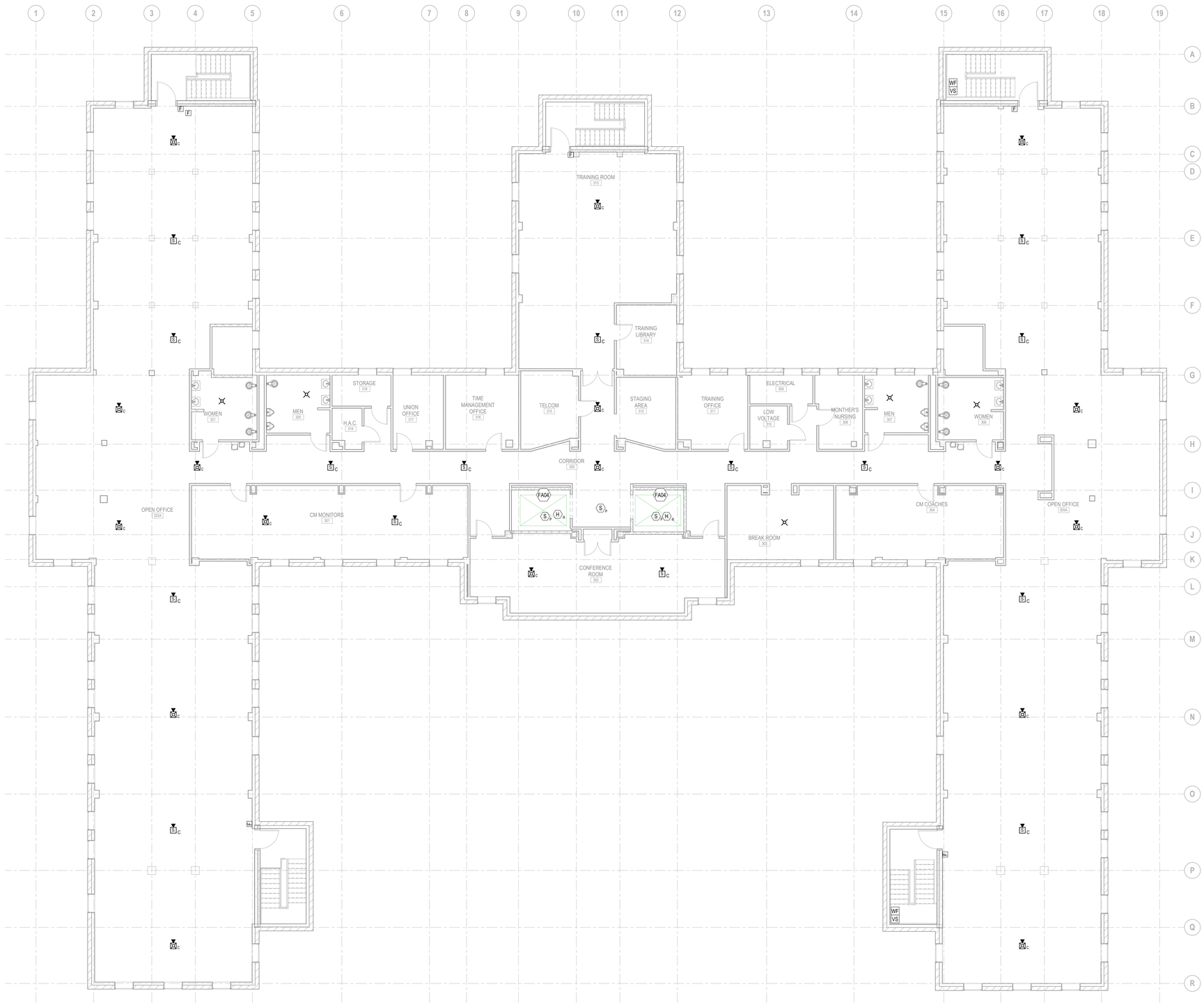
PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	FIRE ALARM PLAN - LEVEL 1
Submission:	100% BID SET
Building:	90
Checked By:	MAR
Drawn By:	JLH
Project Title:	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location:	BUILDING 90 - Pharmacy Call Center 4800 MEMORIAL DRIVE WACO, TX 76711
VA Project Number:	674A4-21-108
Issue Date:	6/25/2021
Drawing Number:	90-FA102

024-10122-000. 90. FA102. 12/26/20.pdf



A14 BUILDING 90 - FIRE ALARM PLAN - LEVEL 2

SCALE: 1/8" = 1'-0"

TRUE NORTH N

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	FIRE ALARM PLAN - LEVEL 2
Submission:	100% BID SET
Building:	90
Checked By:	MAR
Drawn By:	JLH
Project Title:	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location:	BUILDING 90 - Pharmacy Call Center 4800 MEMORIAL DRIVE WACO, TX 76711
VA Project Number:	674A4-21-108
Issue Date:	6/25/2021
Drawing Number:	90-FA103

Drawing 37 of 83

024-10122-000. 90. FA103. 12/26/20.pdf

024-10122-000. 92. FA001. 01/15/21.pdf

FIRE ALARM MATRIX

INPUT ↓ / OUTPUT →	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE ASSOCIATE FIRE DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
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S C	MNS SPEAKER/STROBE CEILING MOUNTED
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CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
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	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
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CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
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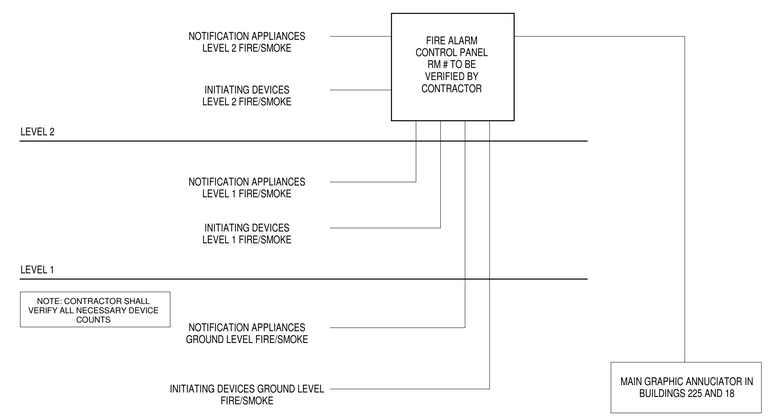
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A6 BUILDING 92 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISSA A. RODRIGUEZ 126314 6/25/21

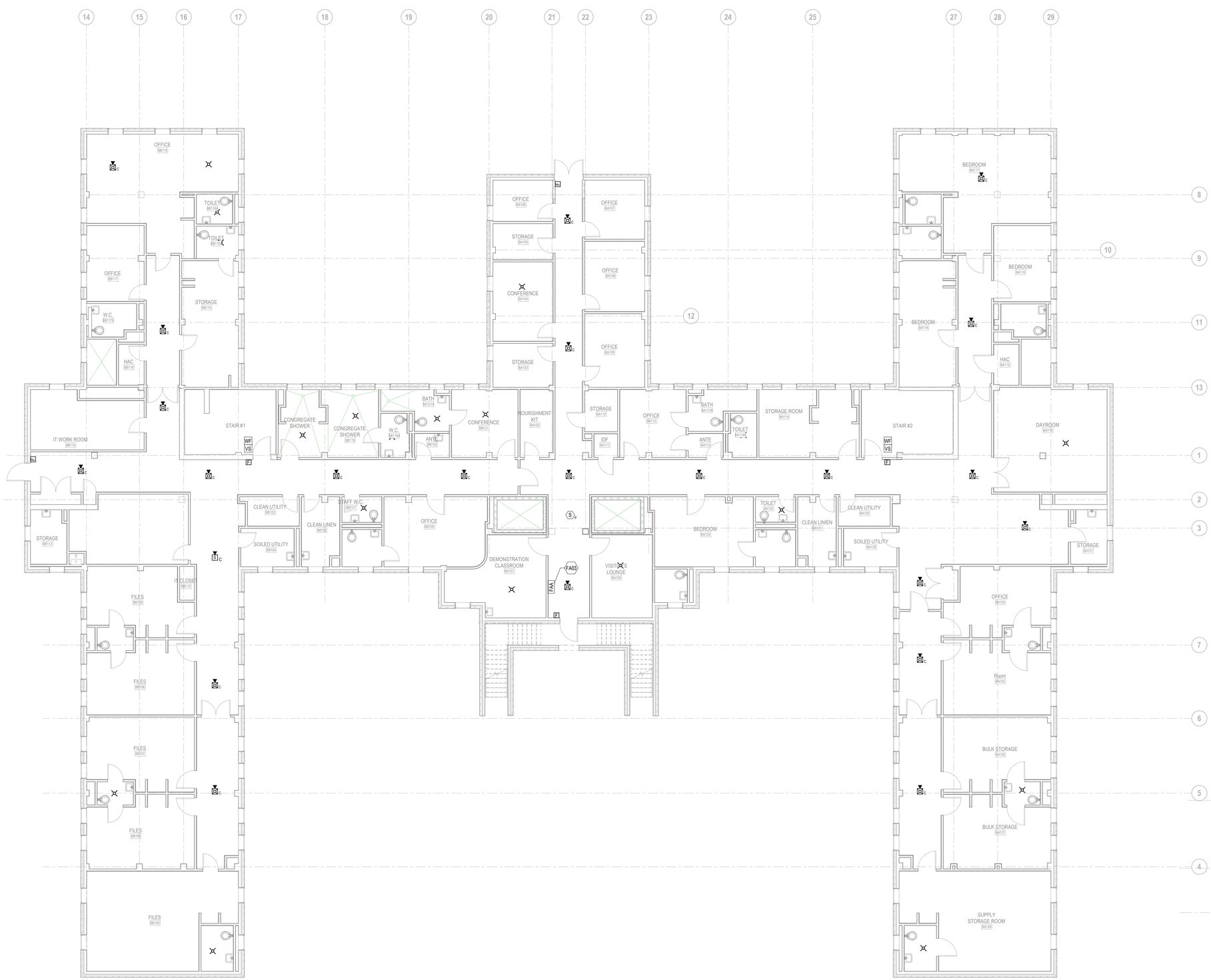
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS
Submission: 100% BID SET
Building: 92 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

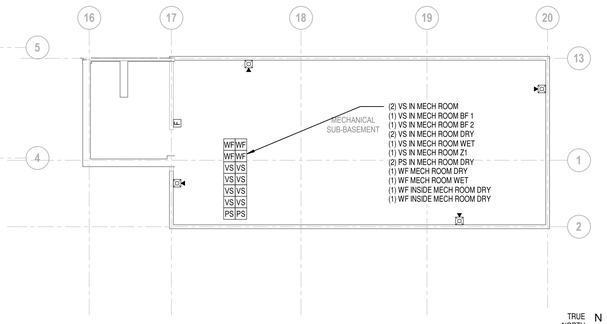
Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BLDG 92 - FSC VA Finance Center
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 92-FA001
Drawing 38 of 83

024-10122-000. 92. FA101. 08/31/20.pdf



A15 BUILDING 92 - FIRE ALARM PLAN - BASEMENT LEVEL
SCALE: 1/8" = 1'-0"



A4 BUILDING 92 - FIRE ALARM PLAN - SUB-BASEMENT
SCALE: 1/8" = 1'-0"

TRUE NORTH

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA03	EXISTING ANNUNCIATOR LOCATION

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

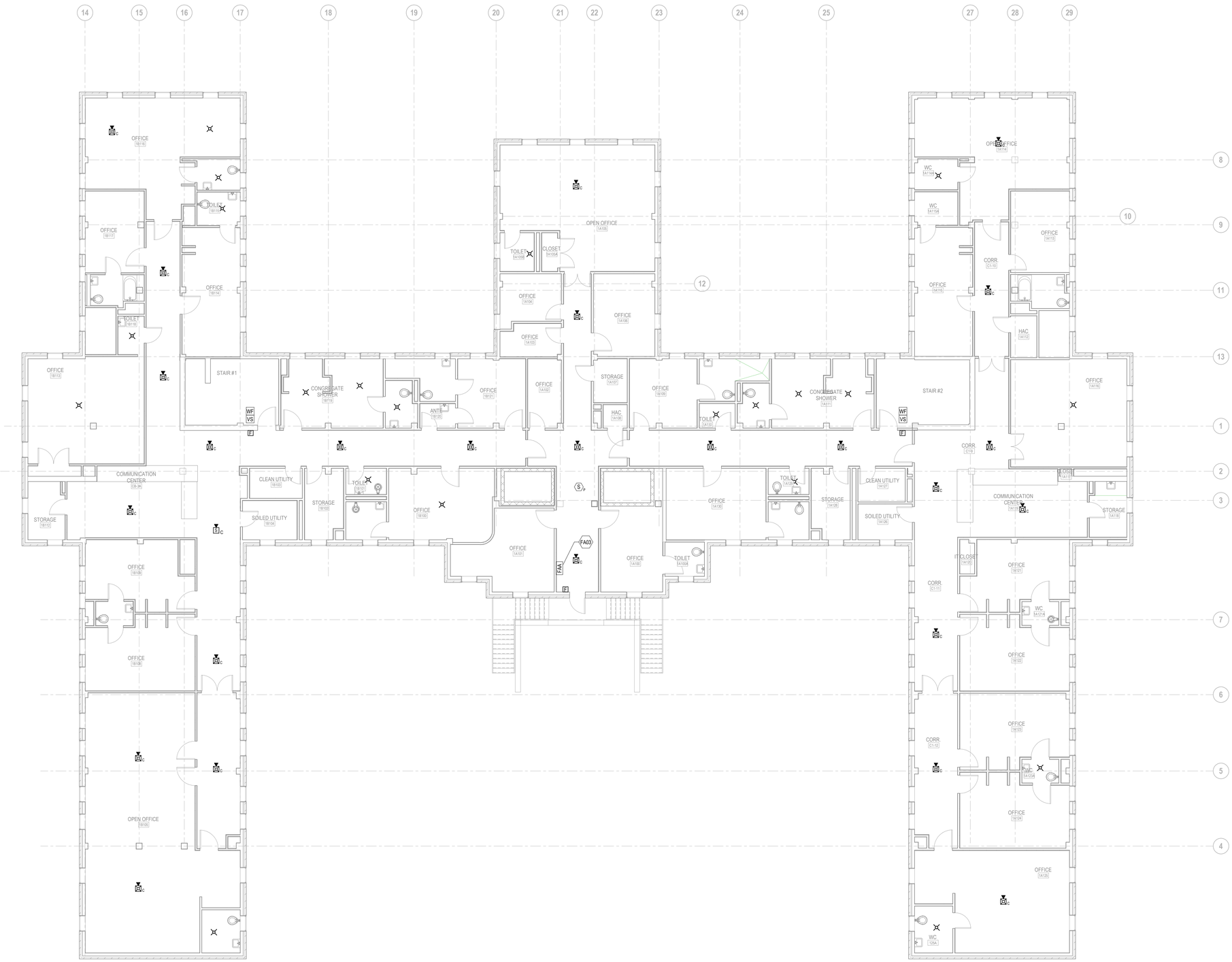
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - BASEMENT LEVEL	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 92 · Checked By: MAR · Drawn By: JLH · FULLY SPRINKLERED	Project Location: BLDG 92 - FSC VA Finance Center 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 92-FA101

024-10122-000. 92. FA102. 12/26/20.pdf



FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA03	EXISTING ANNUNCIATOR LOCATION

A15 BUILDING 92 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
92	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

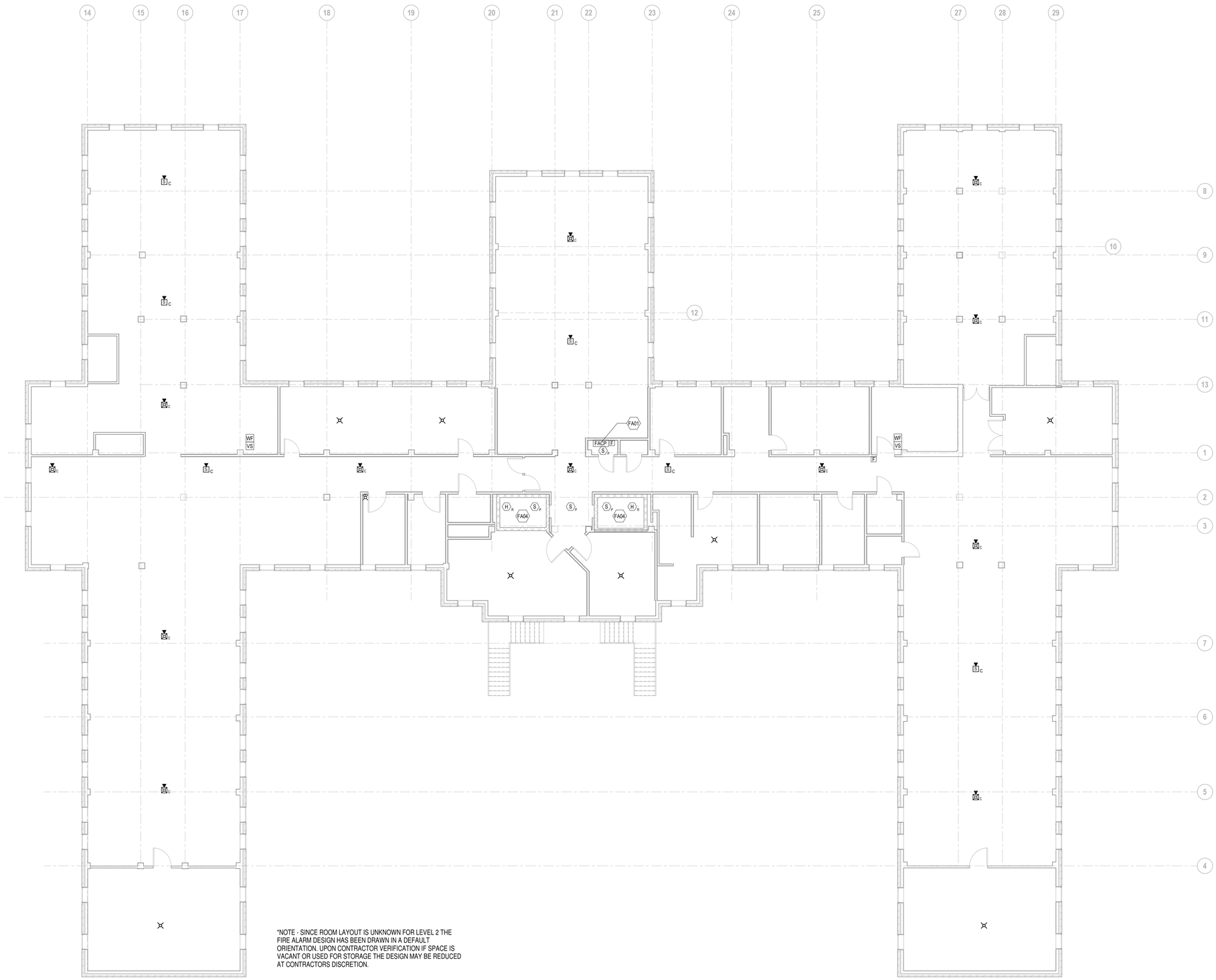
Project Location: BLDG 92 - FSC VA Finance Center
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 92-FA102

024-10122-000. 92. FA103. 12/26/20.pdf



A15 BUILDING 92 - FIRE ALARM PLAN - LEVEL 2

SCALE: 1/8" = 1'-0"

TRUE NORTH N

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL
FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
12902914
LICENSED PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 2	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
		Issue Date: 6/25/2021
Submission: 100% BID SET	Project Location: BLDG 92 - FSC VA Finance Center 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 92-FA103

Building:	Checked By:	Drawn By:	
92	MAR	JLH	FULLY SPRINKLERED

Drawing 41 of 83

024-10122-000. 93. FA001. 01/18/21.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE DAMPERS / DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PROXIMATE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN (DISCONNECT ELEVATOR POWER	OPEN LOCKED EGRESS DOORS ON FLOOR OF FIRE ORIGIN	PROVIDE DIRECT FUEL SOURCE SHUTDOWN FUEL EQUIPMENT
DUCT SMOKE DETECTOR				X		X	X[1]				
AREA SMOKE DETECTOR	X	X	X							X	
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X	
ELEVATOR SMOKE DETECTOR	X	X	X					X			
MANUAL PULL STATION	X	X	X		X					X	
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X		
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X	
WATER CONTROL VALVE TAMPER SWITCH				X							
KITCHEN HOOD SUPPRESSION SYSTEM	X	X	X		X						X

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
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	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
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S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
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CODE DATA

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SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
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FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
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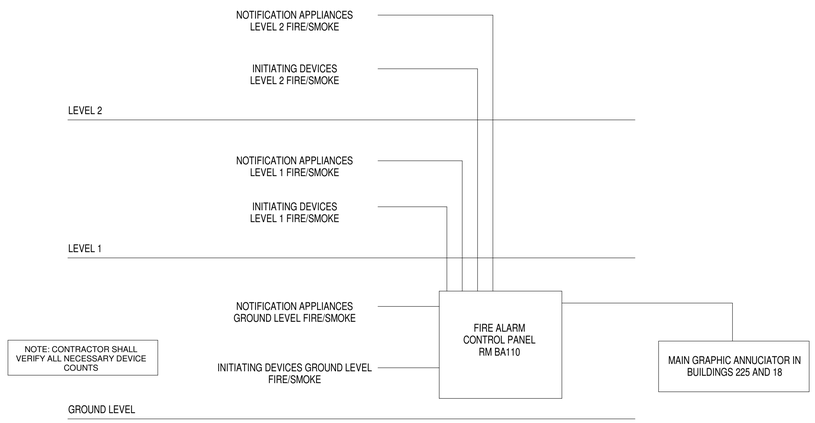
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A6 BUILDING 93 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENARL NOTES AND DETAILS

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
93	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

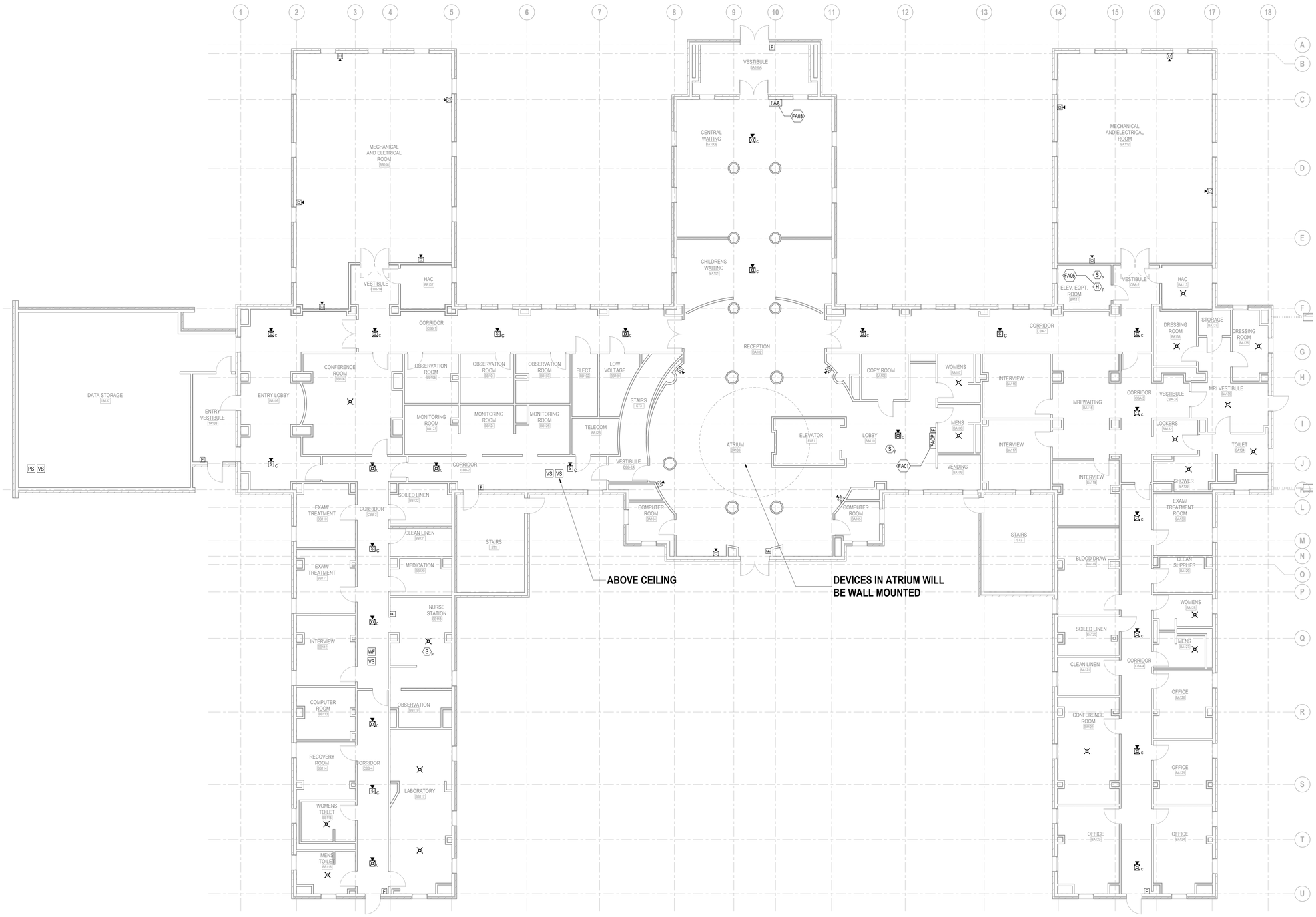
Project Location: VA WACO - BUILDING 93
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 93-FA001

Drawing 42 of 83



FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA03	EXISTING ANNUNCIATOR LOCATION
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.

A15 BUILDING 93 - FIRE ALARM PLAN - BASEMENT LEVEL

SCALE: 1/8" = 1'-0"

TRUE NORTH

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
93	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: VA WACO - BUILDING 93
4800 MEMORIAL DRIVE
WACO, TX 76711

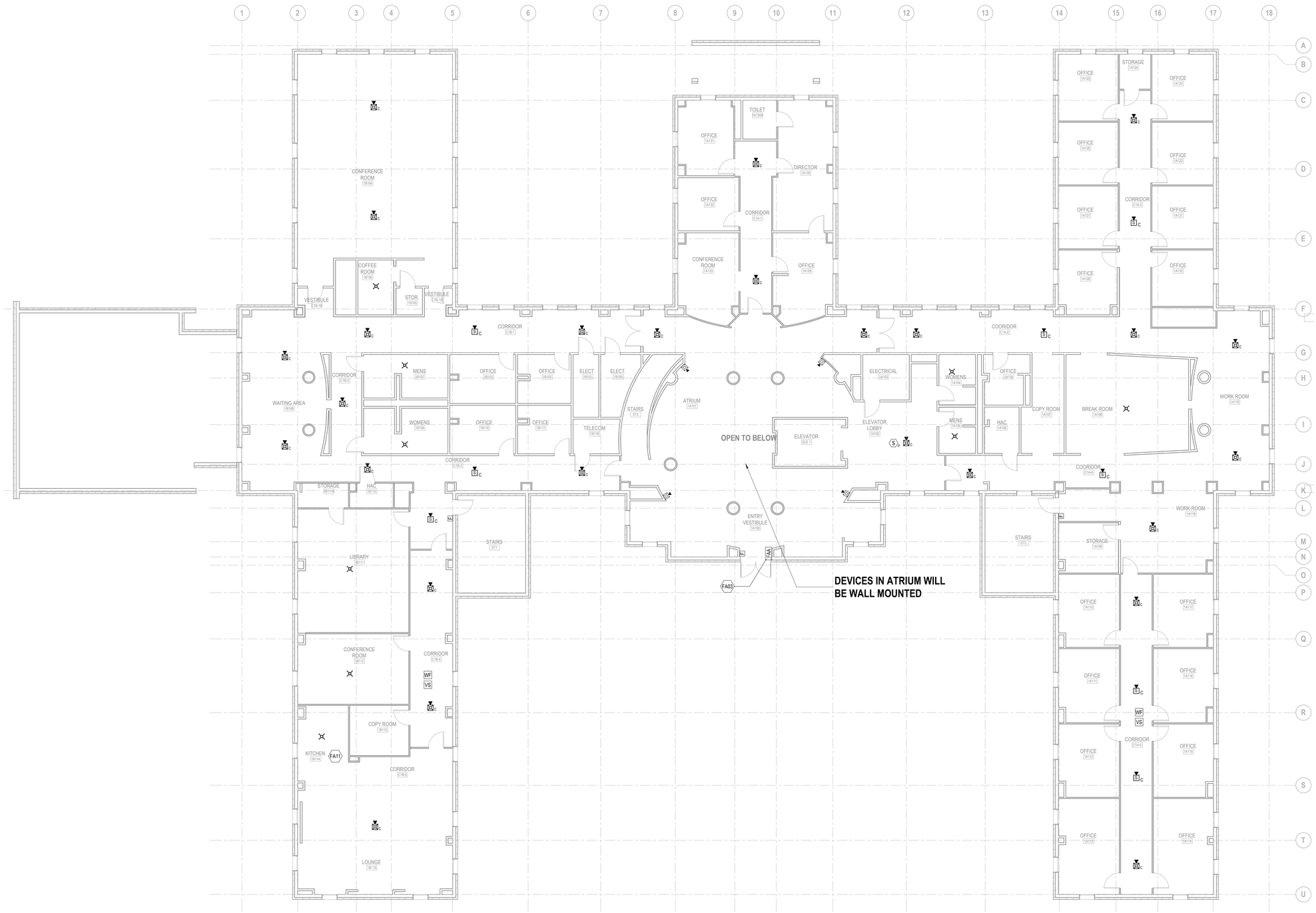
VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 93-FA101

Drawing 43 of 83

024-10122-000. 93. FA101. 12/26/20.pdf



A15 BUILDING 93 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

TRUE NORTH N

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA03	EXISTING ANNUNCIATOR LOCATION
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

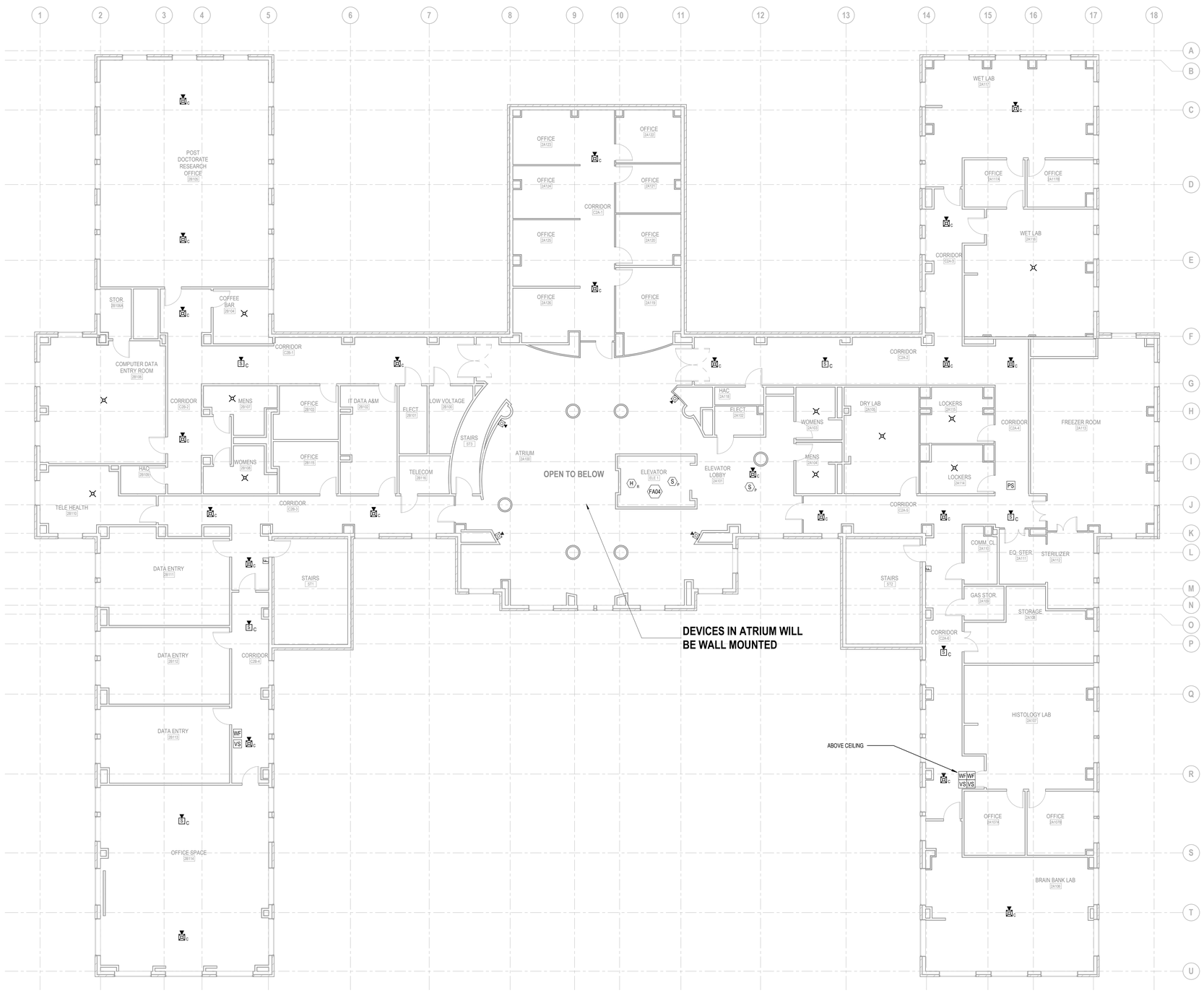
Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
		Issue Date: 6/25/2021
Submission: 100% BID SET	Project Location: VA WACO - BUILDING 93, 4800 MEMORIAL DRIVE, WACO, TX 76711	Drawing Number: 93-FA102

Building:	Checked By:	Drawn By:	
93	MAR	JLH	FULLY SPRINKLERED

Drawing 44 of 83

024-10122-000. 93. FA102. 12/26/20.pdf

024-10122-000. 93. FA103. 12/26/20.pdf



A14 BUILDING 93 - FIRE ALARM PLAN - LEVEL 2

SCALE: 1/8" = 1'-0"

TRUE NORTH N

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 2	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 93 · Checked By: MAR · Drawn By: JLH · FULLY SPRINKLERED	Project Location: VA WACO - BUILDING 93, 4800 MEMORIAL DRIVE, WACO, TX 76711	Drawing Number: 93-FA103

Drawing 45 of 83

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FIRE ALARM MATRIX

INPUT ↓ / OUTPUT →	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO FA SYSTEM PANEL PC FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PROXIMATE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	OPEN LOCKED EGRESS DOORS ON FLOOR OF FIRE ORIGIN	DISCONNECT FUEL SOURCE FROM COOKING EQUIPMENT
DUCT SMOKE DETECTOR				X		X	X[1]				
AREA SMOKE DETECTOR	X	X	X							X	
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X	
ELEVATOR SMOKE DETECTOR	X	X	X					X			
MANUAL PULL STATION	X	X	X		X					X	
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X		
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X	
WATER CONTROL VALVE TAMPER SWITCH				X							
KITCHEN HOOD SUPPRESSION SYSTEM	X	X	X		X						X

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
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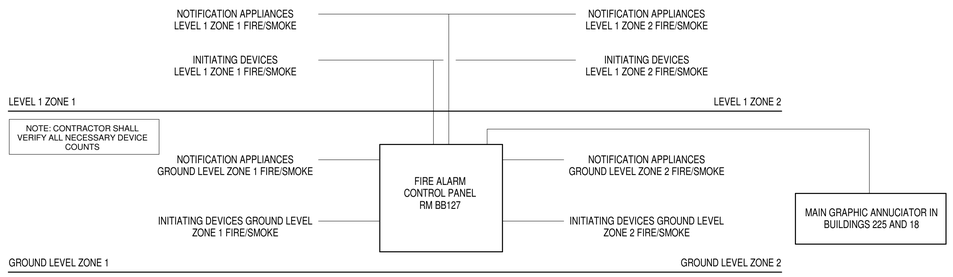
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	HEALTHCARE
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM ZONING TO MATCH EXISITNG SMOKE ZONES

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A7 **BUILDING 94 - FIRE ALARM RISER DIAGRAM**
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

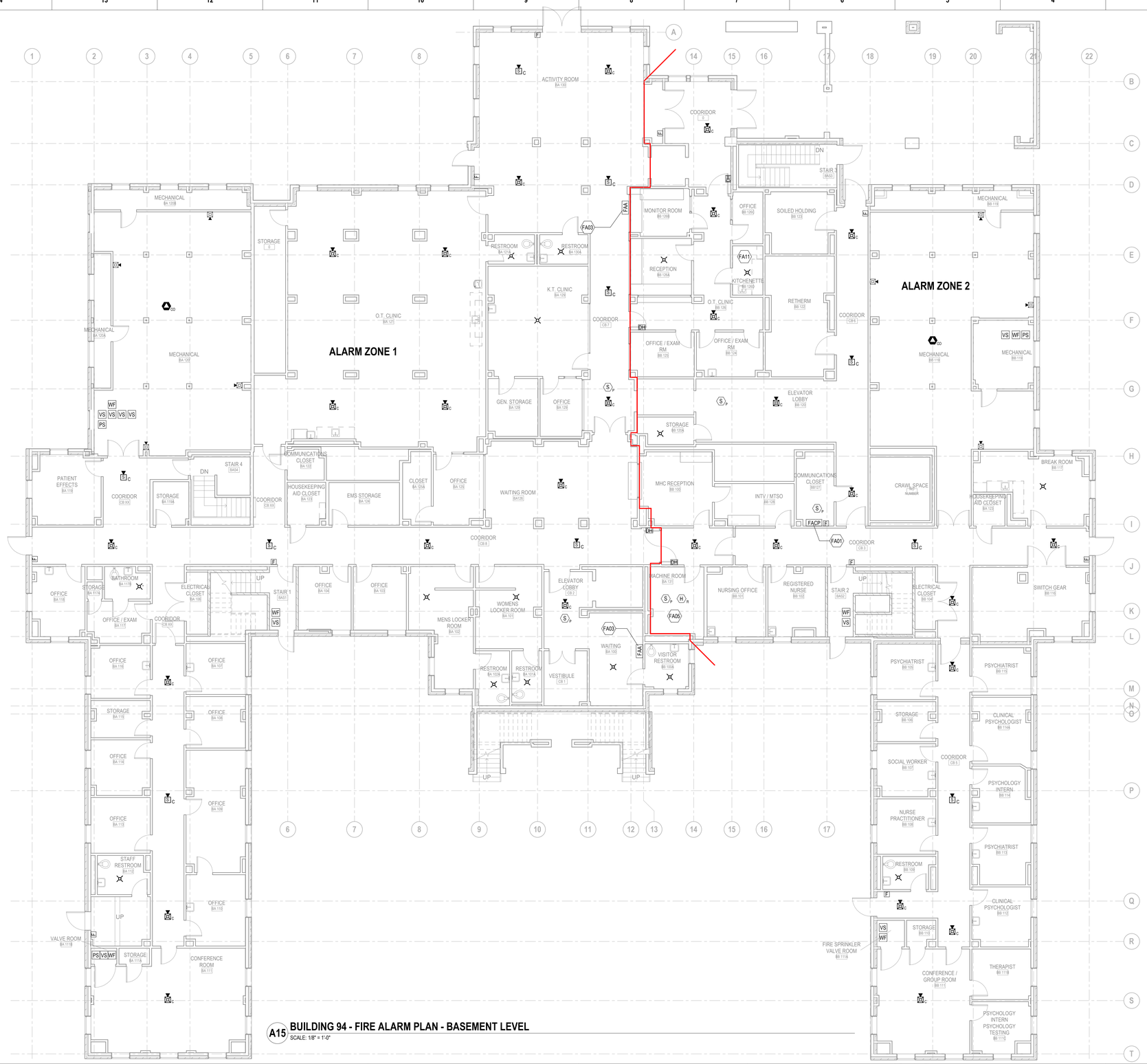
PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS
Submission: 100% BID SET
Building: 94 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: B94 - IP PSY / SMILE U. / ACUTE PSY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 94-FA001
Drawing 46 of 83



A15 BUILDING 94 - FIRE ALARM PLAN - BASEMENT LEVEL
SCALE: 1/8" = 1'-0"

TRUE NORTH

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
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	SWITCHES
WF	FLOW DETECTOR/SWITCH
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	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
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	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA03	EXISTING ANNUNCIATOR LOCATION
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

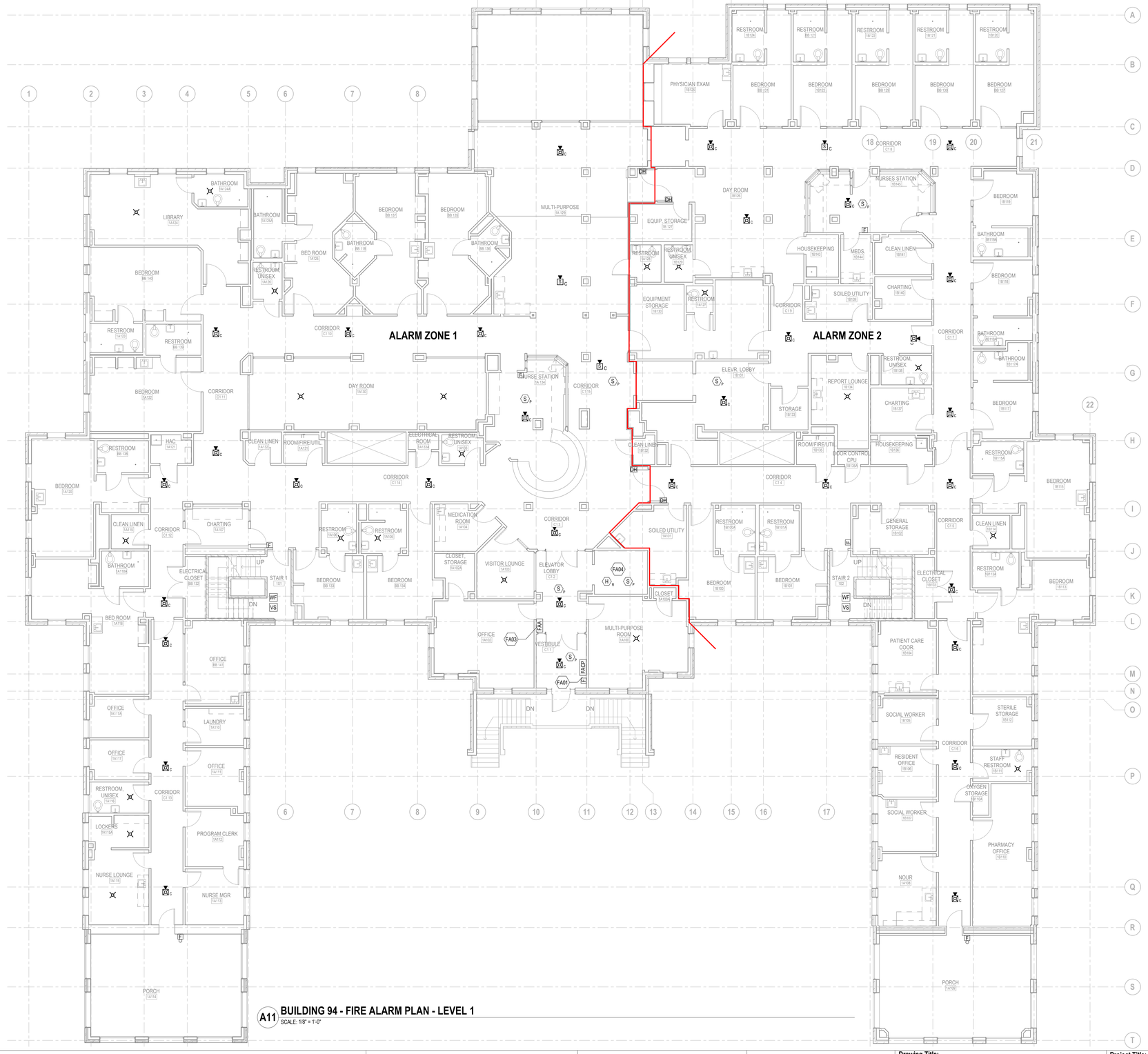
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL
Submission: 100% BID SET
Building: 94 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: B94 - IP PSY / SMILE U. / ACUTE PSY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 94-FA101
Drawing 47 of 83

024-10122-000, 94, FA101, 12/26/20.pdf



A11 **BUILDING 94 - FIRE ALARM PLAN - LEVEL 1**
SCALE: 1/8" = 1'-0"

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
MNS C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA03	EXISTING ANNUNCIATOR LOCATION
FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
120314
LICENSED PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1
Submission: 100% BID SET
Building: 94 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: B94 - IP PSY / SMILE U. / ACUTE PSY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 94-FA102
Drawing 48 of 83

024-10122-000_94_FA102_12/26/20.pdf

024-10122-000, 99, FA101, 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE ASSOCIATE EGRESS DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

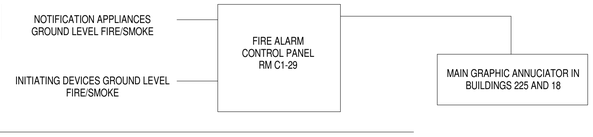
KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL

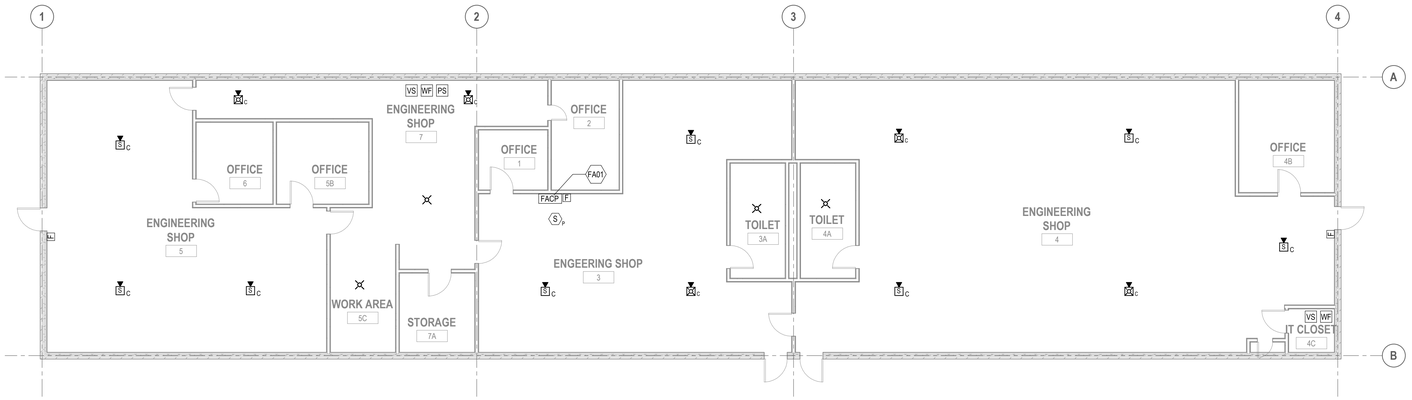
FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.

NOTE: CONTRACTOR SHALL VERIFY ALL NECESSARY DEVICE COUNTS



D8 FIRE ALARM RISER DIAGRAM
SCALE: NTS



A13 BUILDING 99 - FIRE ALARM PLAN - BASEMENT LEVEL
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
99	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

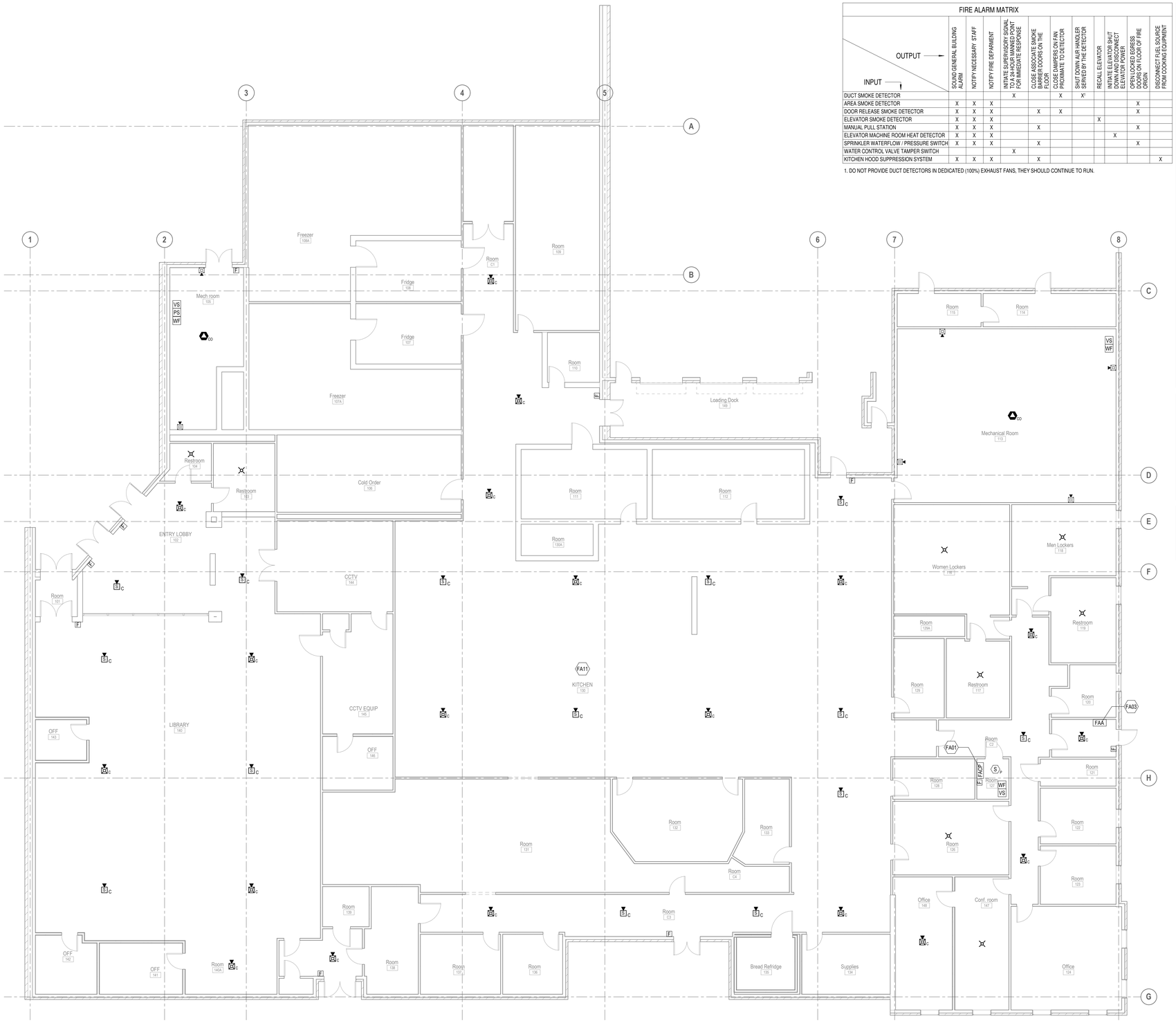
Project Location: BUILDING 99 - FMS SHOPS
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 99-FA101

Drawing 49 of 83



A16 BUILDING 202 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

FIRE ALARM MATRIX

INPUT ↓ / OUTPUT →	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PROXIMATE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	OPEN LOCKED EGRESS DOORS ON FLOOR OF FIRE ORIGIN	DISCONNECT FUEL SOURCE FROM COOKING EQUIPMENT
DUCT SMOKE DETECTOR				X		X	X[1]				
AREA SMOKE DETECTOR	X	X	X							X	
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X	
ELEVATOR SMOKE DETECTOR	X	X	X					X			
MANUAL PULL STATION	X	X	X		X					X	
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X		
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X	
WATER CONTROL VALVE TAMPER SWITCH				X							
KITCHEN HOOD SUPPRESSION SYSTEM	X	X	X		X						X

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
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	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.
FA03	EXISTING ANNUNCIATOR LOCATION
FA11	IF KITCHEN RANGE HOOD AND/OR DUCT FIRE SUPPRESSION SYSTEM ARE PRESENT THEY WILL NEED TO INTERFACE WITH FIRE ALARM SYSTEM PER THE FIRE ALARM MATRIX.

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
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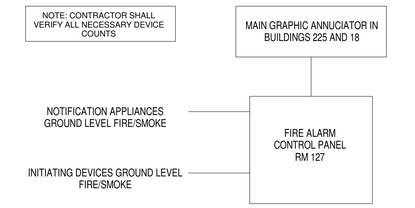
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A4 BUILDING 202 - FIRE ALARM RISER DIAGRAM

SCALE: NTS

N TRUE NORTH

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS — MELISA A. RODRIGUEZ — 126314 — LICENSED — PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
202	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 202 - DIETETICS / FUTURE VCS
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 202-FA101

Drawing 50 of 83

024-10122-000, 202, FA101, 12/26/20.pdf

024-10122-000_216_FA101_12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW SWITCH	X	X	X		X					X
SPRINKLER WATERFLOW SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

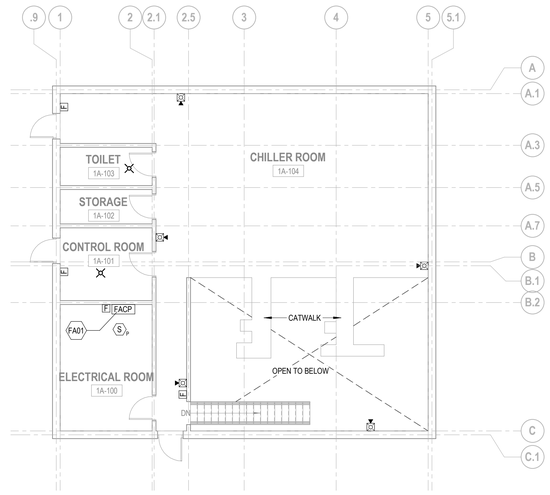
OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

KEYNOTE LEGEND

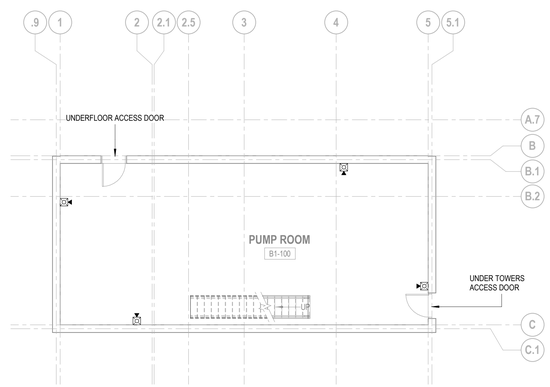
FA01	EXISTING FIRE ALARM CONTROL PANEL

FIRE ALARM GENERAL NOTES

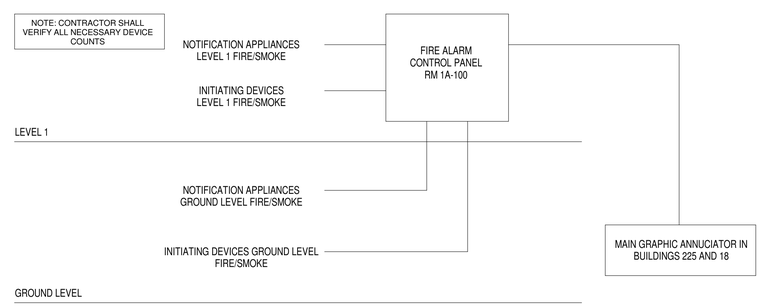
1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



E9 BUILDING 216 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"



A9 BUILDING 216 - FIRE ALARM PLAN - BASEMENT
SCALE: 1/8" = 1'-0"



A6 BUILDING 216 - FIRE ALARM CONTROL PANEL
SCALE: NTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT & LEVEL 1
Submission: 100% BID SET
Building: 216 | **Checked By:** MAR | **Drawn By:** JLH | **FULLY SPRINKLERED**

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 216 - CENTRAL CHILLER 4800 MEMORIAL DRIVE WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 216-FA101
Drawing 51 of 83

024-10122-000_219_FA101_12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

KEYNOTE LEGEND

FA01 EXISTING FIRE ALARM CONTROL PANEL.

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
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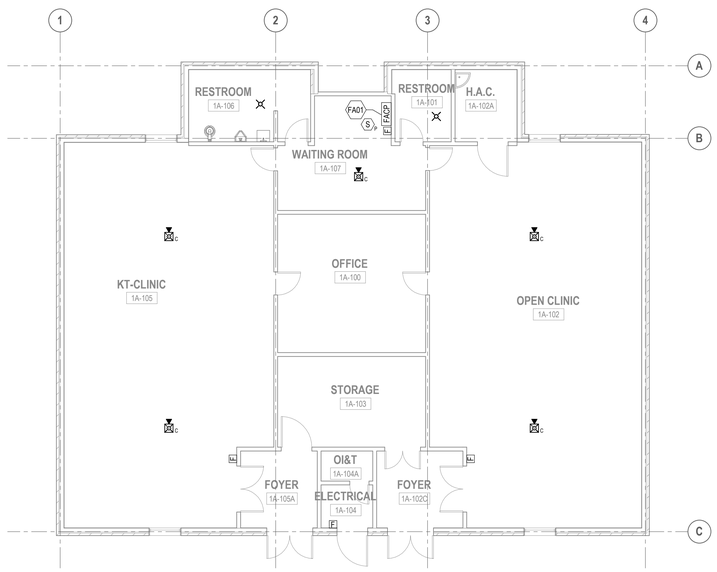
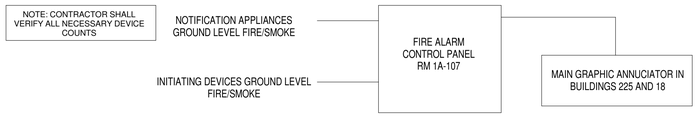


A11 BUILDING 219 - FIRE ALARM PLAN - BASEMENT LEVEL
SCALE: 1/8" = 1'-0"



A6 BUILDING 216 - FIRE ALARM CONTROL PANEL
SCALE: NTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
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POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
1290314
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT LEVEL

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
219	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BLDG 219 - KINS / PHYSICAL THERAPY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 219-FA101

Drawing 52 of 83

024-10122-000, 222, FA101, 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

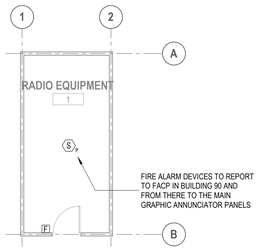
SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

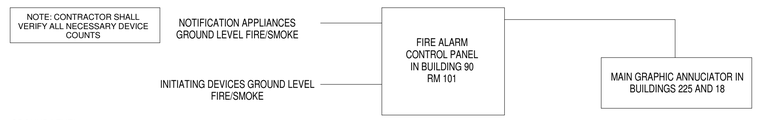
OCCUPANCY	BUSINESS
SPRINKLERS	NOT SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK. INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A8 **BUILDING 222 - FIRE ALARM PLAN - LEVEL 1**
SCALE: 1/8" = 1'-0"



A6 **BUILDING 222 - FIRE ALARM RISER DIAGRAM**
SCALE: NTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISSA A. RODRIGUEZ
1265314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1
Submission: 100% BID SET
Building: 222 | **Checked By:** MAR | **Drawn By:** JLH | NOT SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 222 - Radio Equipment
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 222-FA101
Drawing 53 of 83

024-10122-000, 224, FA101, 12/26/20.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE ASSOCIATE FIRE DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

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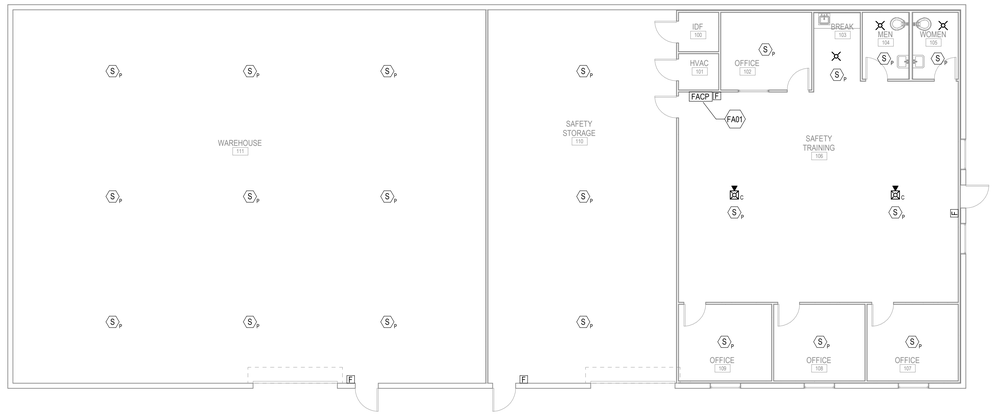
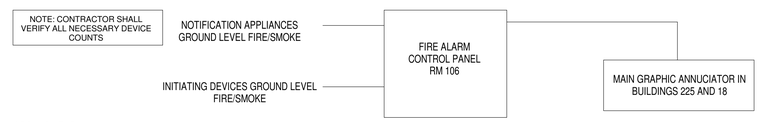
KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.



A13 BUILDING 224 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"



A6 BUILDING 224 - FIRE ALARM RISER DIAGRAM
SCALE: NTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1
Submission: 100% BID SET
Building: 224 | **Checked By:** MAR | **Drawn By:** JLH | NOT SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 224 - SAFTEY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 224-FA101
Drawing 54 of 83

024-10122-000. FA100. 05/06/21.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE ELIMINATES ON AN INDIVIDUAL DETECTOR	SHUT DOWN AUR HANDLER SERVED BY THE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE CORRIDOR DOORS DOORS ON FLOOR OF FIRE ORIGIN
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AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

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FAA	FIRE ALARM ANNUNCIATOR PANEL
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FATC	FIRE ALARM TERMINAL CABINET
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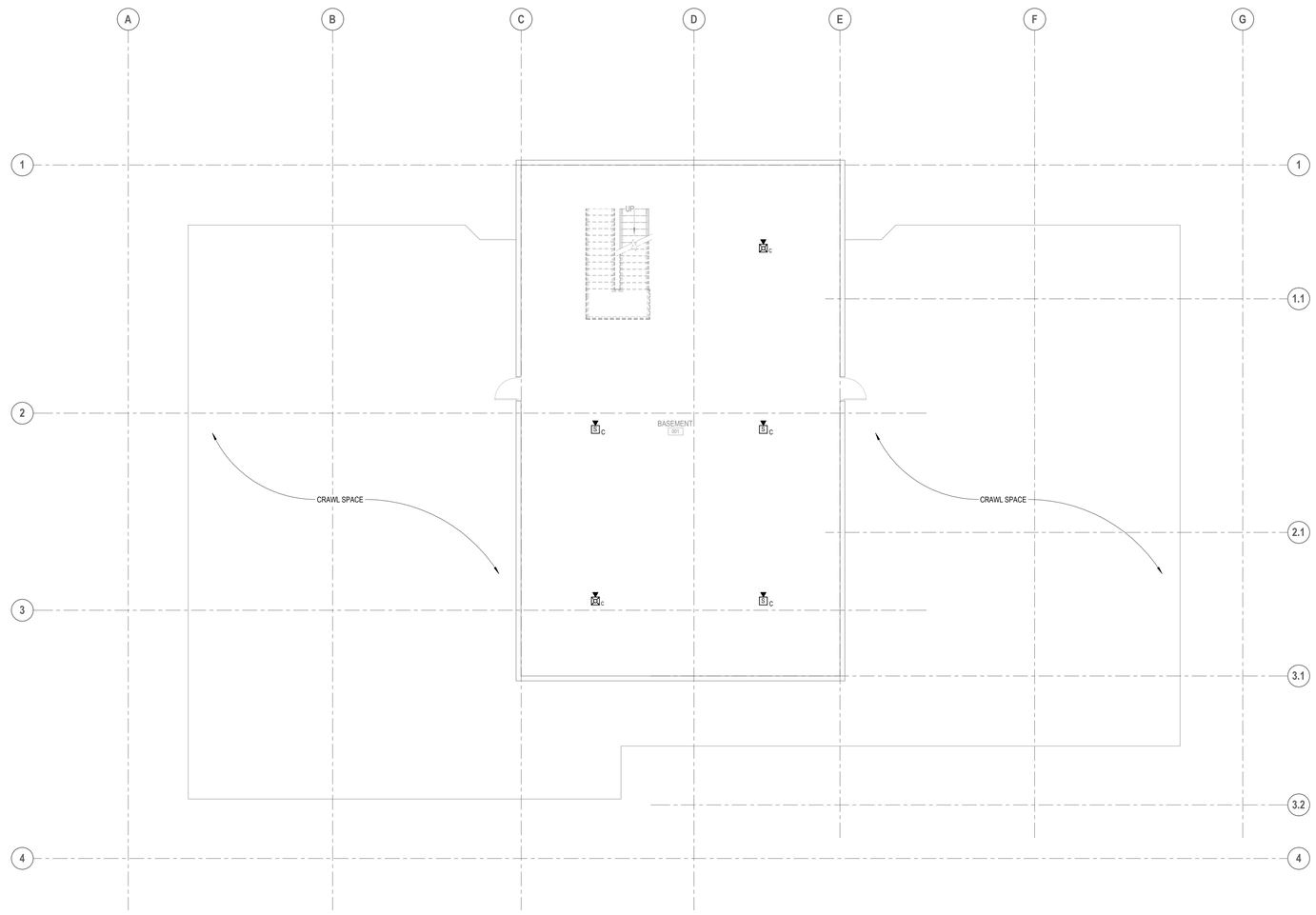
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

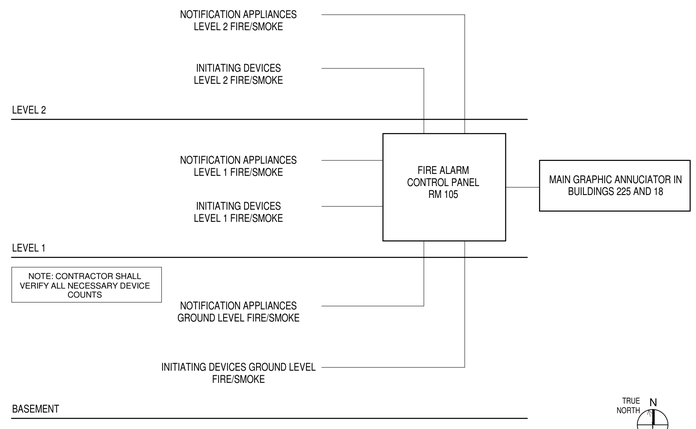
OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY UCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
2. ALL EXISTING FIRE ALARM DEVICES, PANELS AND RELATED EQUIPMENT ARE TO BE DEMOLISHED. EXISTING ALARM SYSTEMS MUST REMAIN IN-SERVICE AND FUNCTIONAL WHILE NEW ALARM SYSTEM IS INSTALLED. FOLLOW ILSM PROTOCOLS FOR SHUTDOWN AND PHASE DEMO OF EXISTING ALARM SYSTEM SO THAT REMOVAL ONLY OCCURS ONCE NEW ALARM SYSTEM IS FULLY INSTALLED AND FUNCTIONAL.
3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
4. COORDINATE FIRE ALARM SYSTEM DEVICE LOCATIONS WITH LIGHT FIXTURES, STRUCTURAL MEMBERS, SPRINKLER HEADS AND PIPING, HVAC EQUIPMENT AND DUCTWORK. CONTRACTOR TO VERIFY LOCATIONS OF DUCT SMOKE DETECTORS AND CONNECT TO NEW FIRE ALARM SYSTEM.
5. THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND SATISFACTORILY OPERATING SYSTEMS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS EVIDENTLY INTENDED. IT IS NOTED THAT THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENTS OF SYSTEMS AND WORK INTERCONNECTIONS HAVE BEEN SHOWN, AND THE CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND WIRING AS REQUIRED TO ACCOMPLISH THE FUNCTIONS INDICATED. ADDITIONALLY, FIRE ALARM SYSTEMS HAVE BEEN SHOWN AND THE CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED QUANTITIES AND TYPES OF CABLES, CONDUCTORS, RACEWAYS, REMOTE POWER SUPPLIES AND CONNECTIONS, SHIELDING REQUIREMENTS, ETC., AS REQUIRED BY THE SYSTEM MANUFACTURER, THE SPECIFICATIONS, AND ANY APPLICABLE CODES. ALL WIRING SHOWN ON RISER DIAGRAMS SHALL ALSO BE FURNISHED AND INSTALLED REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE FLOOR PLANS.
6. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE WORK OF ALL OTHER TRADES AND EXISTING CONDITIONS SO AS TO AVOID CONFLICTS. RESOLVE ALL CONFLICTS THROUGH THE A/E PRIOR TO ROUGH-IN. FAILURE TO PROVIDE SUCH COORDINATION PRIOR TO WORK BEING INSTALLED SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR, AND MAY RESULT IN REJECTION OF THE WORK.
7. ADDITIONAL DEVICES MAY BE REQUIRED. DO NOT USE THESE DRAWINGS FOR DEVICE COUNTS.
8. ALL MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
9. EXISTING CONDUIT IN GOOD CONDITION THAT HAS BEEN SALVAGED FROM OTHER BUILDINGS MAY BE REUSED IF POSSIBLE AND SHALL BE STRIPED IN PATIENT AREAS. NEW CONDUIT SHALL BE MARKED WITH RED COUPLINGS. ALL OTHER MATERIALS SHALL BE NEW, SHALL BE SUITABLE FOR THE APPLICATION INTENDED, AND SHALL BEAR LABELS OR MARKINGS INDICATING THIRD PARTY TESTING LABORATORY LISTINGS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
10. ALL FIRE ALARM CABLES SHOULD BE INSTALLED IN METAL RACEWAYS.
11. ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED SPACES AND MAY BE EXPOSED IN UNFINISHED SPACES SUCH AS MECHANICAL AND ELECTRICAL ROOMS. ALL RACEWAY AND WIRING SHALL BE ROUTED EITHER PERPENDICULAR OR PARALLEL TO THE BUILDING'S STRUCTURAL COMPONENTS.
12. PROVIDE PULL AND JUNCTION BOXES AS REQUIRED TO MEET CODE AND INSTALLATION REQUIREMENTS. PULL AND JUNCTION BOXES SHALL BE CONCEALED IN FINISHED SPACES AND LOCATIONS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES SO AS TO AVOID CONFLICTS.
13. ALL CONDUCTORS SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAGS INDICATING PANEL AND CIRCUIT NUMBER, CONTROL WIRE IDENTIFICATION NUMBER, OR OTHER APPROPRIATE INFORMATION. ALL PULL AND JUNCTION BOXES SHALL BE LABELED AS TO FUNCTION.
14. ALL EQUIPMENT SHALL BE SECURELY FASTENED BY MEANS OF ANCHORS, RODS, HANGERS, SUPPORTS, GUIDES, SWAY BRACES, ETC., TO MAINTAIN ALIGNMENT AND PREVENT EQUIPMENT MOVEMENT. ALL EQUIPMENT LOCATED IN SEISMIC ZONES SHALL BE SECURED WITH MEANS APPROVED FOR THE SEISMIC CLASSIFICATION ENCOUNTERED.
15. ALL PENETRATIONS OF FIRE OR SMOKE RATED CONSTRUCTION SHALL BE SEALED WITH FIRESTOPPING MATERIALS APPROVED AND LISTED FOR THE RATING OF THE CONSTRUCTION TO BE PENETRATED. PROVIDE DOCUMENTATION ON ALL SUCH PENETRATION SEALING SYSTEMS FOR VERIFICATION OF PROPER INSTALLATION.
16. ALL PENETRATIONS OF ROOFS, EXTERIOR WALLS, FOUNDATIONS, OR OTHER WATER OR MOISTURE PROOF CONSTRUCTION SHALL BE SEALED WITH APPROPRIATE SEALING FITTINGS OR SEALED CONSTRUCTION TO PREVENT THE INTRODUCTION OF MOISTURE INTO THE BUILDING.
17. WHERE EMPTY RACEWAYS ARE INSTALLED, THEY SHALL BE LABELED AT BOTH ENDS AND FITTED WITH NYLON PULLSTRINGS FOR FUTURE USE.
18. ELECTRICAL WORK SHALL BE PERFORMED ON DE-ENERGIZED SYSTEMS ONLY TO PREVENT PERSONNEL INJURY AND POTENTIAL SYSTEM FAILURE. WHERE WORK ON EXISTING SYSTEMS WILL REQUIRE INTERRUPTION OF ELECTRICAL SERVICE, THEN TEMPORARY PROVISIONS ACCEPTABLE TO THE OWNER FOR TEMPORARY POWER SHALL BE UTILIZED UNTIL THE WORK IS COMPLETE.
19. THE FIRE ALARM SYSTEM SHALL COMPLY WITH ALL RELATED NFPA, BUILDING CODES AND LOCAL FIRE DEPARTMENT REGULATIONS.
20. WALL MOUNTED FIRE ALARM PULL STATIONS ARE TO BE LOCATED 46" A.F.F. AND WITHIN 5' OF THE NEAREST ADJACENT EXIT DOOR FROM THE FLOOR OR BUILDING.
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



1 **BUILDING 225 - FIRE ALARM PLAN - BASEMENT**
SCALE: 1/8" = 1'-0"



A5 **BUILDING 225 - FIRE ALARM RISER DIAGRAM**
SCALE: NTS

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - BASEMENT

Submission: 100% BID SET

Building: | **Checked By:** DLO | **Drawn By:** JLH | **FULLY SPRINKLERED**

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 225 - ENERGY CENTER
4800 MEMORIAL DRIVE
WACO, TX 7611

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 225-FA100

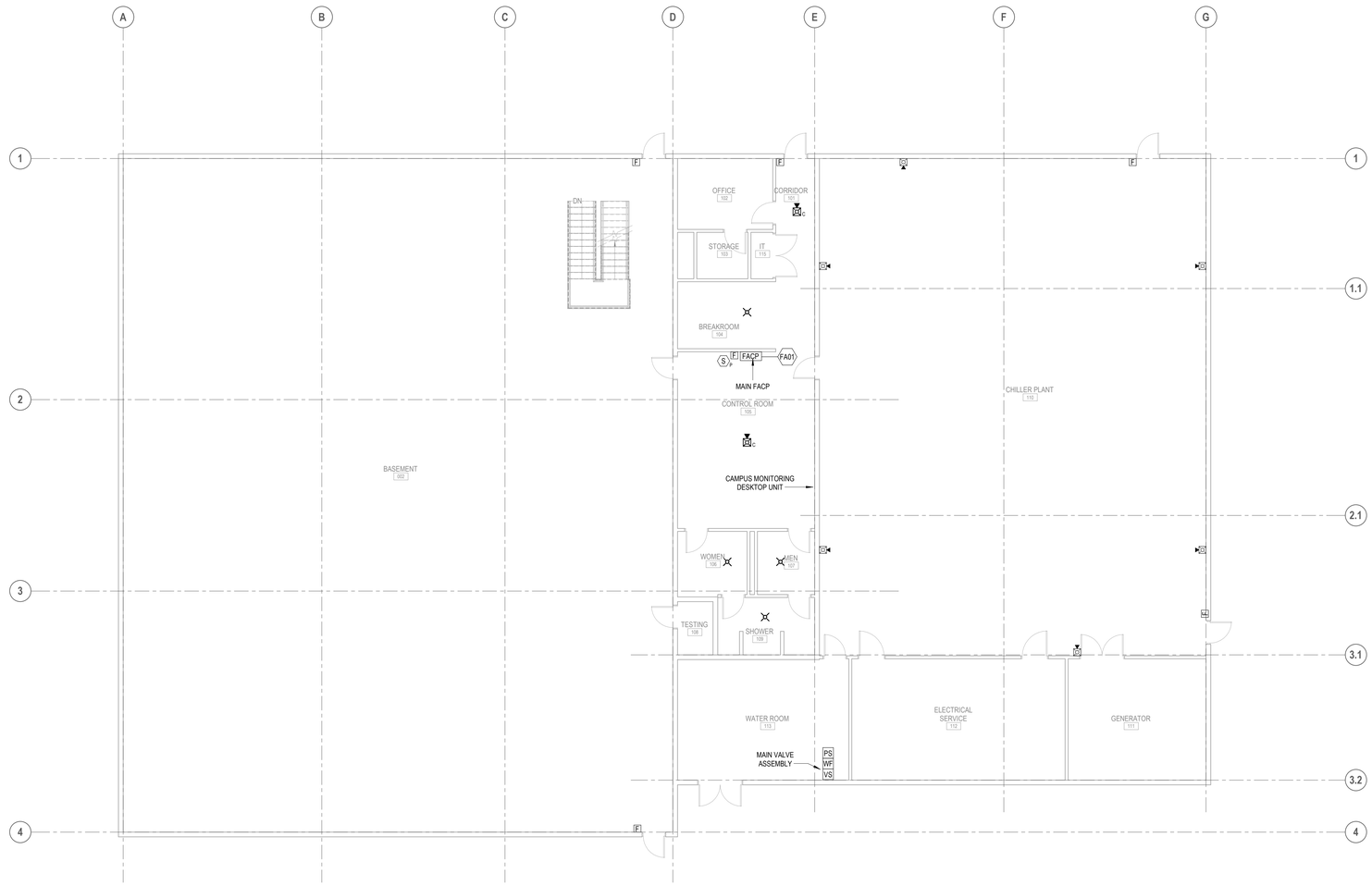
024-10122-000, FA101, 05/06/21.pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.



A13 BUILDING 225 - FIRE ALARM PLAN - LEVEL 1
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 1

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 225 - ENERGY CENTER
4800 MEMORIAL DRIVE
WACO, TX 7611

VA Project Number: 674A4-21-108

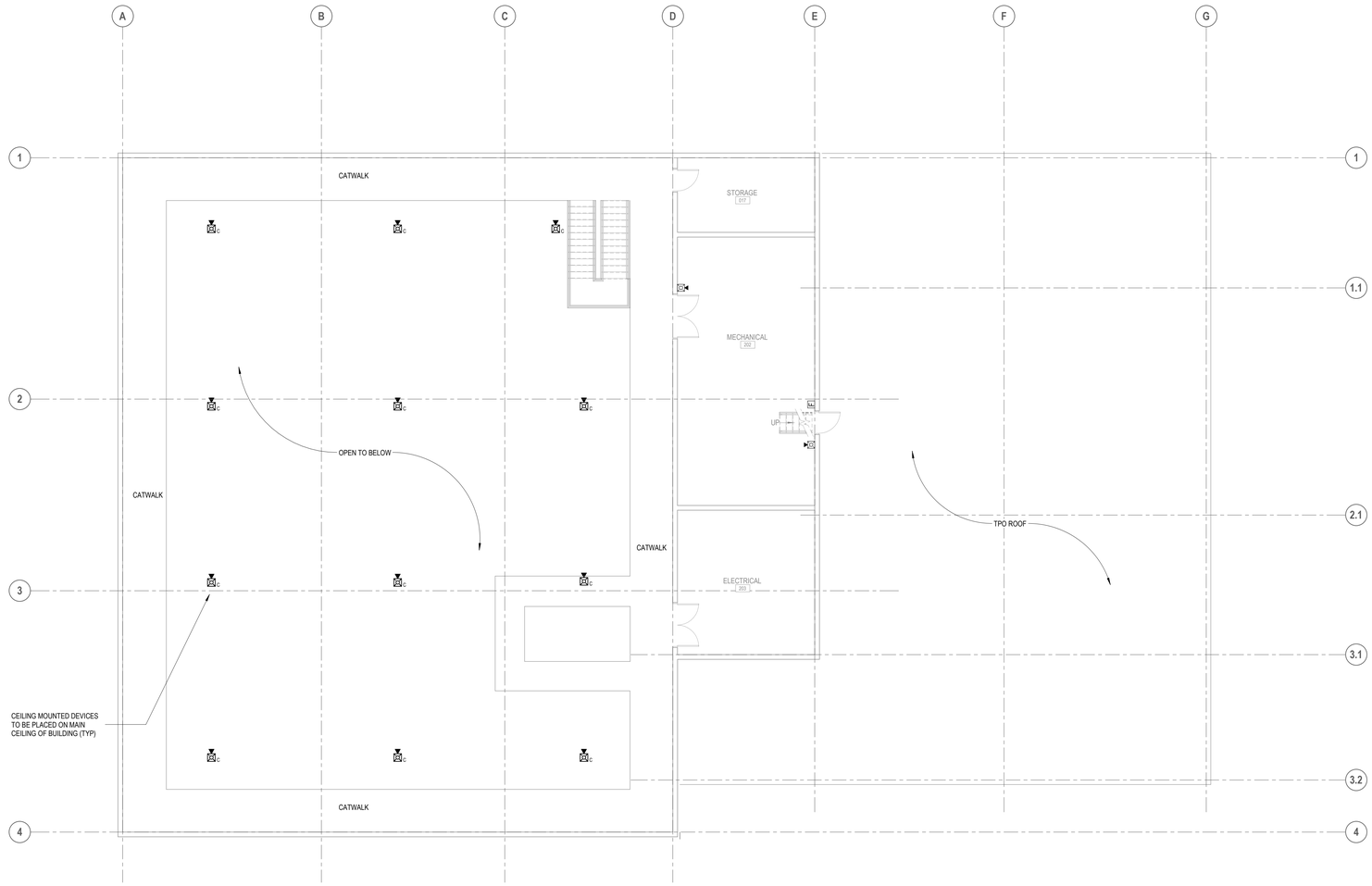
Issue Date: 6/25/2021

Drawing Number: 225-FA101

024-10122-000. FA102. 05/06/21.pdf

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES



A13 BUILDING 225 - FIRE ALARM PLAN - LEVEL 2
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - LEVEL 2
Submission: 100% BID SET
Building:
Checked By: MAR
Drawn By: JLH
FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 225 - ENERGY CENTER
4800 MEMORIAL DRIVE
WACO, TX 7611

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 225-FA102
Drawing 57 of 83

024-10122-000_226_FA001_02/17/21.pdf

FIRE ALARM MATRIX

INPUT \ OUTPUT	SOUND GENERAL BUILDING ALARM	NOTIFY NECESSARY STAFF	NOTIFY FIRE DEPARMENT	INITIATE SUPERVISORY SIGNAL TO A 24-HOUR MANNED POINT FOR IMMEDIATE RESPONSE	CLOSE ASSOCIATE SMOKE BARRIER DOORS ON THE FLOOR	CLOSE DAMPERS ON FAN PACKAGE TO DETECTOR	SHUT DOWN AUR HANDLER SERVED BY FIRE DETECTOR	RECALL ELEVATOR	INITIATE ELEVATOR SHUT DOWN AND DISCONNECT ELEVATOR POWER	CLOSE ASSOCIATE FIRE DOORS ON FLOOR OF FIRE ORIGIN
DUCT SMOKE DETECTOR				X		X	X[1]			
AREA SMOKE DETECTOR	X	X	X							X
DOOR RELEASE SMOKE DETECTOR	X	X	X		X	X				X
ELEVATOR SMOKE DETECTOR	X	X	X					X		
MANUAL PULL STATION	X	X	X		X					X
ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X						X	
SPRINKLER WATERFLOW / PRESSURE SWITCH	X	X	X		X					X
WATER CONTROL VALVE TAMPER SWITCH				X						

1. DO NOT PROVIDE DUCT DETECTORS IN DEDICATED (100%) EXHAUST FANS, THEY SHOULD CONTINUE TO RUN.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
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S C	MNS SPEAKER/STROBE CEILING MOUNTED
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CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

CODE DATA

OCCUPANCY	BUSINESS
SPRINKLERS	FULLY SPRINKLERED
NOTIFICATION	SPEAKERS, STROBES AND COMBINATION SPEAKER-STROBES IN NORMALLY OCCUPIED AREAS
DETECTION	MANUAL PULL-STATIONS, SPRINKLERS, SMOKE DETECTOR AT FACP, CO DETECTOR AT FUEL FIRED EQUIPMENT
FIRE ALARM ZONING	FIRE ALARM SYSTEM TO BE ZONED PER FLOOR

FIRE ALARM GENERAL NOTES

1. PROVIDE AND INSTALL A NEW FIRE ALARM SYSTEM THROUGHOUT THE BUILDING PER THE VA DESIGN GUIDE AND NFPA 72. REFER TO SPEC SECTION 28 31 00 INTERIOR FIRE ALARM SYSTEM. FIRE ALARM SYSTEM WILL BE ZONED PER FLOOR.
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3. ALL EXISTING INTERFACING DEVICES (TAMPERS, FLOWS, PRESSURE SWITCHES, ETC) WILL BE CONNECTED TO THE NEW FA SYSTEM AND REPORT TO THE MAIN GRAPHIC ANNUNCIATORS IN BUILDING 225. A SECONDARY MONITORY STATION SHALL BE LOCATED IN BUILDING 18. INTERFACING DEVICES ARE SHOWN WHEN LOCATIONS ARE KNOWN, HOWEVER THE DRAWINGS SHOULD NOT BE USED AS EXHAUSTIVE LIST. THE EXISTING CAMPUS FIRE ALARM SYSTEM WILL NOT BE REUSED AND A NEW CAMPUS WIDE SYSTEM IS TO BE PROVIDED, SEE FIRE ALARM SITE PLAN.
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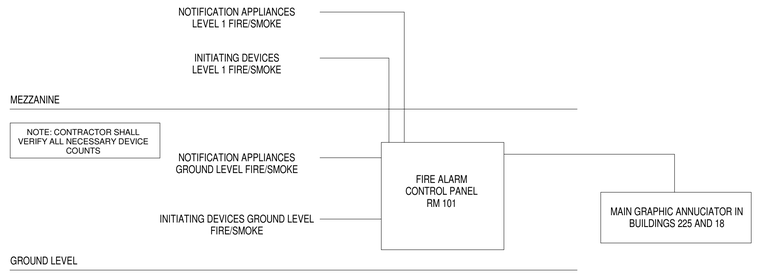
21. WALL MOUNTED FIRE ALARM NOTIFICATION APPLIANCES, EITHER VISUAL, OR COMBINATION AUDIO/VISUAL, SHALL BE LOCATED SUCH THAT THE ENTIRE LENS OF THE VISUAL PORTION IS BETWEEN 80" AND 96" A.F.F. AUDIO ONLY APPLIANCES SHALL BE LOCATED, NOT LESS THAN 90" A.F.F. TO TOP OF APPLIANCE, OR 6" BELOW CEILING.



A6 **BUILDING 226 - FIRE ALARM RISER DIAGRAM**
SCALE: NTS

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
MELISA A. RODRIGUEZ
126314
6/25/21

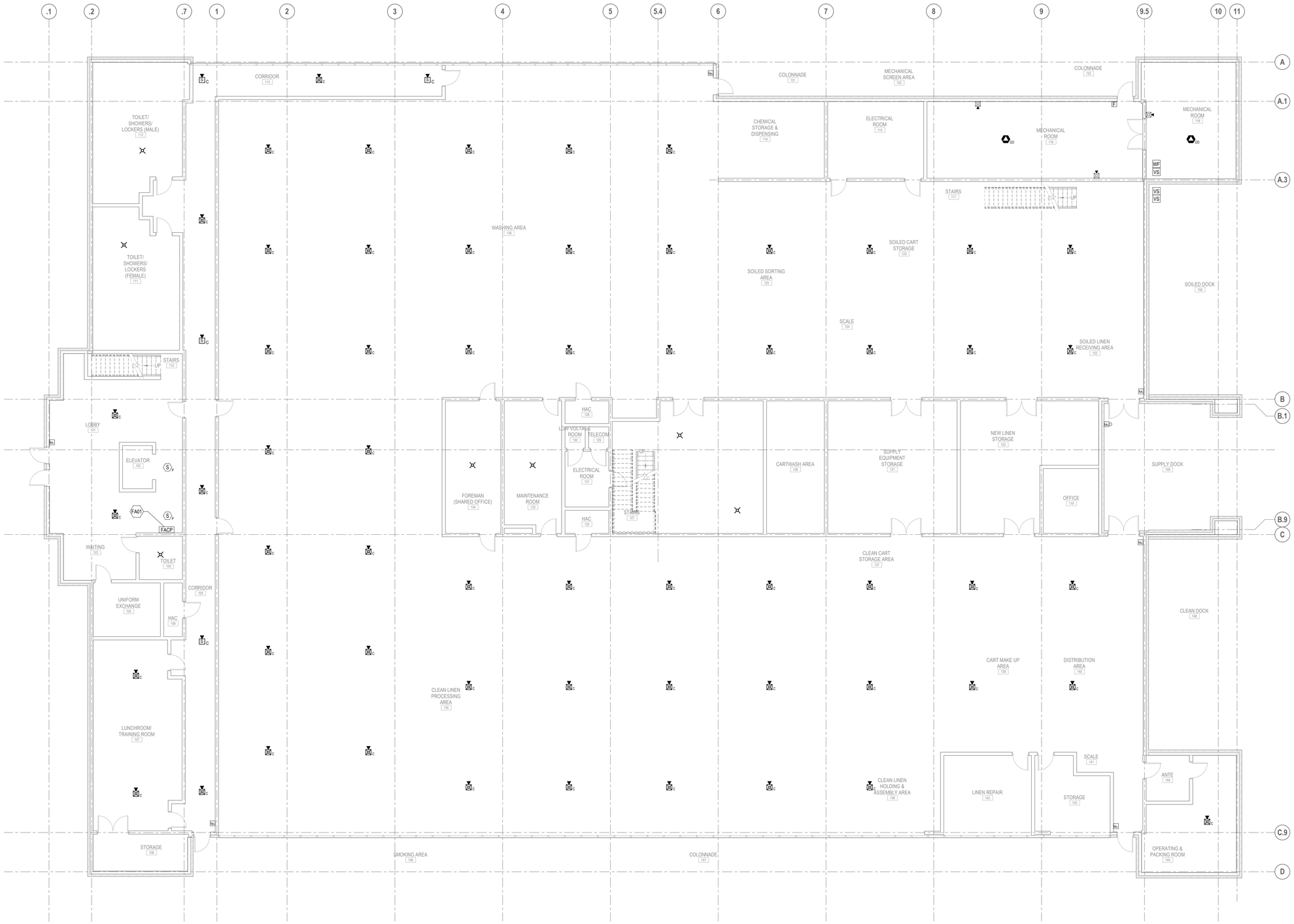
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM GENERAL NOTES AND DETAILS
Submission: 100% BID SET
Building: 226 | **Checked By:** MAR | **Drawn By:** JLH | FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE
Project Location: BUILDING 226 - LAUNDRY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 226-FA001
Drawing 58 of 83

024-10122-000, 226, FA101, 12/26/20,.pdf



A16 BUILDING 226 - FIRE ALARM PLAN - LEVEL 1

SCALE: 1/8" = 1'-0"

TRUE NORTH

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA01	EXISTING FIRE ALARM CONTROL PANEL.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

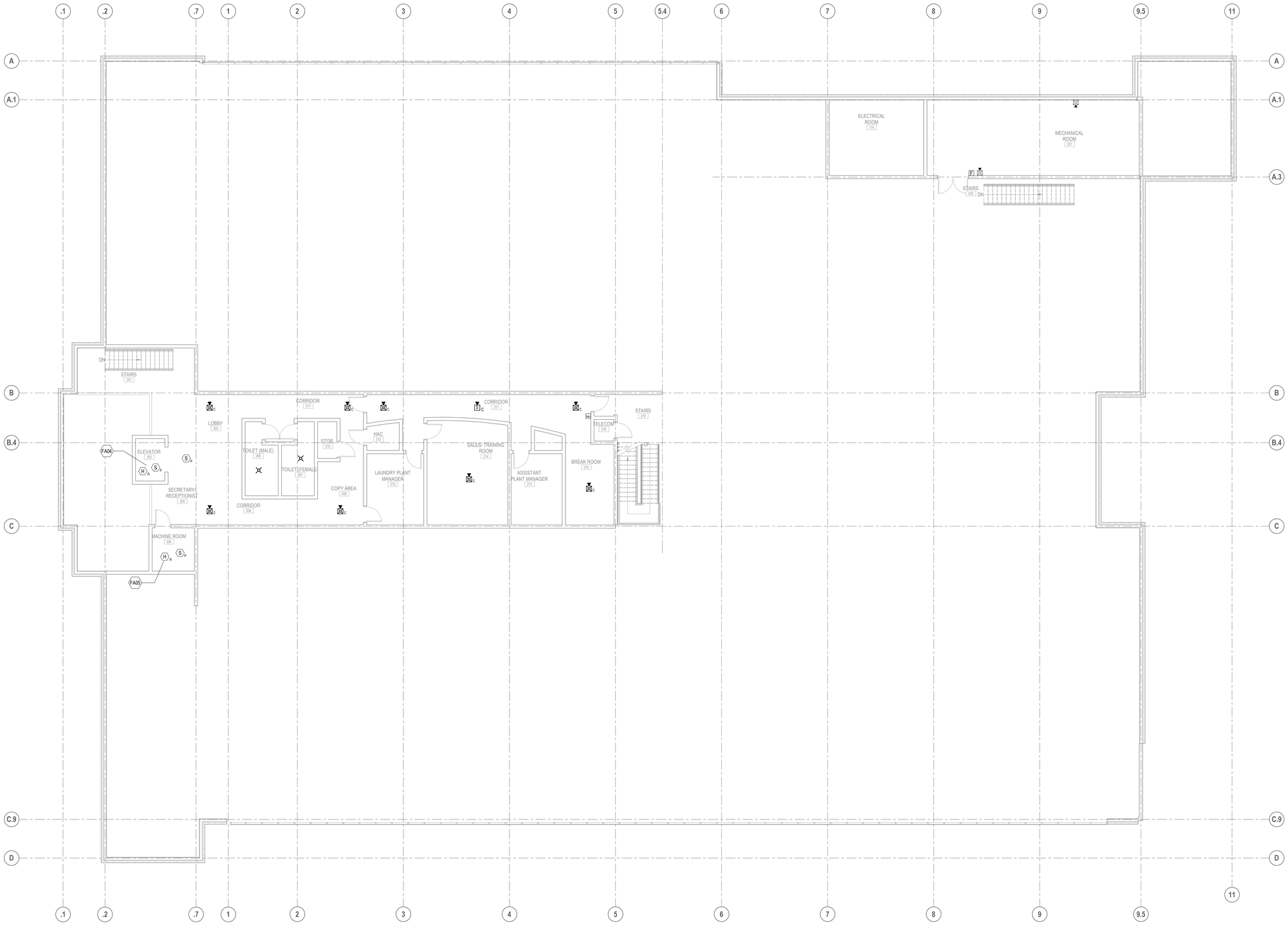
PROFESSIONAL SEAL:
STATE OF TEXAS
MELISA A. RODRIGUEZ
126314
LICENSED
PROFESSIONAL ENGINEER
6/25/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
FIRE ALARM PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET		Issue Date: 6/25/2021
Building: 226 / Checked By: MAR / Drawn By: JLH / FULLY SPRINKLERED	Project Location: BUILDING 226 - LAUNDRY 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 226-FA101
		Drawing 59 of 83

024-10122-000, 226, FA102, 01/04/21.pdf



FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
	DEVICES
F	EXTERIOR BELL
F	MANUAL PULL STATION
S	SPEAKER ONLY WALL MOUNTED
S C	SPEAKER ONLY CEILING MOUNTED
S	COMBINATION OF SPEAKER/STROBE WALL MOUNTED
	STROBE ONLY WALL MOUNTED
	STROBE ONLY CEILING MOUNTED
S C	MNS SPEAKER/STROBE CEILING MOUNTED
	DETECTORS
CO	GAS DETECTOR - CARBON MONOXIDE
H R	HEAT DETECTOR - RATE OF RISE
S D	SMOKE DETECTOR - IN DUCT
S P	SMOKE DETECTOR - PHOTOELECTRIC
	SWITCHES
WF	FLOW DETECTOR/SWITCH
PS	PRESSURE DETECTOR/SWITCH
VS	VALVE SUPERVISORY SWITCH
	PANELS
FAA	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
	LINE TYPES
	SMOKE/ALARM ZONE BOUNDARY LINES

KEYNOTE LEGEND

FA04	SMOKE AND HEAT DETECTION AT TOP OF ELEVATOR SHAFT MAY BE OMITTED IF NO SPRINKLER IS PRESENT. DEVICES THAT ARE INSTALLED WILL BE INSTALLED PER NFPA 72 REQUIREMENTS
FA05	HEAT DETECTOR IN ELEVATOR MACHINE ROOM MAY BE OMITTED IF NO SPRINKLER IS PRESENT.

A16 **BUILDING 226 - FIRE ALARM PLAN - MEZZANINE**
SCALE: 1/8" = 1'-0"

TRUE NORTH N

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
MELISSA A. RODRIGUEZ
126314
LICENSED
6/25/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: FIRE ALARM PLAN - MEZZANINE LEVEL

Submission: 100% BID SET

Building:	Checked By:	Drawn By:	
226	MAR	JLH	FULLY SPRINKLERED

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 226 - LAUNDRY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

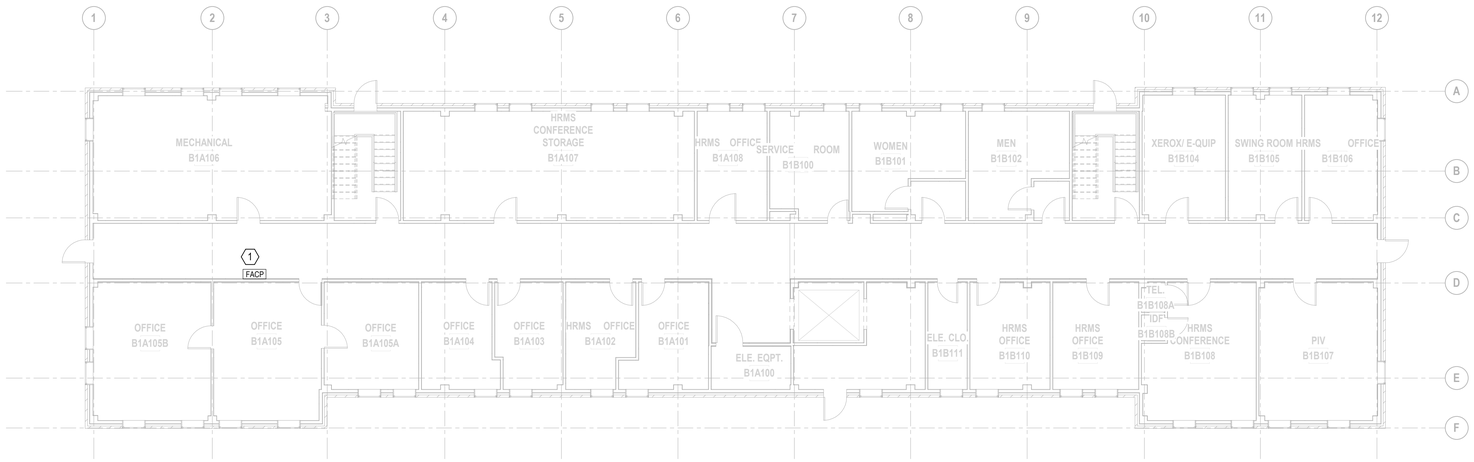
Issue Date: 6/25/2021

Drawing Number: 226-FA102

024-10122-000. 2-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A12 BUILDING 2: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

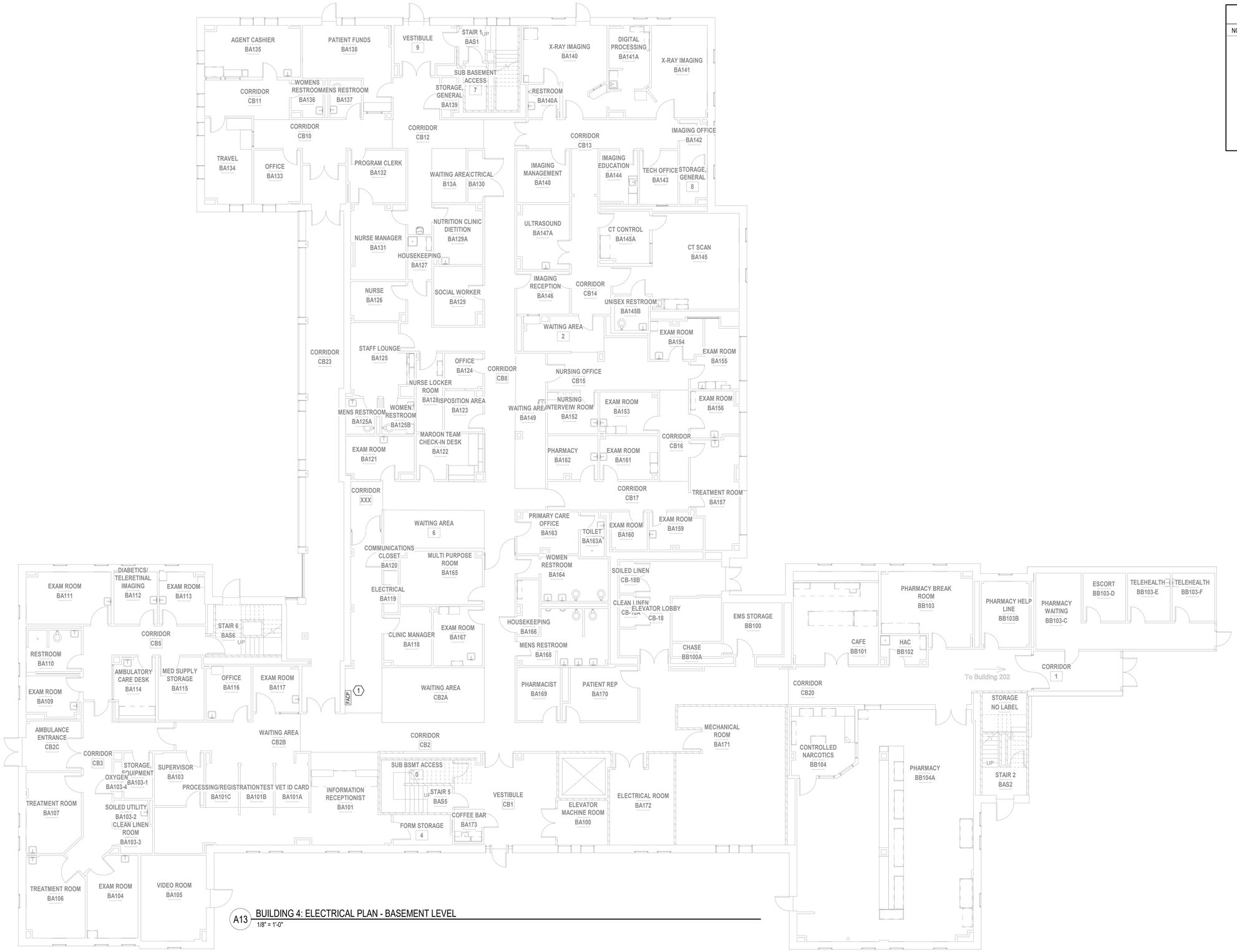
ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 2, ELECTRICAL PLAN - BASEMENT LEVEL	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADES	674A4-21-108
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 2: ADMINISTRATIVE 4800 MEMORIAL DRIVE WACO, TX 76711	Issue Date: 6/25/2021
Building: 2 / Checked By: JGR / Drawn By: JGF		Drawing Number: 2-E101
		Drawing 61 of 83

024-10122-000. 4-E101. 11/22/15.pdf



A13 BUILDING 4: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

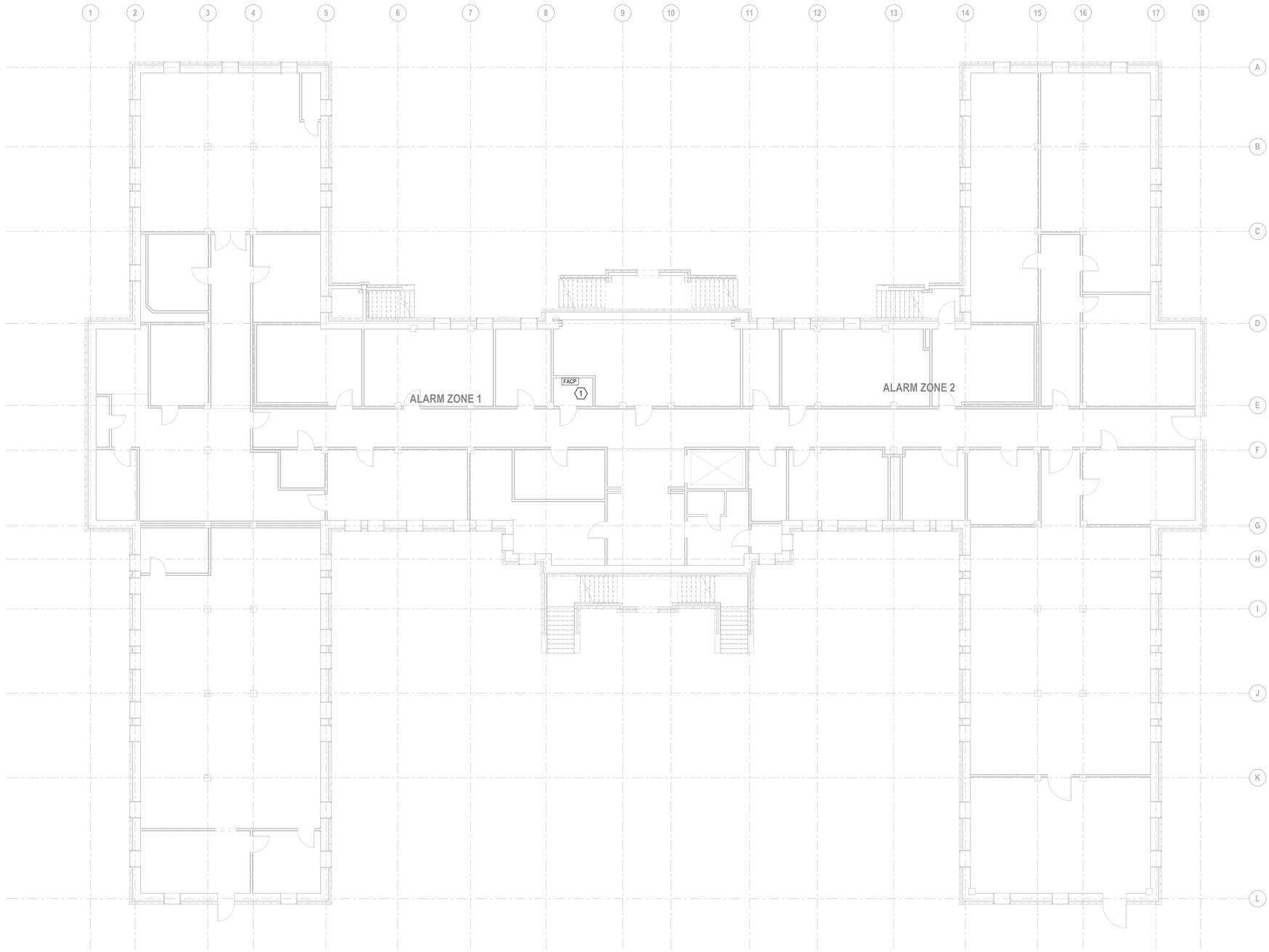
ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY C. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5-24-21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 4, ELECTRICAL PLAN - BASEMENT LEVEL	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADES	674A4-21-108
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 4: OUTPATIENT CLINIC / PHARMACY / LAB / RADIOLOGY, 4800 MEMORIAL DRIVE, WACO, TX 76711	Issue Date: 6/25/2021
Building: 4 · Checked By: JGR · Drawn By: JGF		Drawing Number: 4-E101
		Drawing 62 of 83

024-10122-000. 5-E101. 11/22/15.pdf



A16 BUILDING 5: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY C. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 5, ELECTRICAL PLAN - BASEMENT LEVEL

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
5	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADES

Project Location: BUILDING 5 - PHARMACY/EDUCATION
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

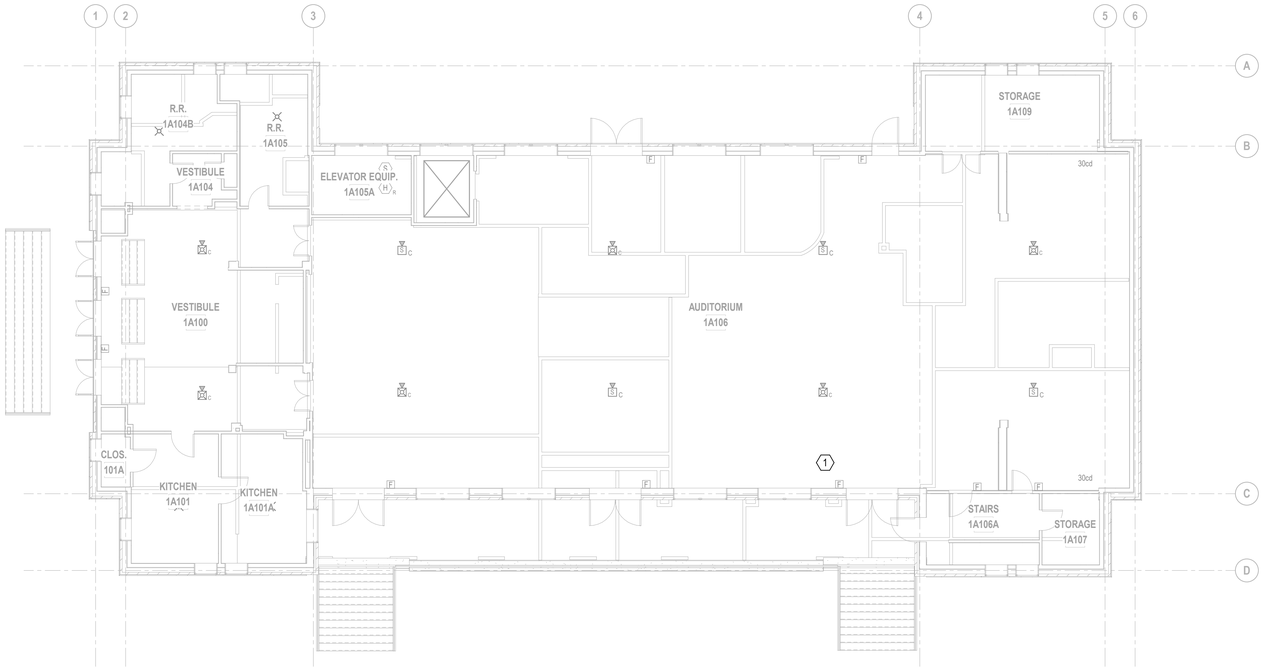
Drawing Number: 5-E101

Drawing 63 of 83

024-10122-000, 6-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A16 BUILDING 6: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management

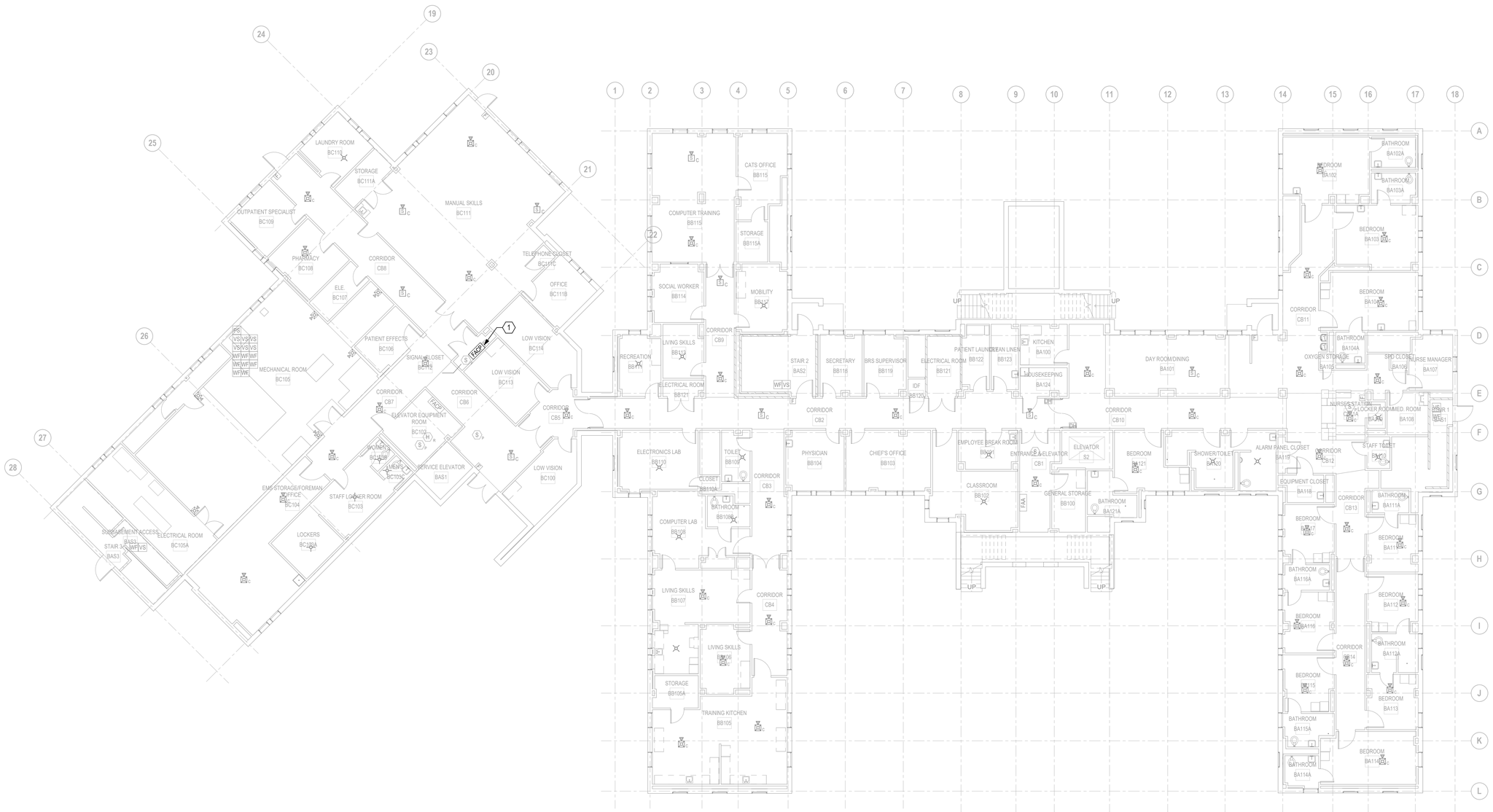
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 6, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADES	674A4-21-108
Submission: 100% BID SET SUBMISSION		Issue Date: 06/25/2021
Building: 6 / Checked By: JGR / Drawn By: JGF	Project Location: BUILDING 6: AUDITORIUM 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 6-E101
		Drawing 64 of 83

024-10122-000, 7-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A16 BUILDING 7: ELECTRICAL PLAN - BASEMENT LEVEL
1" = 10'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
7/28/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 7, ELECTRICAL PLAN - BASEMENT AREA

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
7	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADES

Project Location: BUILDING 7: BLIND REHAB UNIT/RISE UNIT
4800 MEMORIAL DRIVE
WACO, TX 76711

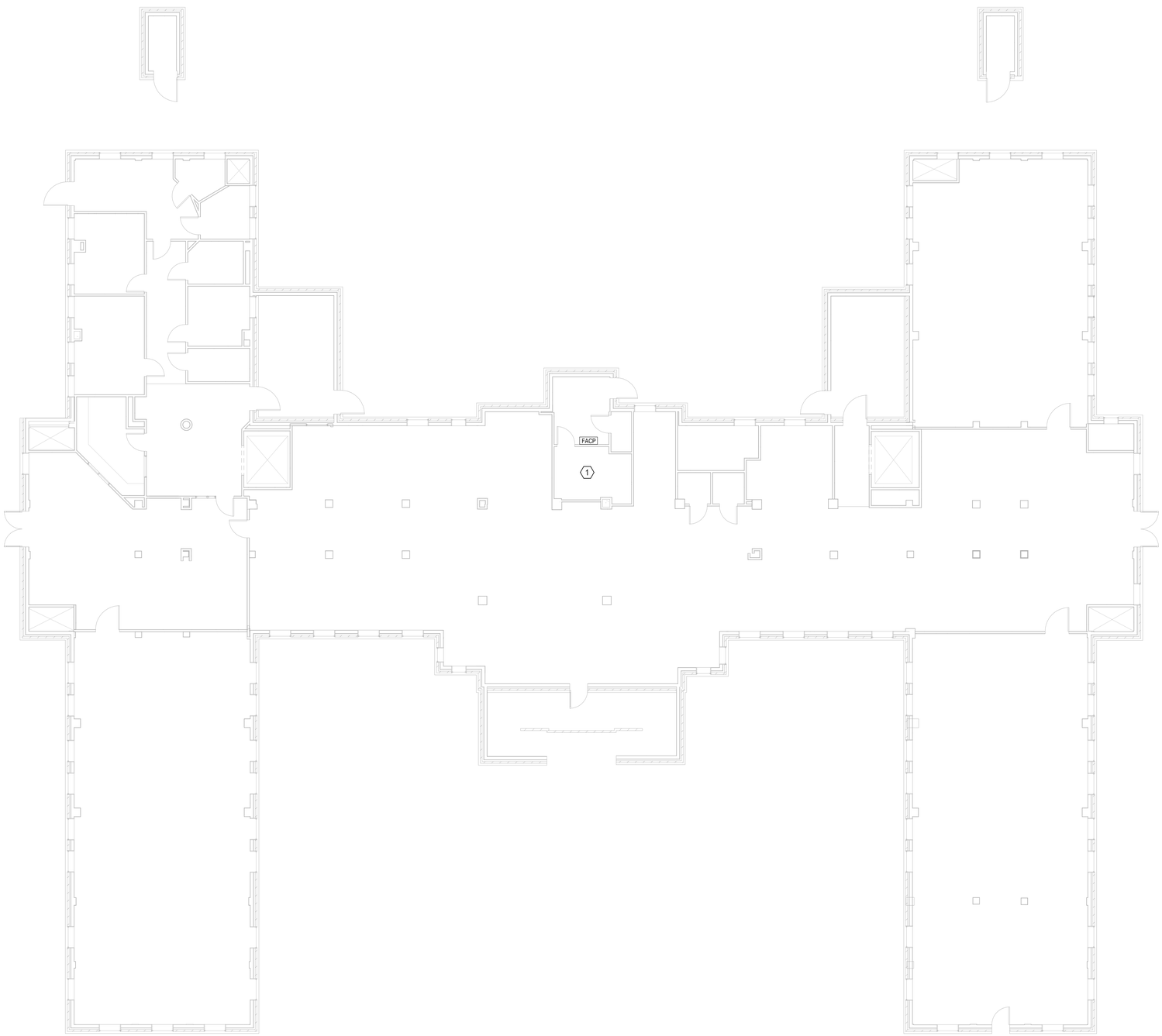
VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 7-E101

Drawing 65 of 83

024-10124-000. 8-E101. 11/22/15.pdf



KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

A16 BUILDING 8: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 8, ELECTRICAL PLAN - LEVEL 1

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
8	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 8: MHICM PROGRAM / FUTURE ACUTE MENTAL HEALTH
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

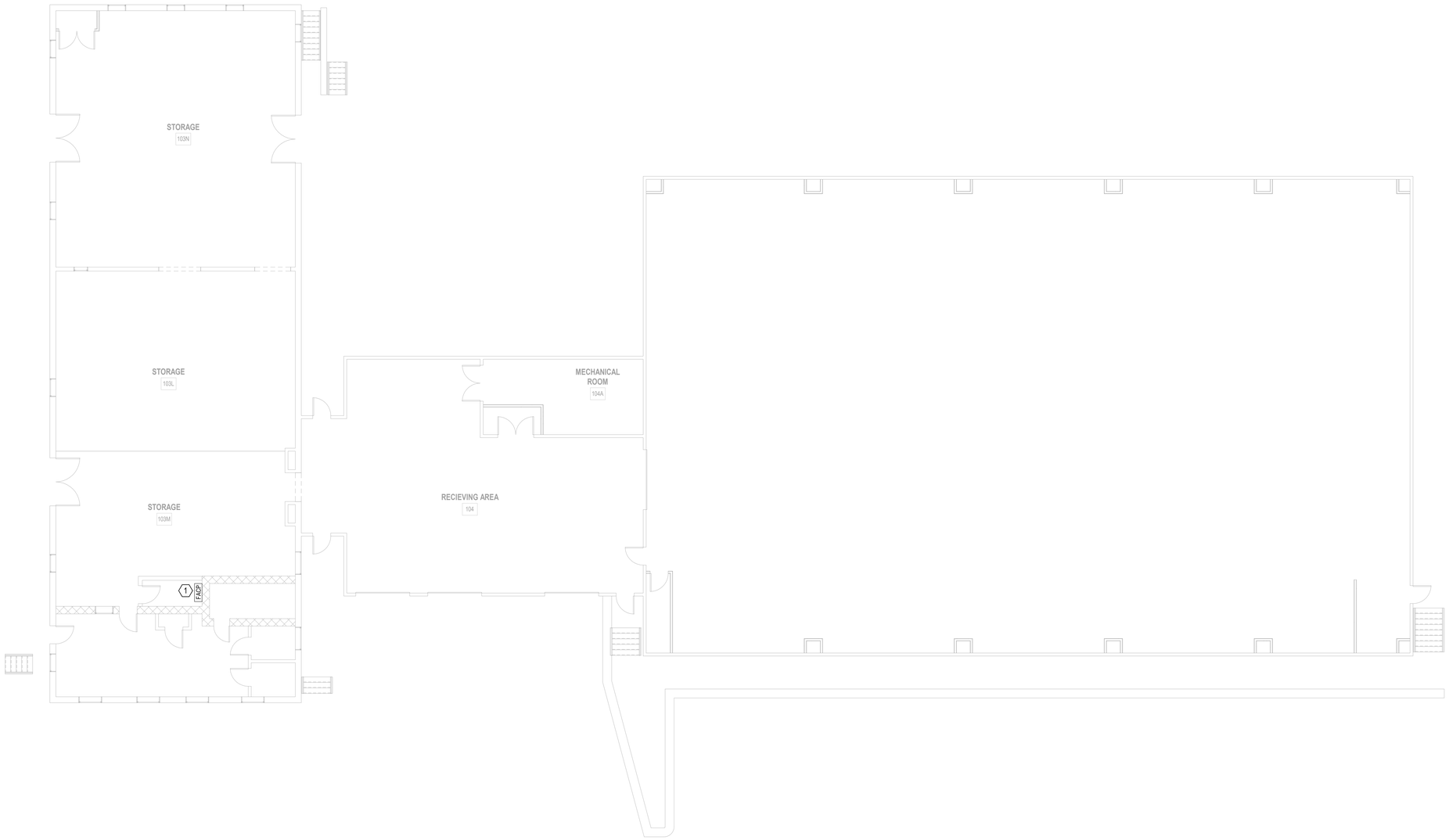
Issue Date: 6/25/2021

Drawing Number: 8-E101

024-10124-000, 15-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A15 BUILDING 15: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5/24/21

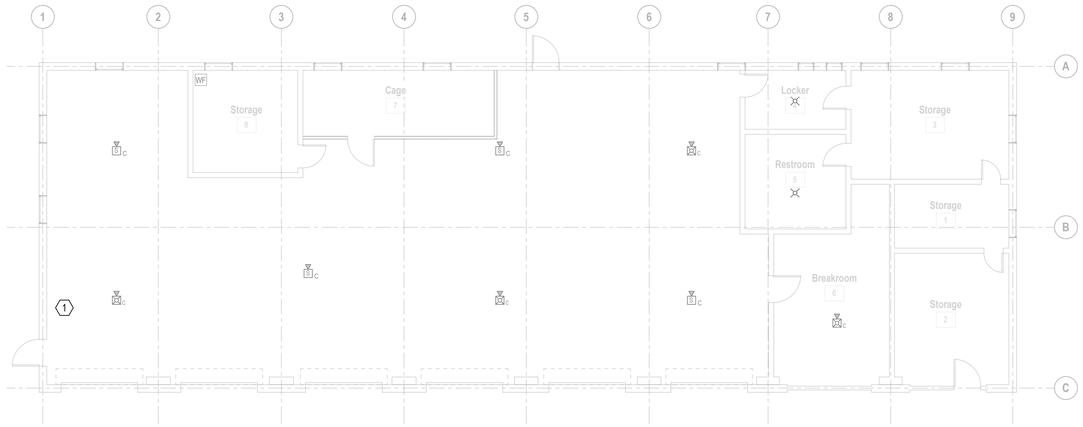
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 15, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION		Issue Date: 6/25/2021
Building: 15 / Checked By: JGR / Drawn By: JGF	Project Location: BUILDING 15 - VBA, 4800 MEMORIAL DRIVE, WACO, TX 76711	Drawing Number: 15-E101
		Drawing 67 of 83

024-10124-000, 16-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A16 BUILDING 16: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 16, ELECTRICAL PLAN - LEVEL 1

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
16	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 16: GARAGE
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

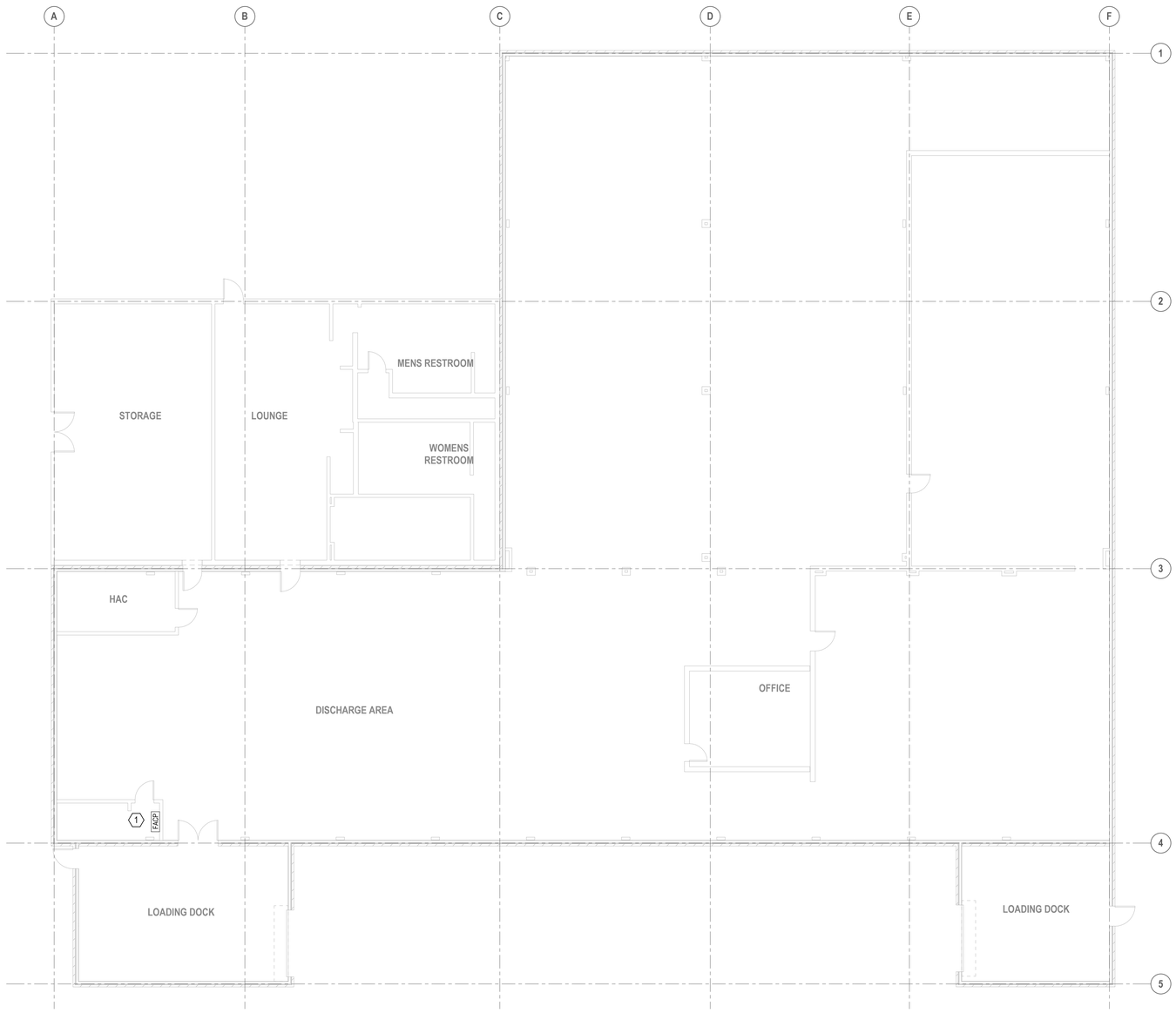
Drawing Number: 16-E101

Drawing 68 of 83

024-10124-000, 17-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A14 BUILDING 17: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management

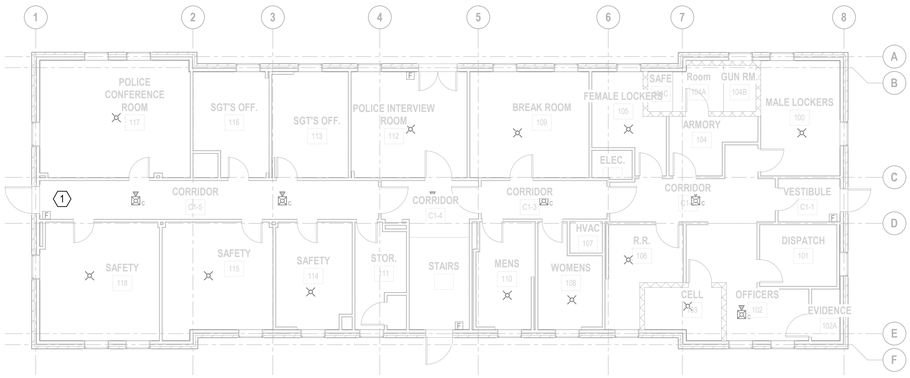
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 17, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 17: CONDOLIDATED LAUNDRY 4800 MEMORIAL DRIVE WACO, TX 76711	Issue Date: 6/25/2021
Building: 17 / Checked By: JGR / Drawn By: JGF		Drawing Number: 17-E101
		Drawing 69 of 83

024-10124-000, 18-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A16 BUILDING 18: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 18, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION		Issue Date: 6/25/2021
Building: 18 / Checked By: JGR / Drawn By: JGF	Project Location: BUILDING 18: POLICE 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 18-E101
		Drawing 70 of 83

024-10124-000. 24-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

A12 BUILDING 24: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

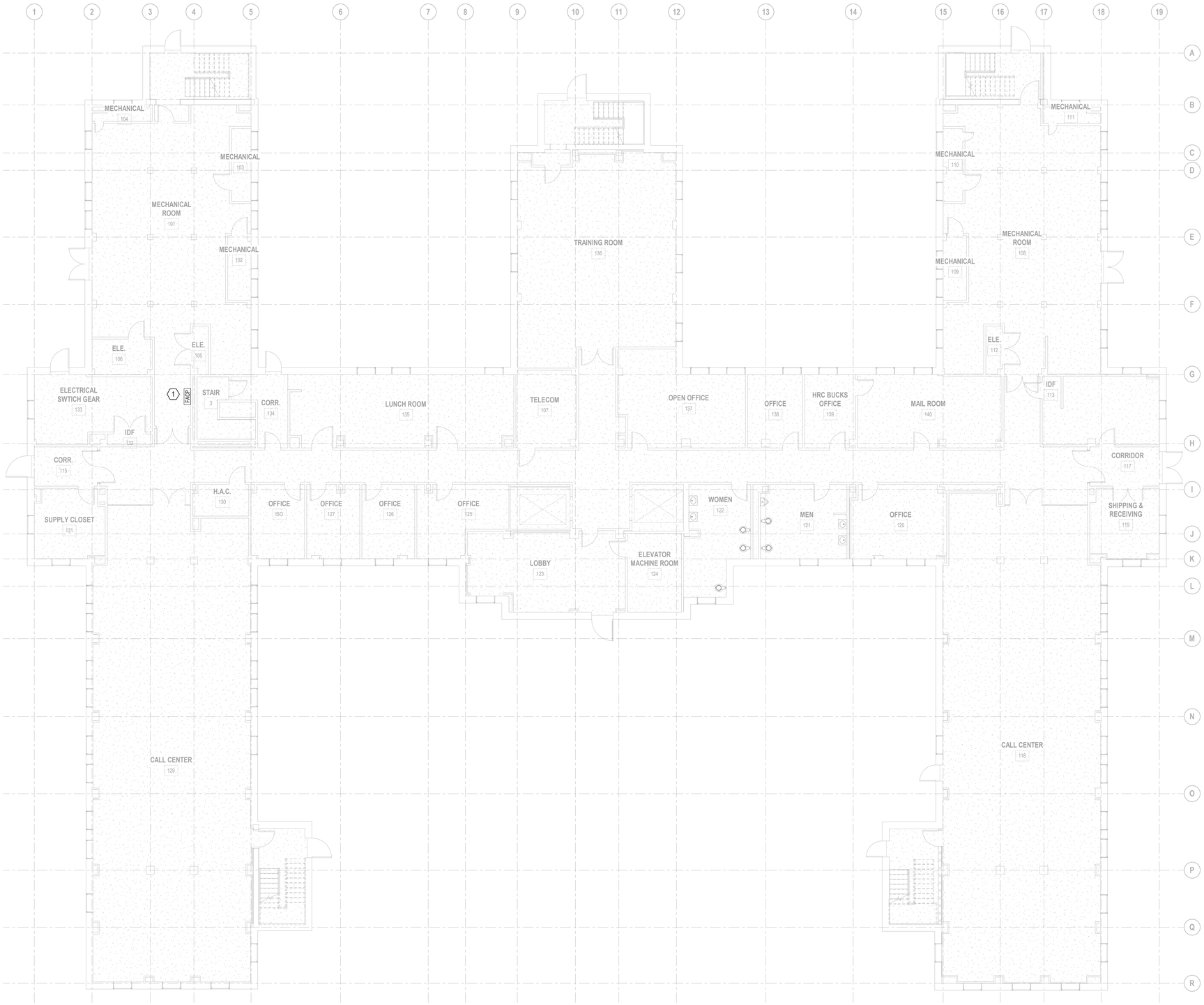
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 24, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION		Issue Date: 6/25/2021
Building: 24 / Checked By: JGR / Drawn By: JGF	Project Location: BUILDING 24: FMS / SHOPS 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 24-E101
		Drawing 71 of 83

024-10124-000, 90-E101, 11/22/15.pdf



A16 BUILDING 90: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 90, ELECTRICAL PLAN - BASEMENT LEVEL

Submission: 100% BID SET SUBMISSION

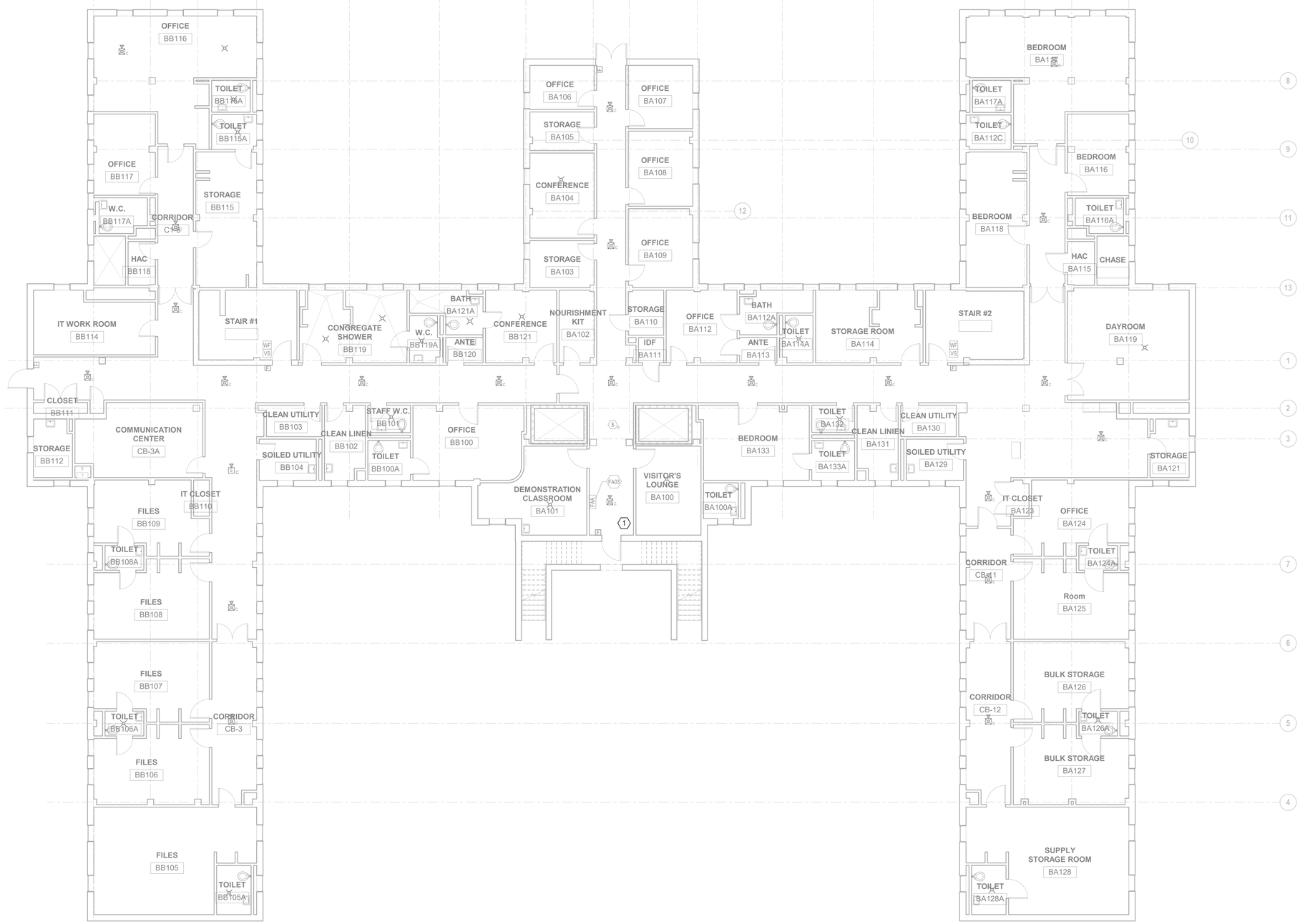
Building:	Checked By:	Drawn By:
90	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 90: HRC PHARMACE CALL CENTER
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 90-E101
Drawing 72 of 83

024-10124-000, 92-E101, 11/22/15.pdf



KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

A16 BUILDING 92: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

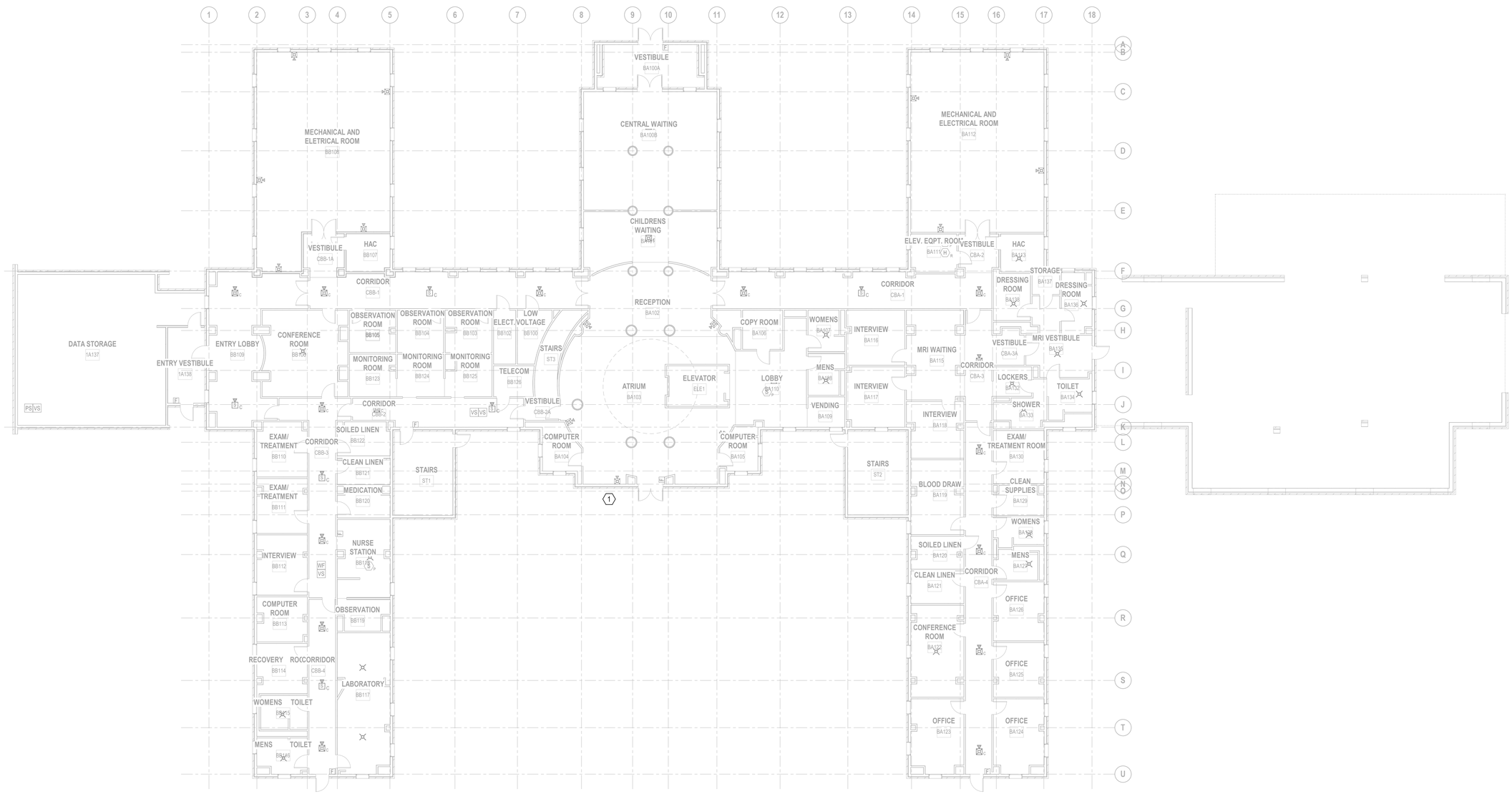
PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
7/29/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 92, ELECTRICAL PLAN - BASEMENT LEVEL	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION		Issue Date: 6/25/2021
Building: 92 / Checked By: JGR / Drawn By: JGF	Project Location: BUILDING 92: FSC VA FINANCE CENTER 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 92-E101
		Drawing 73 of 83

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A16 BUILDING 93: ELECTRICAL PLAN - BASEMENT LEVEL
1" = 10'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 93, ELECTRICAL PLAN - BASEMENT LEVEL

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
93	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 93: FUTURE CENTER OF EXCELLENCE
4800 MEMORIAL DRIVE
WACO, TX 76711

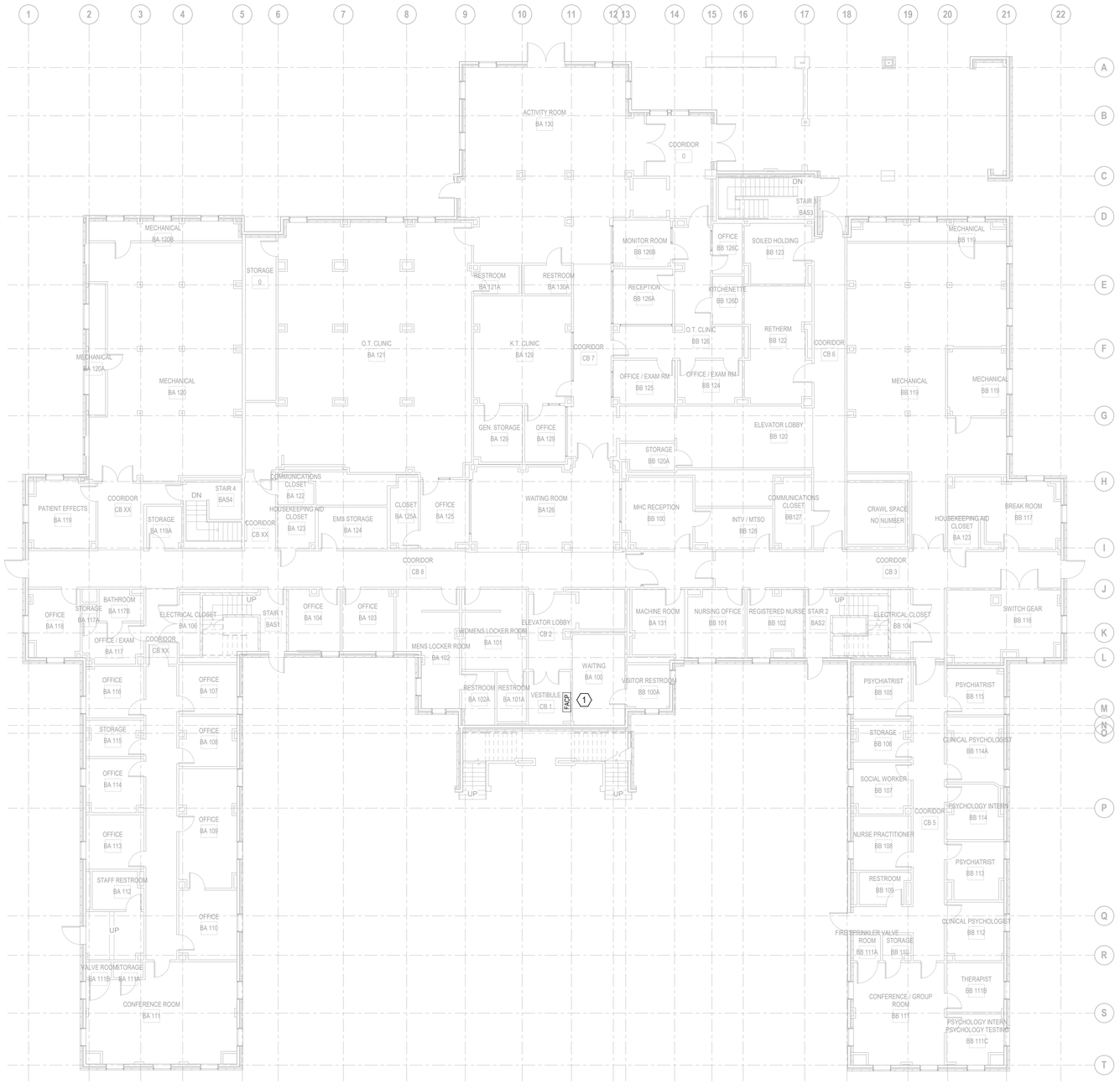
VA Project Number: 674A4-21-108
Issue Date: 6/25/2021
Drawing Number: 93-E101
Drawing 74 of 83

024-10124-000, 93-E101, 11/22/15.pdf

024-10124-000, 94-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A14 BUILDING 94: ELECTRICAL PLAN - BASEMENT LEVEL
1" = 10'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:
ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

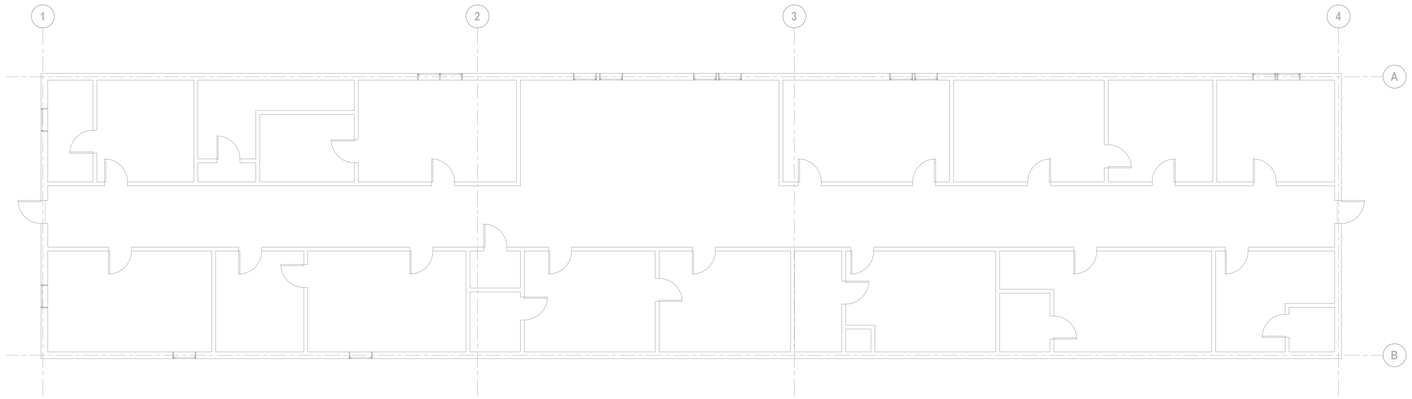
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 94, ELECTRICAL PLAN - BASEMENT LEVEL	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 94: INPATIENT PSYCH/SMILE UNIT/ ACUTE PSYCH, 4800 MEMORIAL DRIVE, WACO, TX 76711	Issue Date: 6/25/2021
Building: 94 / Checked By: JGR / Drawn By: JGF		Drawing Number: 94-E101
		Drawing 75 of 83

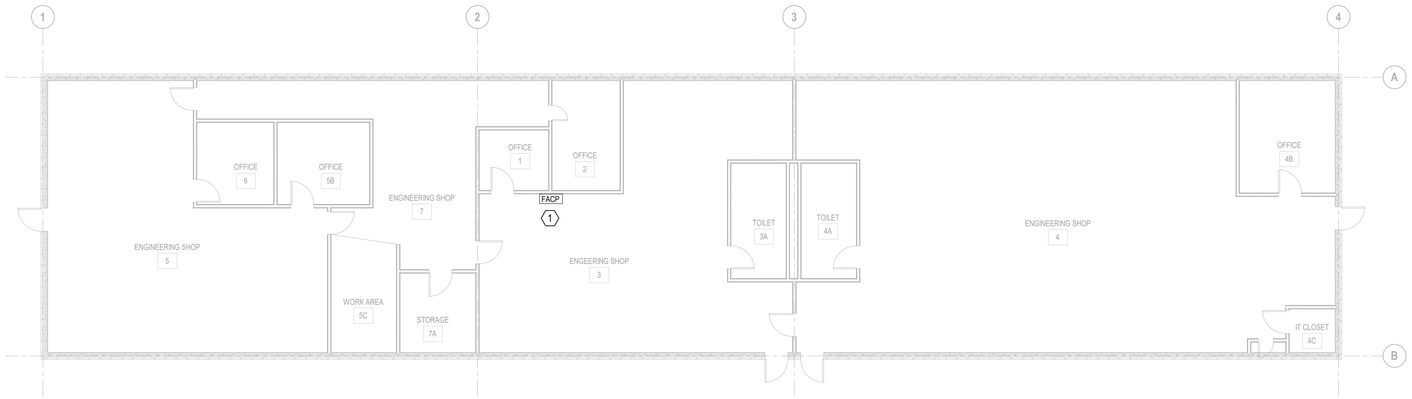
024-10124-000, 99-E101, 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



D12 BUILDING 99: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"



A12 BUILDING 99: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 99, ELECTRICAL PLAN - BASEMENT LEVEL AND LEVEL 1

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
99	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 99: FMS SHOPS
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 99-E101

024-10124-000. 202-E101. 11/22/15.pdf

A16 BUILDING 202: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5-24-21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 202, ELECTRICAL PLAN - LEVEL 1

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
202	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 202: DIETETICS / FUTURE VCS
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

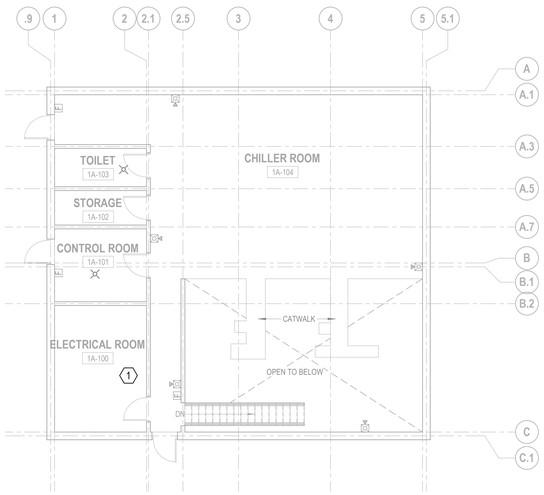
Issue Date: 6/25/2021

Drawing Number: 202-E101

024-10124-000. 216-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A10 BUILDING 216: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 216, ELECTRICAL PLAN - LEVEL 1

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
216	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 216: CENTRAL CHILLER
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

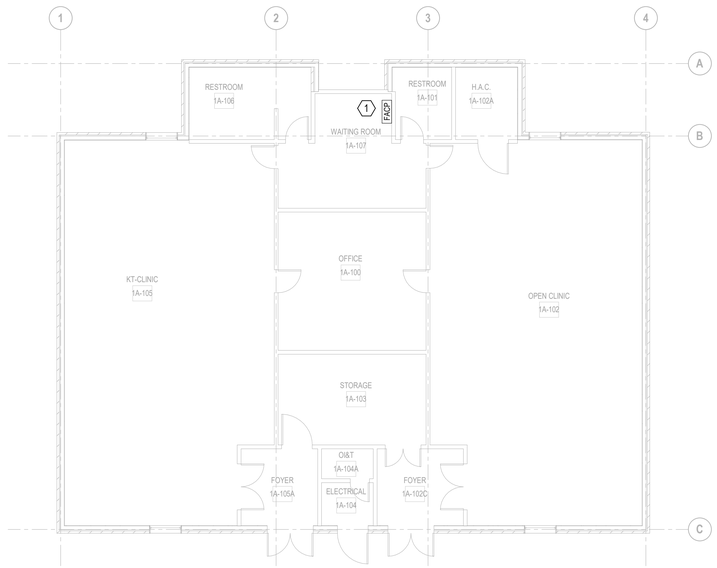
Drawing Number: 216-E101

Drawing 78 of 83

024-10124-000. 219-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A10 BUILDING 219: ELECTRICAL PLAN - BASEMENT LEVEL
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BUILDING 219, ELECTRICAL PLAN - BASEMENT LEVEL

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
219	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 219: KINESIOLOGY / PHYSICAL THERAPY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

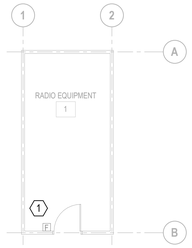
Issue Date: 6/25/2021

Drawing Number: 219-E101

024-10124-000. 222-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



A3 BUILDING 222: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED PROFESSIONAL ENGINEER
6/24/21

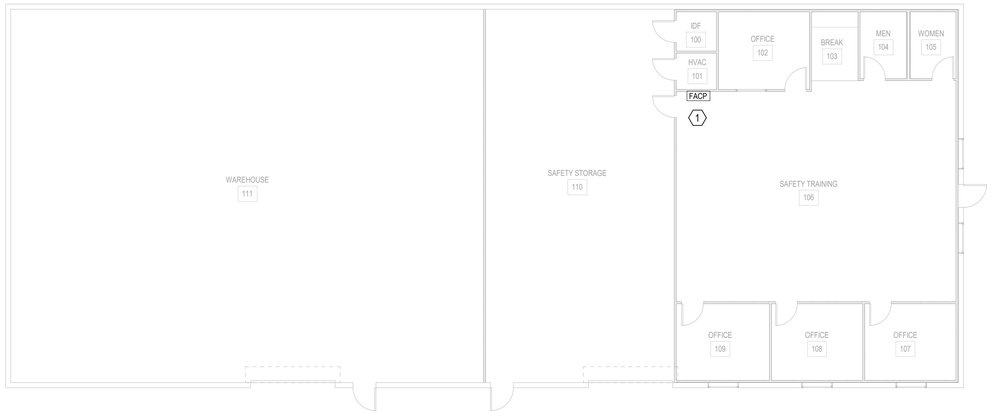
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 222, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 222: RADIO EQUIPMENT TO B-90, 4800 MEMORIAL DRIVE, WACO, TX 76711	Issue Date: 6/25/2021
Building: 222 / Checked By: JGR / Drawn By: JGF		Drawing Number: 222-E101
		Drawing 80 of 83

024-10124-000. 224-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.



D9 BUILDING 224: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
6/24/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 224, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 224: SAFETY BUILDING 4800 MEMORIAL DRIVE WACO, TX 76711	Issue Date: 6/25/2021
Building: 224 / Checked By: JGR / Drawn By: JGF		Drawing Number: 224-E101
		Drawing 81 of 83

024-10124-000. 225-E101. 11/22/15.pdf

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

A16 BUILDING 225: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

Revisions:	Date:

CONSULTANTS:

FIRE PROTECTION:
LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

ELECTRICAL:
HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
817.335.3000, POC: Jeff Roberts

ARCHITECT / ENGINEER OF RECORD:

ARCHITECT:
CB DESIGN GROUP
421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
703.772.4213

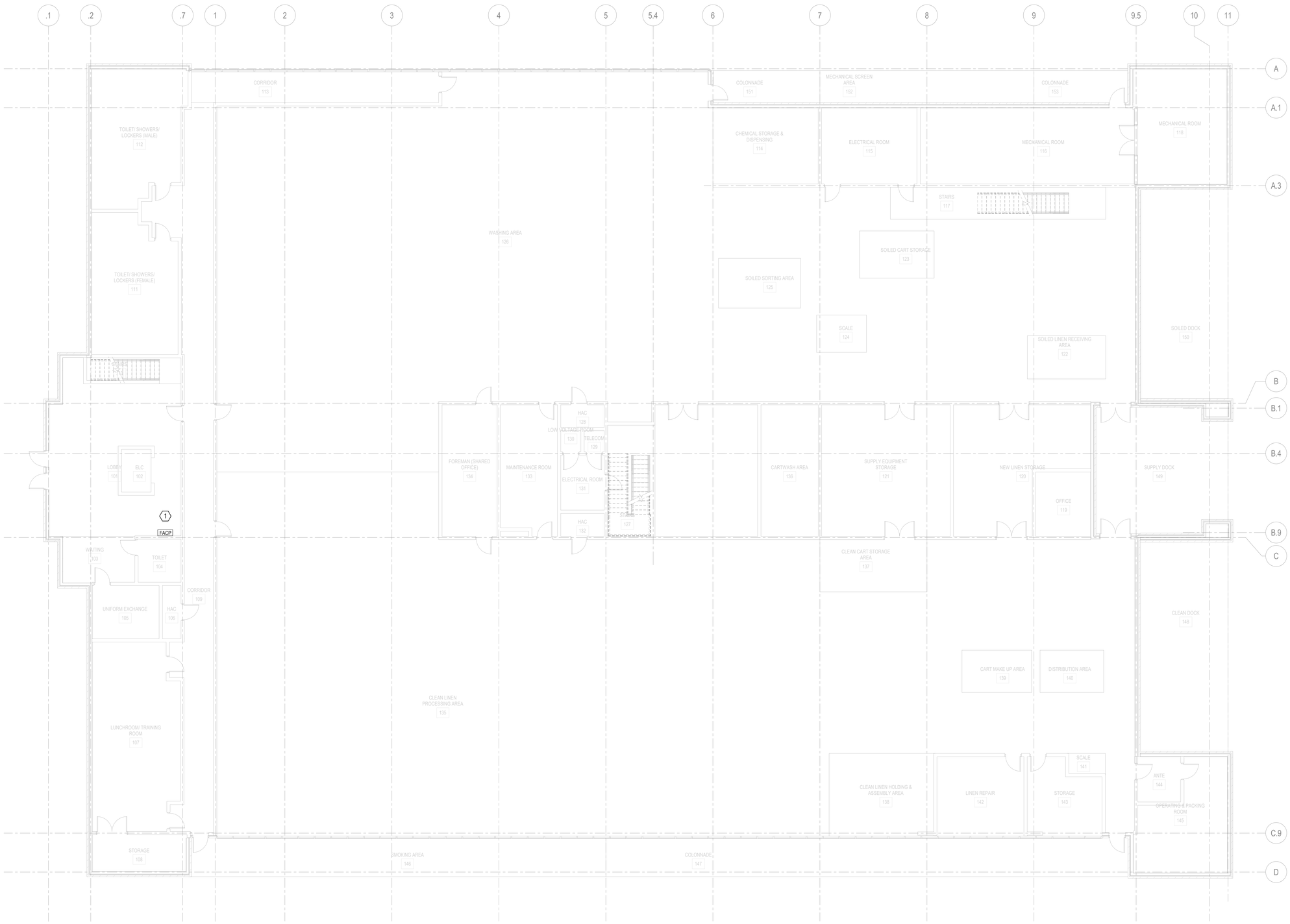
PROFESSIONAL SEAL:
STATE OF TEXAS
JEFFREY G. ROBERTS
80669
LICENSED
PROFESSIONAL ENGINEER
5/24/21

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title:	Project Title:	VA Project Number:
BUILDING 225, ELECTRICAL PLAN - LEVEL 1	WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE	674A4-21-108
		Issue Date: 6/25/2021
Submission: 100% BID SET SUBMISSION	Project Location: BUILDING 225: ENERGY CENTER 4800 MEMORIAL DRIVE WACO, TX 76711	Drawing Number: 225-E101

Building:	Checked By:	Drawn By:
22	JGR	JGF



A16 BUILDIN 226: ELECTRICAL PLAN - LEVEL 1
1/8" = 1'-0"

KEY NOTES

NOTE	DESCRIPTION
1.	DISCONNECT EXISTING FIRE ALARM CONTROL PANEL. EXISTING POWER CIRCUIT SHALL REMAIN AND BE CONNECTED TO NEW FIRE ALARM CONTROL PANEL BEING INSTALLED IN THE SAME OR NEARBY LOCATION. EXTEND EXISTING CIRCUIT AS NEEDED TO MAKE CONNECTION TO NEW PANEL OR LOCATION.

024-10124-000. 226-E101. 11/22/15.pdf

Revisions:	Date:

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LEO A DALY
730 Second Avenue South
Suite 1300
Minneapolis, MN
612.338.8741
POC: Melisa Rodriguez

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HUITT-ZOLLARS
500 West 7th Street, Suite 300, Fort Worth, TX
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421 KING ST., SUITE 301
ALEXANDRIA, VA 22314
POC: WES BRIDGES
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Drawing Title: BUILDING 226, ELECTRICAL PLAN - LEVEL 1

Submission: 100% BID SET SUBMISSION

Building:	Checked By:	Drawn By:
226	JGR	JGF

Project Title: WACO VA MEDICAL CENTER - FIRE ALARM CAMPUS UPGRADE

Project Location: BUILDING 226: LAUNDRY
4800 MEMORIAL DRIVE
WACO, TX 76711

VA Project Number: 674A4-21-108

Issue Date: 6/25/2021

Drawing Number: 226-E101

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