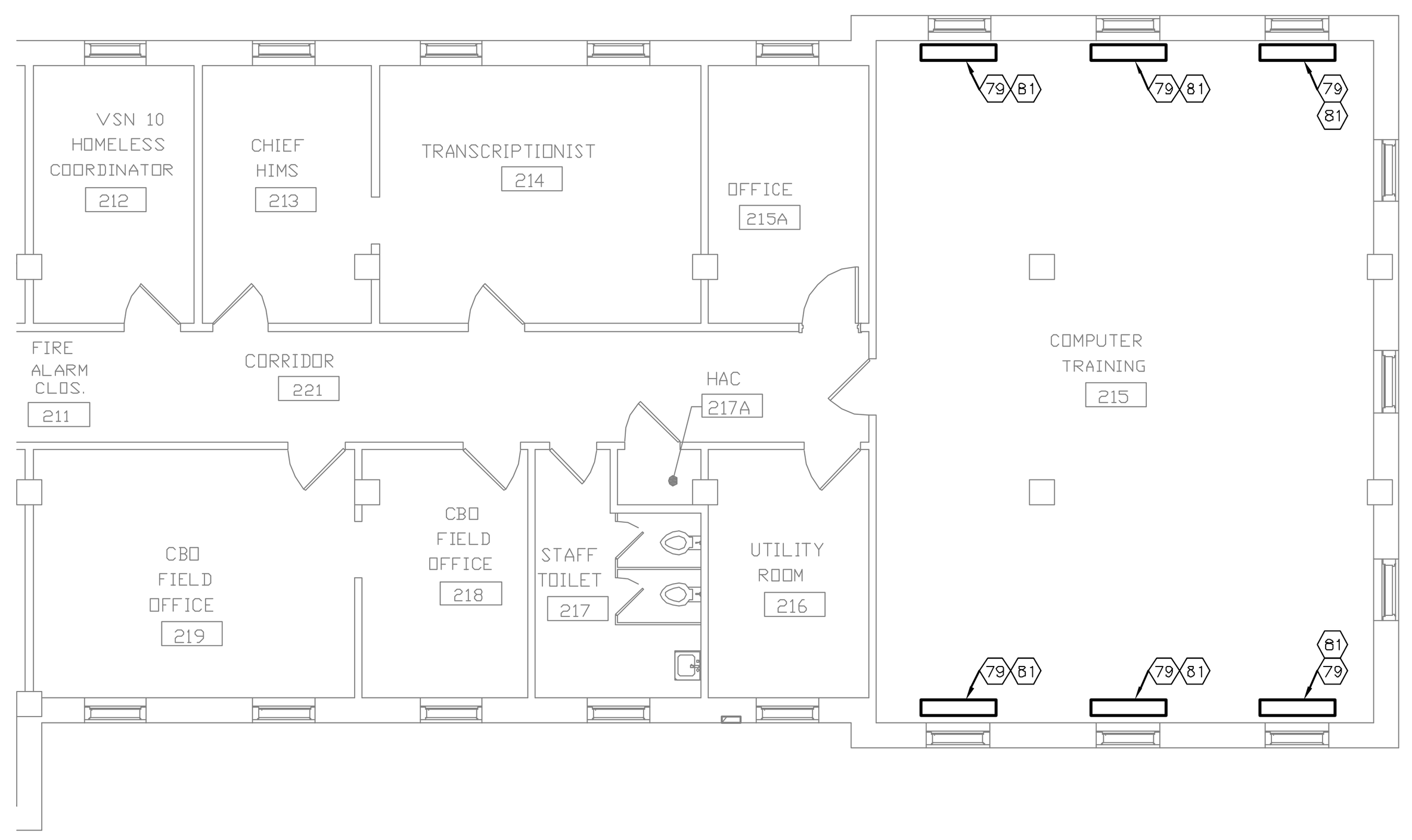
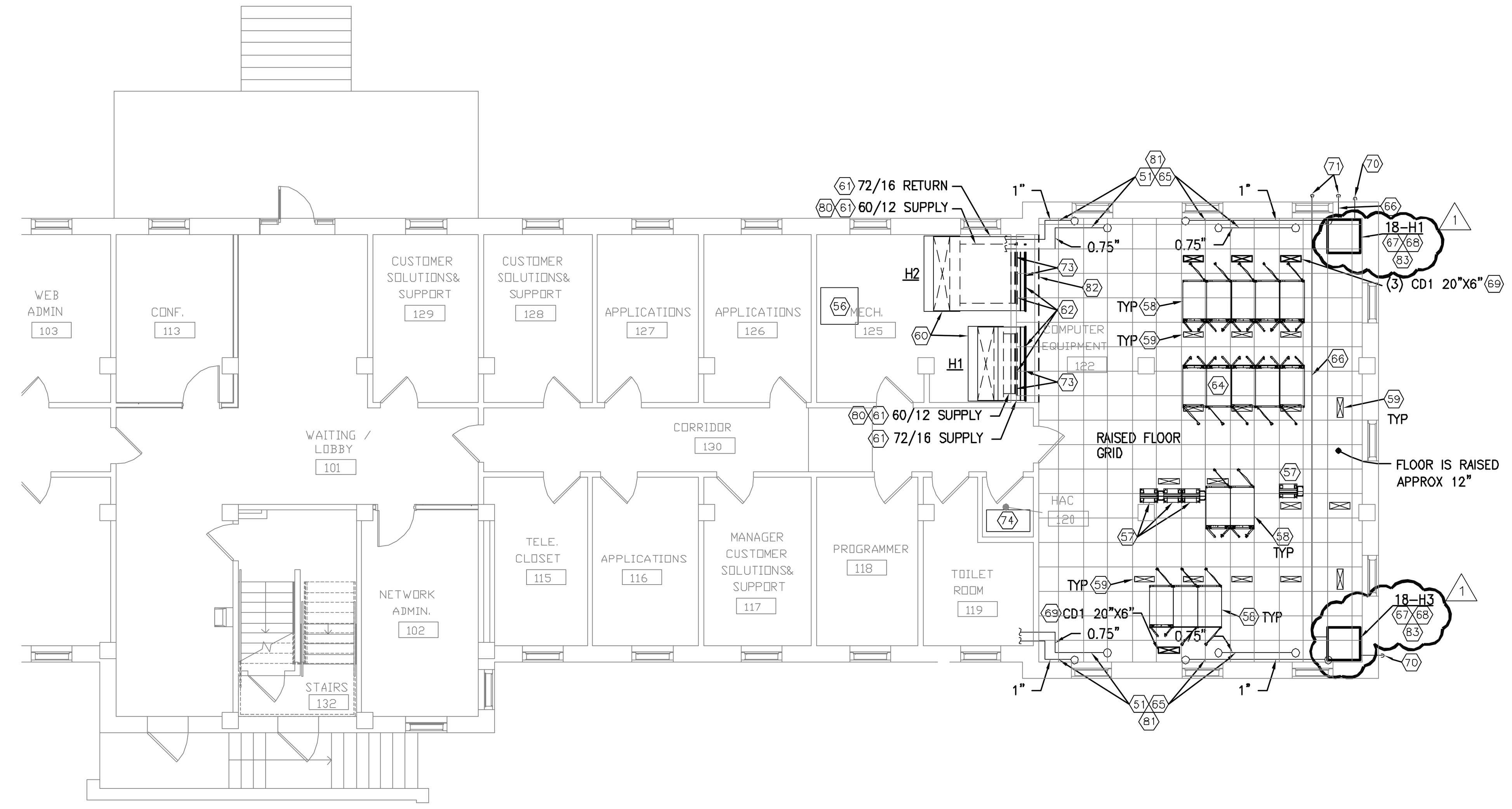


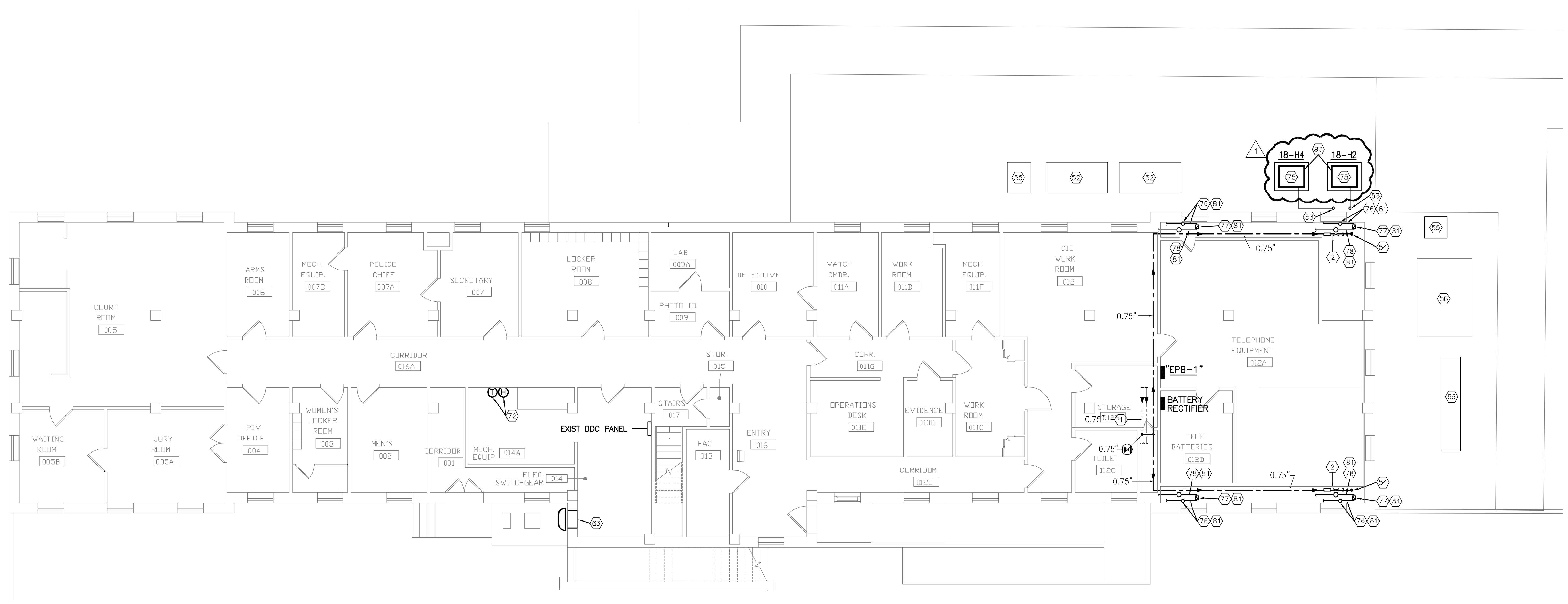
SECOND FLOOR PLAN

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



FIRST FLOOR PLAN

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



BASEMENT FLOOR PLAN

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

GENERAL NOTES

A REFER TO SHEET 18M001 FOR LEGEND, ABBREVIATIONS AND ADDITIONAL GENERAL NOTES.

DIVISION 22 NOTES

1 EXISTING PIPING TO REMAIN.

2 EXTEND 0.75" DCW PIPING AND PROVIDE BALL TYPE SHUT-OFF VALVE, STRAINER, 0.75" SIZE REDUCED PRESSURE TYPE BACKFLOW PREVENTER, AND CAP FOR EXTENSION BY DIVISION 23 CONTRACT AS INDICATED.

DIVISION 23 NOTES

51 EXISTING PIPING TO REMAIN.

52 EXISTING 10 TON COMPUTER ROOM CONDENSING UNIT TO REMAIN.

53 PROVIDE REFRIGERANT PIPING AND ACCESSORIES PER MANUFACTURERS RECOMMENDATIONS. LINE REPRESENTS APPROXIMATE PIPE ROUTE.

54 HUMIDIFIER PIPING FROM ABOVE. REFER TO FIRST FLOOR PLAN ON THIS SHEET.

55 EXISTING CONDENSING UNIT TO REMAIN.

56 EXISTING AIR HANDLING UNIT TO REMAIN.

57 EXISTING RELAY RACK TO REMAIN.

58 EXISTING SERVER RACK TO REMAIN.

59 EXISTING FLOOR TYPE AIR DIFFUSER TO REMAIN.

60 EXISTING 10 TON COMPUTER ROOM A/C UNIT TO REMAIN.

61 EXISTING DUCTWORK TO REMAIN.

62 REMOVE EXISTING SIDEWALL AIR DEVICE AND SECTION OF DUCTWORK AS REQUIRED FOR INSTALLATION OF SMOKE DAMPER. EXTEND/MODIFY DUCTWORK AS REQUIRED AND RE-INSTALL AIR DEVICE.

63 EXISTING EXHAUST FAN TO REMAIN. REFER TO CONTROLS SEQUENCE ON SHEET 18M001 FOR WORK ASSOCIATED WITH FAN.

64 NEW SERVER RACK BEING PROVIDED UNDER VA PROJECT NUMBER 538-13-100.

65 PROVIDE ADDITIONAL 1.5" OF INSULATION OVER EXISTING PIPE INSULATION ABOVE CEILING OF SERVER ROOM. FIELD VERIFY PIPE SIZE AND INSULATION THICKNESS. APPROXIMATE PIPE SIZE INDICATED. APPROXIMATE INSULATION THICKNESS 1.5".

66 PROVIDE REFRIGERANT PIPING AND ACCESSORIES BELOW RAISED FLOOR PER MANUFACTURERS RECOMMENDATIONS. LINE REPRESENTS APPROXIMATE PIPE ROUTE.

67 MODIFY RAISED FLOOR AS REQUIRED FOR INSTALLATION OF NEW A/C UNIT. MODIFY FLOOR PER FLOOR MANUFACTURERS RECOMMENDATIONS. COORDINATE WITH COTR.

68 EXTEND UNIT MANUFACTURERS RECOMMENDED HUMIDIFIER PIPING DOWN THRU FLOOR AND CONNECT TO CW PIPE PROVIDED UNDER DIVISION 22. SEAL PENETRATION LIQUID TIGHT.

69 MATCH EXISTING FLOOR DIFFUSERS. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

70 EXTEND FULL SIZE PVC CONDENSATE DRAIN PIPE THRU WALL, TURN DOWN AND TERMINATE AT GRADE. PROVIDE SPLASH BLOCK.

71 REFER TO BASEMENT FLOOR PLAN ON THIS SHEET FOR CONTINUATION.

72 PROVIDE THERMOSTAT AND HUMIDISTAT FOR CONTROL OF EXHAUST FAN. REFER TO CONTROL SEQUENCE ON SHEET 18M001.

73 PROVIDE SMOKE DAMPER. LOCATE ACTUATOR OUT OF AIR STREAM. REFER TO CONTROLS SEQUENCE ON SHEET 18M001.

74 SIEMENS SAPPHIRE FIRE SUPPRESSION SYSTEM BEING PROVIDED UNDER A SEPARATE VA PROJECT.

75 PROVIDE 6" HIGH, 4000 PSI AIR ENTRAINED CONCRETE PAD WITH INTEGRAL WELDED WIRE FABRIC. EXTEND PAD 6" BEYOND EQUIPMENT ON ALL FOUR SIDES.

76 INSULATE HORIZONTAL AND VERTICAL 0.75" STEAM CONDENSATE PIPING. APPROXIMATELY FIVE FEET TOTAL LENGTH.

77 PROVIDE REMOVABLE INSULATION OVER 0.75" STEAM TRAP.

78 INSULATE 1" STEAM SUPPLY PIPING. APPROXIMATELY 5 FEET TOTAL LENGTH.

79 PROVIDE 2" BOARD INSULATION AT FLOOR UNDER HEATING ELEMENT.

80 REMOVE BLANKET INSULATION AND REPLACEMENT WITH BOARD INSULATION.

81 THIS WORK TO BE INCLUDED IN DEDUCT ALTERNATE #1.

82 EXISTING SOFFIT CONSTRUCTED OF CEILING GRID AND TILES. REVISE AS NECESSARY TO INSTALL DAMPERS BEHIND GRILLES.

1 83 AT LEAST ONE NEW COMPUTER ROOM AIR CONDITIONING UNIT AND ASSOCIATED REMOTE AIR COOLED CONDENSER SHALL BE RUN TESTED AND OPERATIONAL PRIOR TO ELECTRICAL SEQUENCE PHASE 3. TEMPORARY ELECTRIC WILL BE PROVIDED BY DIVISION 26.

Revisions		Date
1	ADDENDUM #1	2/27/13

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STATE OF OHIO JOHN A. BLACK 49341 REGISTERED PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

RDC / JOHN POE ARCHITECTS

Drawing Title: FLOOR PLANS PLUMBING AND HVAC

Approved: Project Director

Project Title: REHAB B18 MACHINE ROOM

Location: Chillicothe, Ohio

Date: 12/27/2012 | Checked: CLC | Drawn: DPB/WJS

Project No.: VA Project No. 538-12-119; JPA Project No. 12022.00

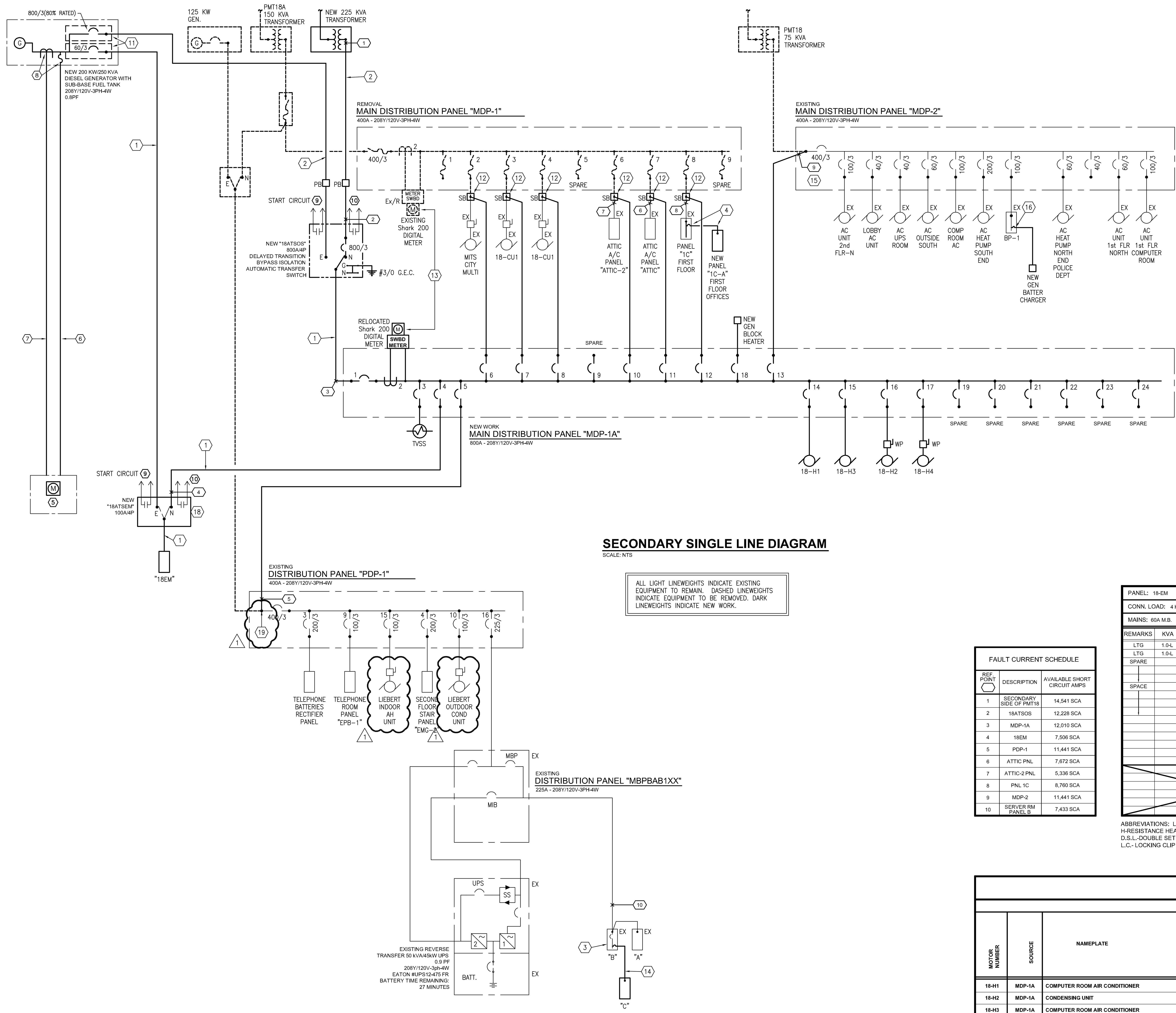
Building Number: 18

Drawing Number: 18M101

Dwg. of

Office of Construction and Facilities Management

Department of Veterans Affairs



DIST. PNL. "MDP-1A"

SPEC. REFERENCE NO.: 26 24 16
MAIN BUSSING: 800 AMPS
FEEDER SIZE: 2 SETS OF (4-600 KCMIL, #1/0 GRD. IN 4" C.)

CONNECTED LOAD: EXISTING + 50 KVA NEW
DEMAND LOAD: EXISTING + 50 KVAD (139A)
VOLTAGE: 208Y/120V-3PH-4W

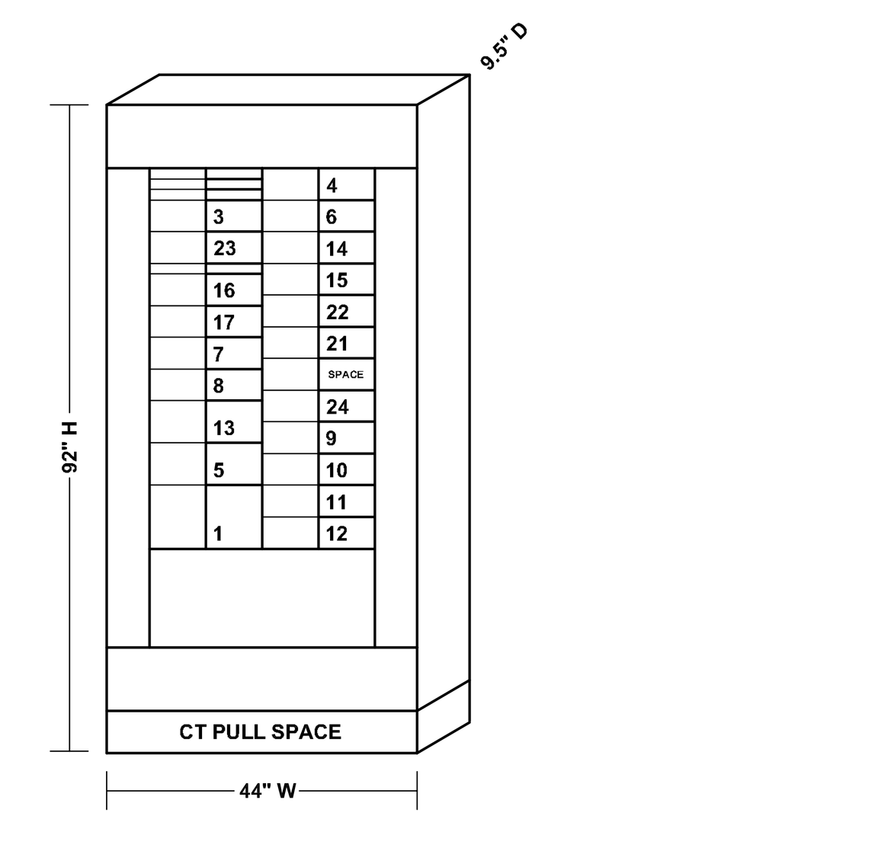
SWITCH OR UNIT NO.	NAMEPLATE	APPROX. CONNECTED KVA LOAD	OVERCURRENT PROTECTION: BREAKER SIZE	POLES		SEE NOTE	FEEDER: NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE
1	MAIN BREAKER	-	800	3						
2	RELOCATED DIGITAL METER	-								
3	SPD	-	30	3			4	10	10	.75
4	NEW EM A.T.S. AND PANEL "18-EM"	3	60	3			4	6	10	1
5	EXISTING DISTRIBUTION PANEL "PDP-1"	EXIST	400	3			4	500	3	4
6	EXISTING "MITS CITY MULTI" EQUIPMENT	EXIST	60	3			3	6	10	.75
7	EXISTING "18-CU1"	EXIST	50	3			3	6	10	.75
8	EXISTING "18-CU1"	EXIST	50	3			3	6	10	.75
9	SPARE	-	100	3						
10	EXISTING ATTIC AC PANEL "ATTIC-2"	EXIST	100	3			4	2	8	1.25
11	EXISTING ATTIC AC PANEL "ATTIC"	EXIST	200	3			4	3/0	6	2
12	EXISTING FIRST FLOOR PANEL "1C"	EXIST	200	3			4	3/0	6	2
13	EXISTING DISTRIBUTION PANEL "MDP-2"	EXIST	400	3			4	500	3	4
14	NEW SERVER ROOM AC UNIT "18-H1"	16.3	60	3			3	6	10	.75
15	NEW SERVER ROOM AC UNIT "18-H3"	16.3	60	3			3	6	10	.75
16	NEW SERVER ROOM OUTDOOR UNIT "18-H2"	7.8	40	3			3	8	10	.75
17	NEW SERVER ROOM OUTDOOR UNIT "18-H4"	7.8	40	3			3	8	10	.75
18	GEBERATOR BLOCK HEATER ⟨17⟩		30	3			3	10	10	.75
19	SPARE		20	1						
20	SPARE		20	1						
21	SPARE		20	3						
22	SPARE		60	3						
23	SPARE		40	3						
24	SPARE		100	3						
25	SPACE									

GENERAL NOTES

A REFER TO ELECTRICAL SITE PLAN FOR DEMOLITION REMOVALS NEW WORK OF EQUIPMENT, FEEDERS, LANDSCAPING, ETC.

NOTES

1. REFER TO MDP-1A SCHEDULE FOR FEEDER SIZES.
2. 2 SETS OF (4-600 KCMIL IN 4"C.)
3. REMOVE 3-20A/1P BREAKER IN EXISTING SERVER ROOM PANEL AND PROVIDE (1) NEW 60A/3P BREAKER TO SERVE NEW PANEL "C". EXTEND EXISTING CIRCUIT/LOADS REMOVED TO NEW PANEL.
4. REMOVE 3-20A/1P BREAKER IN EXISTING NORMAL POWER PANEL "1C" AND PROVIDE (1) NEW 60A/3P BREAKER TO SERVE NEW OFFICE PANEL "1C-A". EXISTING CIRCUIT/LOADS REMOVED WILL BE EXTENDED/BACKFED FROM NEW PANEL. RUN 4-#6, 1-#10 GRD. IN 1"C. CONTRACTOR SHALL INVESTIGATE AND DETERMINE WHAT EXISTING CIRCUITS SHOULD BE UTILIZED TO FREE UP SPACE FOR NEW BREAKER.
5. EXISTING SCHNEIDER ELECTRIC POWER MONITOR/PLC CABINET LOCATED IN MAIN ELECTRICAL ROOM.
6. 5-#10 CONDUCTORS FOR VOLTAGE MONITORING (3 BLK, 1 WHT, 1 GRD.).
7. 7-#10 CONDUCTORS FOR CURRENT MONITORING (3 BLK, 3 WHT, 1 GRD.). PROVIDE 4-#10 SPARE CONDUCTORS (2 BLK, 2 WHT).
8. PROVIDE PT/CT'S IN NEW GENERATOR FOR SCHNEIDER SYSTEM MONITORING.
9. 2-#12 IN 0.75"C. FOR GENERATOR START CIRCUIT.
10. 8-#14 IN 0.75"C. FOR ATS MONITOR/CONTROL VIA SCHNEIDER SYSTEM I/O (ON EM SOURCE, ON NORMAL SOURCE, TEST, START TEST). RUN TO EXISTING PLC CABINET.
11. PROVIDE SEPARATION BARRIER(S) PER NEC 700, 702.
12. INTERCEPT EXISTING FEEDER WITHIN MAIN ELECTRIC ROOM.
13. REMOVE AND RELOCATE SQUARE D PM870 POWER LOGIC EQUIP & METER. REFER TO PLAN NOTE # 5, THIS SHEET, AND ADDITIONAL INFORMATION ON NEW WORK FLOOR PLANS.
14. RUN 4-#6, #10 GRD. IN 1"C.
15. REMOVE NEUTRAL/GROUND BOND.
16. PROVIDE NEW 120V-20A/1P BREAKER IN EXISTING PANEL FOR NEW BATTERY CHARGER. RUN 2-#12, #12 GRD. IN 0.75"C.
17. COORDINATE THE NEED FOR A 3-POLE BREAKER WITH GENERATOR MANUFACTURER.
18. EMERGENCY BRANCH OF GENERATOR SHALL BE UP AND RUNNING WITHIN 10 SECONDS TO COMPLY WITH 2011 NEC ARTICLE 700 AND NFPA 101. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
19. CONNECTION POINT OF TEMPORARY GENERATOR



MDP-1A
SCALE: NONE
A / 18E602

FAULT CURRENT SCHEDULE

REF. POINT	DESCRIPTION	AVAILABLE SHORT CIRCUIT AMPS
1	SECONDARY SIDE OF PMT18	14,541 SCA
2	18ATSOS	12,228 SCA
3	MDP-1A	12,010 SCA
4	18EM	7,506 SCA
5	PDP-1	11,441 SCA
6	ATTIC PNL	7,672 SCA
7	ATTIC-2 PNL	5,336 SCA
8	PNL 1C	8,760 SCA
9	MDP-2	11,441 SCA
10	SERVER RM PANEL B	7,433 SCA

PANEL: 18-EM MOUNTING: SURFACE
CONN. LOAD: 4 KVA DEMAND LOAD: 4 KVAD (11A)
MAINS: 60A M.B. VOLTAGE: 208Y/120V-3PH-4W

REMARKS	KVA	BKR.	CKT. NO.	CKT. NO.	BKR.	KVA	REMARKS
LTG	1.0-L	20/1	1	2	20/1	1.0-L	LTG
LTG	1.0-L		3	4		0.5-R	FA PNL
SPARE			5	6			SPARE
			7	8			
			9	10			
SPACE			11	12			SPACE
			13	14			
			15	16			
			17	18			
			19	20			
			21	22			
			23	24			
			25	26			
			27	28			
			29	30			
			31	32			
			33	34			
			35	36			
			37	38			
			39	40			
			41	42			

PANEL: C MOUNTING: SURFACE
CONN. LOAD: FUTURE LOAD DEMAND LOAD: FUTURE LOAD
MAINS: 60A M.L.O. VOLTAGE: 208Y/120V-3PH-4W

REMARKS	KVA	BKR.	CKT. NO.	CKT. NO.	BKR.	KVA	REMARKS
SERVER		20/1	1	2	20/1		SERVER
ROOM			3	4			ROOM
			5	6			
			7	8			
			9	10			
			11	12			
			13	14			
			15	16			
			17	18			BACKFED CIRCUITS ⟨3⟩
			19	20			
			21	22			
SPACE			23	24			SPACE
			25	26			
			27	28			
			29	30			
			31	32			
			33	34			
			35	36			
			37	38			
			39	40			
			41	42			

PANEL: 1C-A MOUNTING: SURFACE
CONN. LOAD: 9.2 KVA DEMAND LOAD: 9.2 KVAD (26A)
MAINS: 60A M.L.O. VOLTAGE: 208Y/120V-3PH-4W

REMARKS	KVA	BKR.	CKT. NO.	CKT. NO.	BKR.	KVA	REMARKS
REC 105	1.2-R	20/1	1	2	20/1	1.0-R	REC 108
REC 106	0.8-R		3	4		0.8-R	REC 108
REC 106	1.2-R		5	6		1.0-R	REC 109
REC 107	0.6-R		7	8		0.2-R	REC 110
REC 107	0.8-R		9	10		1.0-R	COPIER
REC 107	0.6-R		11	12			SPARE
SPARE			13	14			
			15	16			
			17	18			BACKFED CIRCUITS ⟨4⟩
			19	20			
			21	22			
SPACE			23	24			SPACE
			25	26			
			27	28			
			29	30			
			31	32			
			33	34			
			35	36			
			37	38			
			39	40			
			41	42			

ABBREVIATIONS: L-LIGHTS, R-RECEPTACLES, M-MOTORS, H-RESISTANCE HEAT, C-CONTROL, M.L.O.-MAIN LUGS ONLY, D.S.L.-DOUBLE SET OF LUGS, M.B.-MAIN BREAKER, L.C.- LOCKING CLIP ON BREAKER

MOTORS, STARTERS, DISCONNECTS & CONTROLS

MOTOR

MOTOR NUMBER	SOURCE	NAMEPLATE	HP (KVA OR FLA)	120V-1PH	208V-1PH	208V-3PH	277V-1PH	480V-3PH	LOCATION
18-H1	MDP-1A	COMPUTER ROOM AIR CONDITIONER	(16.3)			o			COMP RM 122
18-H2	MDP-1A	CONDENSING UNIT	(7.8)			o			OUTSIDE
18-H3	MDP-1A	COMPUTER ROOM AIR CONDITIONER	(16.3)			o			COMP RM 122
18-H4	MDP-1A	CONDENSING UNIT	(7.8)			o			OUTSIDE

STARTER

MOTOR NUMBER	NEMA SIZE	TYPE: MANUAL	MAGNETIC	BUILT-IN MOTOR O/L	VFD			SEE NOTE	LOCATION: NEAR MOTOR	INTEGRAL		ROOM NUMBER	SEE NOTE	FURNISHED BY
18-H1										o				23
18-H2										o				23
18-H3										o				23
18-H4										o				23

DISCONNECT MEANS

MOTOR NUMBER	TYPE: DISC. SWITCH	TOGGLE SW	RECEPTACLE	FEEDER SW. OR BREAKER		LOCATION: NEAR MOTOR	INTEGRAL		PANELBOARD	SEE NOTE	FURNISHED BY DIV.
18-H1	o						o				23
18-H2	o					o					26
18-H3	o						o				23
18-H4	o					o					26

CONTROL / FEEDER

MOTOR NUMBER	THERMOSTAT	TIMER	INTEGRAL WITH EQUIPMENT	SPEED CNTRL	BY DIV 23	SEE NOTE	NUMBER OF CONDUCTORS	WIRE SIZE	GRD. SIZE	CONDUIT SIZE	SEE NOTE
18-H1					o						⟨1⟩
18-H2					o						⟨1⟩
18-H3					o						⟨1⟩
18-H4					o						⟨1⟩

Revisions | Date

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Drawing Title: PARTIAL BUILDING SECONDARY ELECTRIC SINGLE LINE

Approved: Project Director

Project Title: REHAB B18 MACHINE ROOM

Location: Chillicothe, Ohio

Date: 12/27/2012 | Checked: MSG | Drawn: JAS

Project No.: VA Project No. 538-12-119; JPA Project No. 12022.00

Building Number: 18

Drawing Number: 18E602

Dwg. of

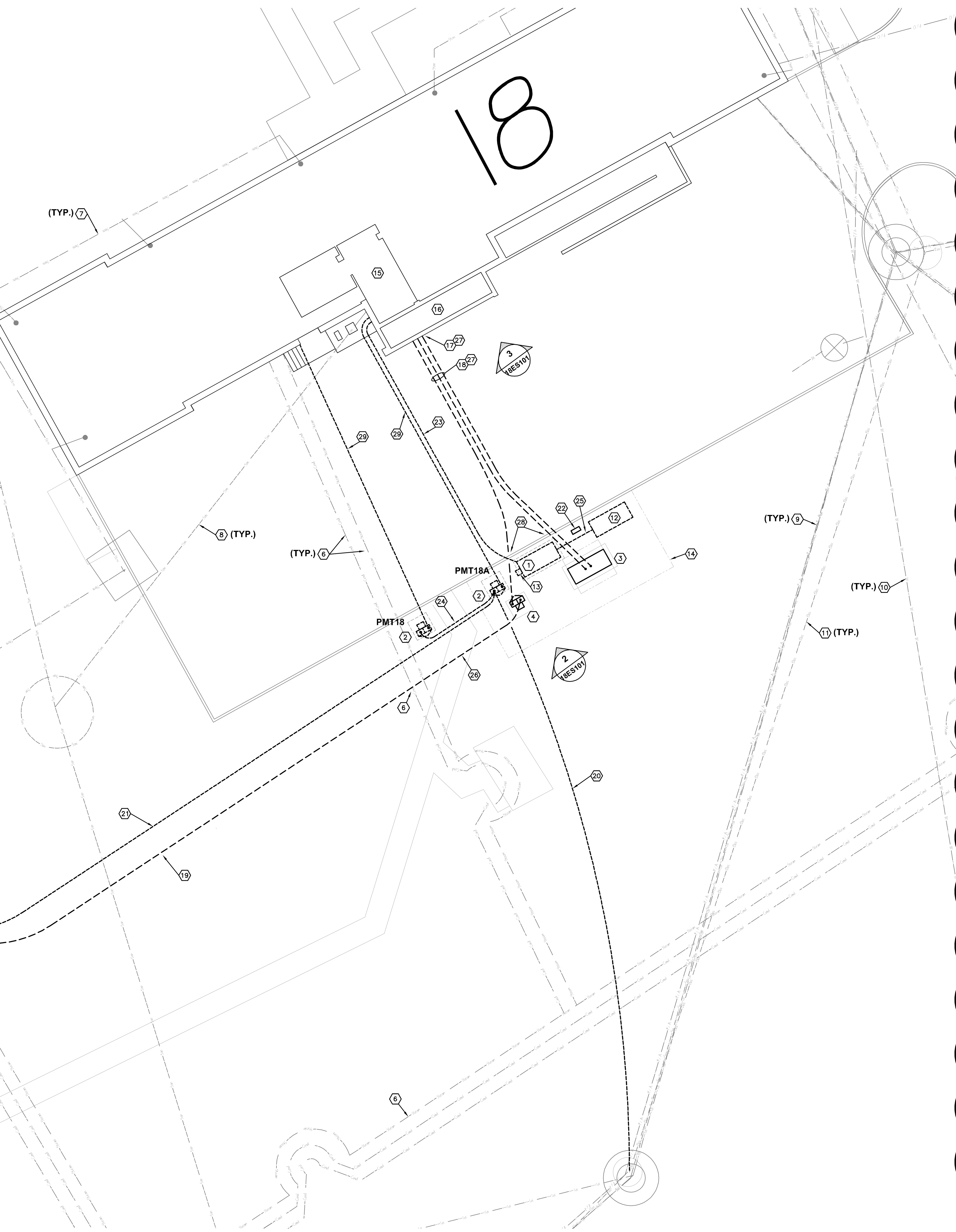
Office of Construction and Facilities Management

Department of Veterans Affairs

PAD MOUNTED SWITCH PMSG25
SITE PHOTOGRAPH 1 18ES101
SCALE: NONE

TRANSFORMER PMT18A
SITE PHOTOGRAPH 2 18ES101
SCALE: NONE

NEW SERVICE ENTRANCE INTO BUILDING
SITE PHOTOGRAPH 3 18ES101
SCALE: NONE



SITE PLAN
SCALE: 1" = 10'-0"

SEQUENCE OF CONSTRUCTION:

PHASE I:

a. ALL EXISTING UNDERGROUND UTILITIES ARE TO BE MARKED, DEPTH LOCATED, IN AREAS WHERE NEW DUCTBANKS ARE TO CROSS OR EQUIPMENT IS LOCATED.

b. SAW CUT BLOCK WALL (FROM ELECTRICAL ROOM SIDE) TO GAIN ACCESS INTO THE BELOW-STAIR CAVITY AREA. EXCAVATE THE AREA NEAR B18 STAIR CAVITY FOUNDATION WALL.

c. SUBMIT COORDINATION DRAWINGS SHOWING ALL PROPOSED CONDUIT (2" AND LARGER) EQUIPMENT, ETC... FOR APPROVAL BY COTR AND ELECTRICAL ENGINEER.

d. ROUGH-IN NEW 800A DISTRIBUTION PANEL "MDP-1A", SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH AND FEEDER CONNECTING THE TWO IN EXISTING ELECTRIC ROOM. ROUGH-IN NEW PRIMARY CONDUIT AND FEEDER FROM EXISTING PAD MOUNTED SWITCH TO NEW TRANSFORMER CONCRETE PAD LOCATION. ROUGH-IN NEW SECONDARY CONDUIT AND FEEDERS FROM NEW TRANSFORMER CONCRETE PAD LOCATION TO EXISTING ELECTRIC ROOM AND TERMINATE TO NEW SERVICE ENTRANCE ATS.

e. ROUGH-IN NEW EMERGENCY CONDUITS AND FEEDERS (LIFE SAFETY AND OPTIONAL STANDBY) FROM NEW GENERATOR CONCRETE PAD LOCATION TO EXISTING ELECTRIC ROOM AND TERMINATE OPTIONAL STANDBY FEEDER TO NEW SERVICE ENTRANCE ATS. STUB LIFE SAFETY CONDUIT AND FEEDER IN TO MAIN ELECTRIC ROOM FOR FUTURE EXTENSION.

f. ROUGH-IN NEW FEEDER FROM DISTRIBUTION PANEL "MDP-1A" AND STUB TO EXISTING DISTRIBUTION PANEL "PDP-1".

g. ROUGH-IN NEW FEEDERS FROM DISTRIBUTION PANEL "MDP-1A" AND TERMINATE TO TWO(2) NEW 5-TON COOLING UNITS LOCATED IN THE EXISTING SERVER ROOM.

Phase II:

a. PROVIDE AND SET TEMPORARY 100kW (125kVA, 348A, 208Y/120V-3PH-4W) GENERATOR WITH OVERLOAD PROTECTION AND TEMPORARY FEEDERS FOR TEMPORARY POWER TO DISTRIBUTION PANEL "PDP-1" (SERVES EXISTING UPS DISTRIBUTION PANEL, EXISTING LIEBERT INDOOR/OUTDOOR UNIT AND EXISTING TELEPHONE ROOM PANELS) DURING CUTOVER. COORDINATE PATH OF TEMPORARY FEEDERS THRU EXISTING MECH/ELEC ROOMS TO ACCESS "PDP-1" BUSSING. TEMPORARY FEEDERS SHALL BE LAID ON FLOOR DURING CUTOVER. PROTECT FEEDERS WHERE ACCESSIBLE TO PUBLIC/PEDESTRIAN TRAFFIC.

b. PROVIDE POWER TO ONE(1) OF THE 5-TON COOLING UNIT (INDOOR AND OUTDOOR UNITS) FROM TEMPORARY GENERATOR. CONTRACTOR IS PERMITTED TO UTILIZE PERMANENT FEEDER FOR TEMPORARY EMERGENCY POWER TO COOLING UNIT(S). COORDINATE WORK WITH DIVISION 23.

c. CLOSE BREAKER ASSOCIATED TO EXISTING PANEL "EMG-2" PRIOR TO DOWNTIME TO FREE UP SPARE CAPACITY ON GENERATOR. COORDINATE BREAKER CLOSURE WITH VA TO ENSURE ALL ASSOCIATED LOADS HAVE BEEN PROPERLY SHUT DOWN.

d. VA SHALL DETERMINE ALL NON-ESSIENTIAL LOADS TO TURN OFF WITHIN SERVER ROOM TO EXTEND UPS BATTERY LIFE (BACKUP TIME). COORDINATE WORK HAS BEEN COMPLETED WITH COTR PRIOR TO CUTOVER OF TEMPORARY POWER.

e. UTILIZE UPS POWER (APPROX. 25 MIN OF BATTERY BACKUP) DURING CUTOVER TO TEMPORARY GENERATOR. TERMINATION OF TEMPORARY CONDUCTORS FROM TEMPORARY GENERATOR TO EXISTING DISTRIBUTION PANEL "PDP-1" SHALL TAKE PLACE DURING BATTERY LIFE OF UPS.

Phase III:

a. SET NEW 225 KVA TRANSFORMER AND 200 KW EMERGENCY GENERATOR. TEST GENERATOR AND TRANSFORMER FUNCTIONALITY TO SATISFACTION OF COTR AND ENGINEER. ALL TESTS SHALL BE COMPLETED PRIOR TO ANY CONNECTION TO CAMPUS PRIMARY OR BUILDING FEEDERS.

b. ONCE TESTING STANDARDS HAVE BEEN MET TO PROPER STANDARDS, TERMINATE ALL ASSOCIATED CONDUCTORS TO TRANSFORMER AND GENERATOR. PROVIDE WRITTEN VERIFICATION TO COTR THAT ALL PHASES OF EQUIPMENT HAVE BEEN VERIFIED WITH RESPECT TO CONDUCTORS PRIOR TO TERMINATIONS.

c. OPEN 5KV SWITCH IN PMSG25 SERVING PMT18A AND PMT18. MAXIMUM DOWNTIME FOR BUILDING POWER SHALL BE NO MORE THAN 4 HOURS TO COMPLETE REMAINING PHASES III-V. SUCESSFUL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE STAFF TO ACCOMODATE THIS WORK WITHIN THE 4 HOUR WINDOW.

d. TERMINATE NEW FEEDER TO EXISTING DISTRIBUTION PANEL "PDP-1".

e. VERIFY SERVICE ENTRANCE ATS IS IN THE "EMERGENCY" AND BYPASS POSITION AND START NEW 200 KW EMERGENCY GENERATOR ENERGIZING THE NEW DISTRIBUTION PANEL "MDP-1A".

f. CONTRACTOR TO PROVIDE TEMPORARY LIGHTING IN POLICE DISPATCH WITHIN THE 4 HOUR DOWNTIME OF BUILDING POWER.

Phase IV:

a. INTERCEPT ALL EXISTING LOADS FED FROM EXISTING "MDP-1" AND EXTEND TO NEW 800A DISTRIBUTION PANEL "MDP-1A".

b. INTERCEPT EXISTING "MDP-2" AND EXTEND TO NEW 800A DISTRIBUTION PANEL "MDP-1A".

Phase V:

a. TERMINATE PRIMARY FEEDER WITHIN PMSG25 AND CLOSE TO ENERGIZE NORMAL POWER TO BUILDING 18.

b. SWITCH NEW S.E.ATS TO "NORMAL" POSITION AND SHUT DOWN EMERGENCY GENERATOR.

Phase VI:

a. REMOVE ALL EXISTING EQUIPMENT, TRANSFORMERS, GENERATOR, FEEDERS, CONDUITS AND CONCRETE PADS NO LONGER BEING USED ASSOCIATED WITH THIS WORK.

Phase VII:

a. INSTALL NEW EMERGENCY PANEL, ATS AND CONNECTING FEEDER.

NOTES

1. REMOVE EXISTING EMERGENCY GENERATOR, CONCRETE PAD AND ASSOCIATED UNDERGROUND FEEDER/CONDUIT. REFER TO SEQUENCE OF CONSTRUCTION FOR PHASING.
2. REMOVE EXISTING TRANSFORMER, CONCRETE PAD AND ASSOCIATED UNDERGROUND FEEDER/CONDUIT. REFER TO SEQUENCE OF CONSTRUCTION FOR PHASING.
3. NEW EMERGENCY GENERATOR. REFER TO NEW WORK FLOOR PLANS FOR ADDITIONAL DETAILS.
4. NEW PAD MOUNTED TRANSFORMER. REFER TO NEW WORK FLOOR PLANS FOR ADDITIONAL DETAILS.
5. EXISTING PAD MOUNTED PRIMARY ELECTRIC SWITCH.
6. EXISTING UNDERGROUND STEAM LINES/TUNNEL TO REMAIN. PROVIDE REINFORCING OF DUCTBANK WHERE IT CROSSES STEAM LINE TUNNEL. COORDINATE REINFORCING MEANS WITH COTR PRIOR TO INSTALLATION.
7. EXISTING UNDERGROUND STORM PIPING TO REMAIN.
8. EXISTING UNDERGROUND SANITARY PIPING TO REMAIN.
9. EXISTING UNDERGROUND FIRE ALARM/DATA CONDUIT TO REMAIN.
10. EXISTING UNDERGROUND WATER PIPING TO REMAIN.
11. EXISTING UNDERGROUND ELECTRIC TO REMAIN.
12. REMOVE EXISTING UNDERGROUND FUEL STORAGE TANK (T17), FILL PIPE, FUEL LINES (BOTH SUPPLY & RETURN), FUEL GAUGE, ETC. BACKFILL EARTH AND RESTORE GRADE TO MATCH EXISTING CONDITIONS
13. REMOVE SCHNEIDER ELECTRIC ATS/GENERATOR PT/CT PULLBOX AND ALL CONDUIT/CABLING.
14. SITE GRADING/RETAINING WALL WORK. REFER TO ARCHITECTURAL PLANS.
15. ELECTRICAL ROOM. REFER TO 1/8" PLANS FOR EQUIPMENT LOCATIONS.
16. RUN ELECTRICAL CONDUITS THRU BELOW STAIR CAVITY.
17. CORE DRILL EXISTING WALL, OR INSTALL BELOW FOOTER, FOR ENTRANCE INTO THE EXISTING ELECTRIC ROOM. EXCAVATION OF EXISTING SOIL/ASPHALT WILL EXPOSE ELEVATION REQUIRED TO ENTER THE BUILDING.
18. SLOPE NEW FEEDERS AWAY FROM BUILDING. REFER TO SHEET 18E501 FOR UNDERGROUND CONDUIT DETAILS.
19. INSTALL NEW PRIMARY FEEDER MINIMUM OF 30" BELOW GRADE (PER NEC T300.50).
20. REMOVE EXISTING ABANDONED UNDERGROUND CONDUIT BACK TO MANHOLE AS INDICATED.
21. REMOVE EXISTING UNDERGROUND 5kV PRIMARY FEEDER, CONDUIT AND DUCTBANK. REFER TO SEQUENCE OF CONSTRUCTION.
22. REMOVE EXISTING GENERATOR FUEL MONITORING EQUIPMENT, CONDUIT, WIRING, WEATHERPROOF ENCLOSURE AND SUPPORT BRACING.
23. REMOVE EXISTING UNDERGROUND GENERATOR FEEDER. REFER TO SEQUENCE OF CONSTRUCTION FOR PROPER PHASING.
24. REMOVE UNDERGROUND 5kV PRIMARY FEEDER.
25. REMOVE UNDERGROUND FUEL PIPING.
26. PROVIDE ALL SAW CUTTING AND PATCHING OF EXISTING CONCRETE SIDEWALK. REMOVE AND REPLACE ENTIRE PADS.
27. PROVIDE ALL SAW CUTTING AND PATCHING OF EXISTING ASPHALT DRIVEWAY.
28. PROVIDE ALL SAW CUTTING AND PATCHING OF EXISTING CONCRETE CURBS.
29. REMOVE EXISTING UNDERGROUND SECONDARY FEEDER. REFER TO SEQUENCE OF CONSTRUCTION FOR PROPER PHASING.

GENERAL NOTES

A. SEQUENCE OF CONSTRUCTION INDICATED BELOW IS ONE POSSIBLE SOLUTION TO MINIMIZE DOWNTIME OF THE BUILDING ELECTRICAL SYSTEM. CONTRACTOR IS REQUIRED TO SUBMIT A DETAILED SEQUENCE OF OPERATION TO THE COTR AT THE BEGINNING OF THE PROJECT. SEQUENCE MUST BE APPROVED BY THE COTR BEFORE THE CONTRACTORS ARE PERMITTED TO COMMENCE WORK. DEVIATIONS FROM THE FOLLOWING PROPOSED SEQUENCE OF CONSTRUCTION WILL BE REVIEWED, BUT WILL NOT BE GROUNDS FOR ADDITIONAL COST TO THE GOVERNMENT.

B. ALL CUT OVER WORK DOWNTIME SHALL BE DONE OUTSIDE OF NORMAL WORKING HOURS (NIGHTS AND WEEKENDS).

C. COORDINATE DOWNTIME SCHEDULES WITH COTR MINIMUM OF 30 DAYS IN ADVANCE FOR PROPER COORDINATION.

D. REFER TO FLOOR PLANS AND SINGLE LINE FOR ADDITIONAL INFORMATION.

E. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF ALL UNDERGROUND UTILITIES WITHIN AFFECTED AREAS/SCOPE OF WORK. THIS WORK SHALL BE PERFORMED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR MUST USE A PROFESSIONAL UNDERGROUND UTILITY LOCATING SERVICE AND SUBMIT ALL FINDINGS TO THE COTR WITH DOCUMENTED SEQUENCE OF CONSTRUCTION FOR REVIEW.

F. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE GOVERNMENT.

G. RECOMMEND HYDRO-EXCAVATION TO MINIMIZE DAMAGE TO UNKNOWN UNDERGROUND UTILITIES NOT LOCATED DURING INVESTIGATION.

H. ALL CIRCUITRY IS SHOWN FROM AS-BUILT DRAWINGS. FOR REFERENCE ONLY. UPDATE ON AS BUILT DRAWINGS WHEN LOCATED.

I. PROVIDE ALL EXCAVATION, RIGGING, BACKFILL, GRADING, SEEDING, SURFACE RESTORATION, ETC. AS REQUIRED TO RETURN ALL WORK BACK TO ORIGINAL CONDITIONS.

Revisions | Date

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Drawing Title	ELECTRICAL SITE PLAN REMOVAL & NEW WORK
Approved: Project Director	
Project Title	REHAB B18 MACHINE ROOM
Location	Chillicothe, Ohio
Date	12/27/2012
Checked	MSG
Drawn	JAS
VA Project No.	538-12-119
JPA Project No.	12022.00
Building Number	18
Drawing Number	18ES101
Dwg. of	

Office of Construction and Facilities Management
Department of Veterans Affairs