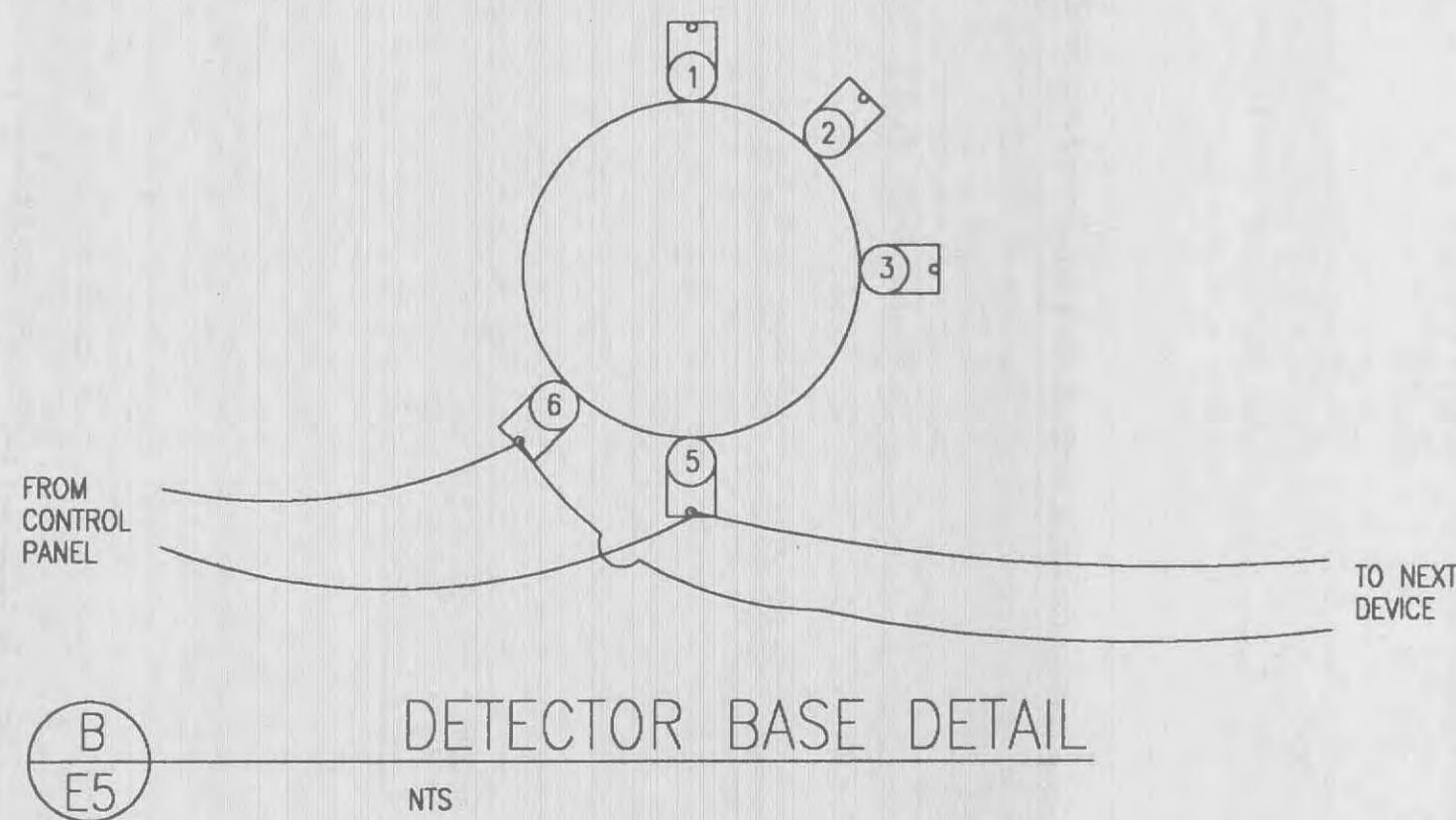


FLOOR PLAN
1/4" = 1'-0"

REQ	ITEM	PART NUMBER	DESCRIPTION	REMARKS
1	1	74-100013-001	CONTROL UNIT	
1	2	74-100004-001	SIGNAL / AUDIBLE MODULE	
2	3	LCR 12V17AP	12V 15 AMP/HR BATTERY	PANASONIC
1	4	ORR-066	SIGN - FIRE ALARM	OR EQUAL
2	5	70-407001-000	ADDRESSABLE CONTACT INPUT DEVICE	
2	6	70-400001-000	DETECTOR BASE	
1	7	70-401001-000	IONIZATION DETECTOR	
1	7A	71-401001-000	PHOTOELECTRIC DETECTOR	
1	8	131-3103D	ALARM BELL MECHANISM	FCI
1	9	131-0020D	ALARM GONG	USE WITH ITEM 8
1	10	29-320000-281	FIRE PULL STATION	
2	11	29-320000-288	BACK BOX	
1	12	30-191042-050	AUXILIARY RELAY	4P/3 AMP.
1	13	20245-82	AUXILIARY RELAY	2P/30 AMP.
1	14	GTE-BOX	DOCUMENT HOLDER	
1	15	134-35946	FIRE STROBE	USE WITH ITEM 8
1	16	PM 2400 PPM	MODEM - PRACTICAL PERIPHERAL	1-800-442-4774
1	17	139-3101 F	BACK BOX	USE WITH ITEM 8



POWER REQUIREMENTS (FN1000 PANEL)
(MANUFACTURER : FENWALL)

QTY.	ITEM	SUPERVISORY CURRENT	TOTAL	ALARM CURRENT	TOTAL
1	FENWALNET 1000	0.200	0.2 AMP	0.250	0.25 AMP
1	RX/TX MODULE	0.055	0.055 AMP	0.055	0.055 AMP
1	SIGNAL AUDIO OUTPUT MODULE	0.055	0.055 AMP	0.095	0.095 AMP
0	RELAY OUTPUT MODULE	0.017	0 AMP	0.057	0 AMP
0	FIELD DEVICES		0 AMP		0 AMP
1	IONIZATION DETECTOR	0.00033	0.00033 AMP	0.00040	0.0004 AMP
0	IONIZATION DETECTOR WITH THERMAL	0.00035	0 AMP	0.00042	0 AMP
0	IONIZATION DETECTOR WITH THERMAL AND RELAY	0.00038	0 AMP	0.00046	0 AMP
0	IONIZATION DETECTOR WITH RELAY	0.00037	0 AMP	0.00044	0 AMP
1	PHOTOELECTRIC DETECTOR	0.00035	.00035 AMP	0.00047	.00047 AMP
0	PHOTOELECTRIC DETECTOR WITH THERMAL	0.00037	0 AMP	0.00048	0 AMP
0	PHOTOELECTRIC DETECTOR WITH THERMAL AND RELAY	0.00040	0 AMP	0.00046	0 AMP
0	PHOTOELECTRIC DETECTOR WITH RELAY	0.00039	0 AMP	0.00050	0 AMP
2	ADDRESSABLE INPUT DEVICE	0.00031	0.00062 AMP	0.00038	0.00076 AMP
0	ADDRESSABLE INPUT DEVICE CURRENT LIMITED OUTPUT	0.00033	0 AMP	0.00035	0 AMP
1	HORN	0	0 AMP	.035	.035 AMP

TOTAL SUPERVISORY CURRENT X 24 HR. = .3113 AMP
7.4712 A/H

TOTAL ALARM CURRENT X .166 HR. (10 MIN.) = .43663
.072481 A/H

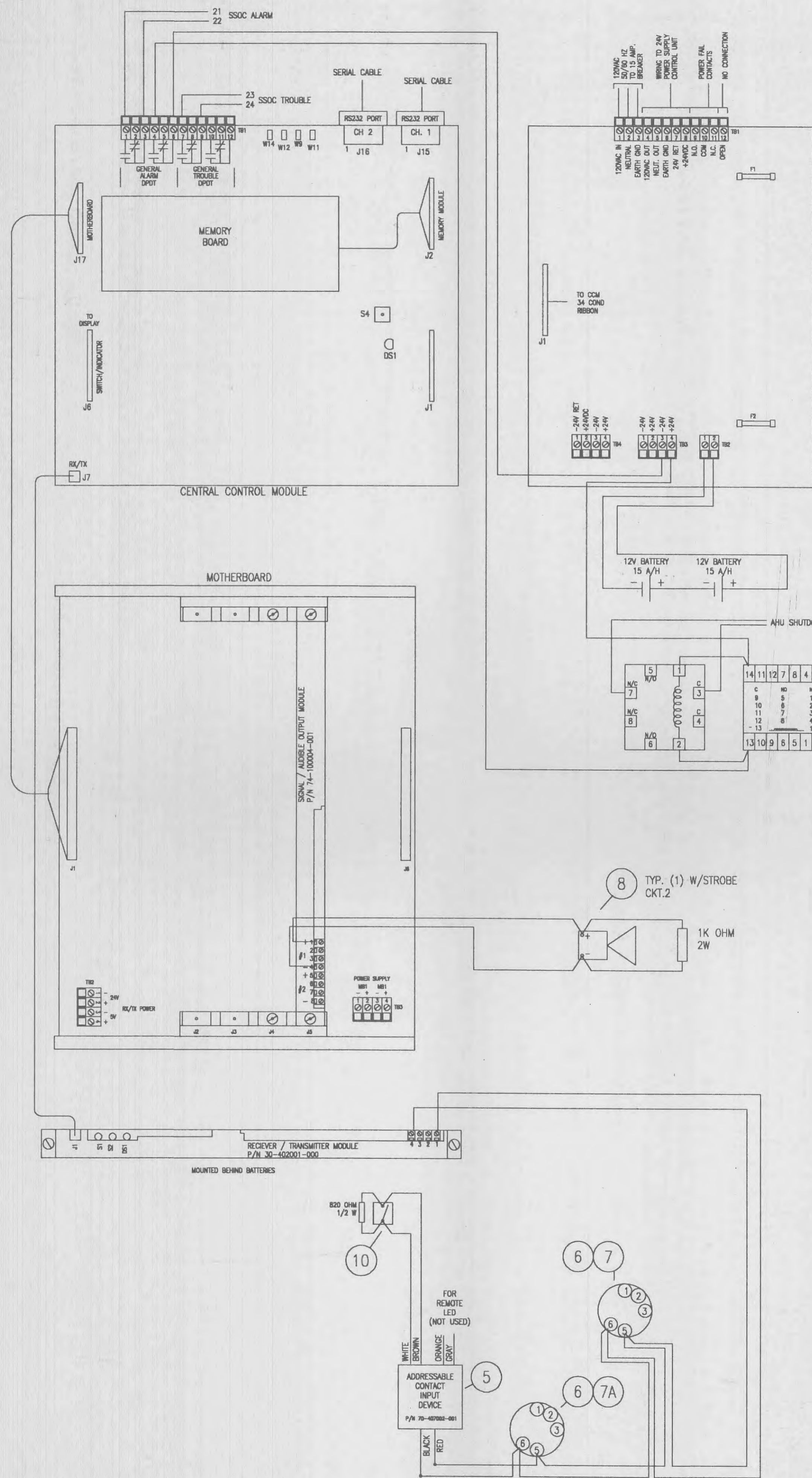
7.4712 A/H + .072481 A/H = 7.54368 A/H

7.54368 A/H X 1.2 (DERATE) = 9.05242 A/H

15 A/H BATTERY REQUIRED FOR 24 HOURS SUPERVISION AND 10 MINUTES OF ALARM AFTER POWER LOSS.

FIRE DETECTION NOTES

- THE FIRE PANEL SHALL BE MOUNTED AT 6'-0" OFF FINISH FLOOR TO THE TOP OF THE PANEL.
- ALL BELL STROBES AND HORN STROBES SHALL BE MOUNTED 7'-6" OFF FINISH FLOOR.
- ALL MANUAL PULL STATIONS SHALL BE MOUNTED 48" OFF FINISH FLOOR TO CENTER OF PULL.
- DETECTORS SHALL BE MOUNTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. DETECTORS SHALL NOT BE LOCATED WITHIN 4'-0" OF SUPPLY AIR REGISTERS AND SHALL BE MOUNTED AWAY FROM WALLS A MINIMUM OF 12".
- WIRE RANGE SHALL BE 14 TO 18 AWG, STRANDED COPPER EQUAL TO CARROL CABLE C0439 TWISTED NON SHIELDED CABLE AND SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR WIRE SIZES AND QUANTITY.
- PROVIDE 120 VOLT 15 AMP 1 PHASE DEDICATED CIRCUIT USING 14 AWG WIRE AS REQUIRED UNDER ITEM 5. THE OVER CURRENT DEVICE USED FOR THE FIRE PANEL SUPPLY SHALL HAVE A LOCKING DEVICE TO PREVENT ACCIDENTAL SHUT OFF.
- ALL DEVICES AND AUXILIARY FUNCTION WIRING SHALL BE INSTALLED IN MINIMUM 3/4" EMT CONDUIT. STEEL SET SCREW FITTINGS SHALL ONLY BE USED. ISOLATE ALL A/C WIRING FROM DEVICE AND AUXILIARY FUNCTION WIRING. ALL FIRE SYSTEM RELATED CONDUIT RUNS AND JUNCTION BOXES SHALL BE ROUTED ABOVE OR AROUND THE SWITCHING EQUIPMENT. ALARMS AND FIRE DETECTION WIRING CAN SHARE CONDUIT WHERE PRACTICAL.
- ALL PENETRATIONS THRU WALLS, CEILINGS, FLOOR SHALL MAINTAIN THE EXISTING FIRE RATING. USE FIRE PROOF SEALING PRODUCTS AS MANUFACTURED BY 3M PRODUCTS. DOORS AND TELEPHONE CABLE OPENINGS AND OTHER POTENTIAL AREA OF LEAKAGE SHALL HAVE PROPER SEALING DEVICES TO PREVENT AIR LEAKAGE INTO AND OUT OF THE PROTECTED AREA.
- LABEL ALL CONDUITS AND JUNCTION BOX COVERS WITH THE VERIZON APPROVED FIRE PROTECTION WARNING LABELS.
- SEE AIR SHUT DOWN NOTES FOR HVAC OPERATION AND SYSTEM OPERATION.
- IN FENWALNET 1000 AND 4000 SYSTEMS: 1) THE END OF LINE RESISTOR LOCATION FOR THE ADDRESSABLE INPUT DEVICE SHALL NOT BE LOCATED MORE THAN 150' FROM THE AL DEVICE. 2) REFER TO THE SYSTEM INSTALLATION MANUAL FOR RESISTOR SIZES AND APPLICATION.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH NFPA 12A, NFPA 72E, NFPA 70, STATE, AND LOCAL CODES.
- CONTRACTOR SHALL KEEP THE WORK AREA CLEAN AND FREE OF DUST AT ALL TIMES DURING CONSTRUCTION. DUE TO THE NATURE AND FUNCTION OF THE FACILITY, GREAT CARE SHALL BE TAKEN THROUGH EVERY PHASE OF INSTALLATION TO PROTECT THE EQUIPMENT ENVIRONMENT. BUILDING PERIMETER OUTLETS ARE THE ONLY RECEPTACLES ALLOWED FOR TOOL OPERATION. OUTLETS ASSOCIATED WITH THE SWITCH SHALL NOT BE USED FOR ANY REASON. CAUTION SHALL BE USED WHEN MOVING LADDERS AND OTHER EQUIPMENT. EQUIPMENT CABLE TRAYS SHALL NOT BE USED FOR PLATFORMS DURING EQUIPMENT INSTALLATION. A VACUUM SHALL BE USED DURING ALL DRILLING OR SAWING OPERATIONS TO PREVENT AIRBORNE DUST WHICH CAN CAUSE DAMAGE TO THE SWITCHING EQUIPMENT. IF AT ANY TIME DURING AN INSTALLATION A VERIZON EMPLOYEE PRESENTS A PROBLEM WITH THE INSTALLATION METHOD BEING USED, THE PROBLEM SHALL BE RESOLVED BEFORE INSTALLATION MAY PROCEED.
- CONTRACTOR SHALL NOTIFY BOTH THE BUILDING ENGINEER AND THE APPROPRIATE CONTROL CENTERS 24 HOURS BEFORE ARRIVING AT THE PROJECT SITE AND THE START OF CONSTRUCTION.
- ALL PIPING FOR HALON INSTALLATIONS SHALL CONFORM TO ALL FEDERAL, STATE, AND LOCAL CODES. SEE DRAWINGS FOR SIZES, LOCATION, AND TYPE.
- 12 VDC SUPPLY AND 24 VDC BATTERY SUPPLY MUST BE DISCONNECTED BEFORE PERFORMING ANY TYPE OF SYSTEM MAINTENANCE.



FIRE ALARM SCHEMATIC WIRING DIAGRAM
NTS

Revision	Date	No.

Notice

NO PART OF THESE PLANS AND/OR PROJECT MANUAL MAY BE REPRODUCED, COPIED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM BY ANY MEANS WITHOUT PRIOR WRITTEN PERMISSION OF MITZEL + SCROGGS ARCHITECTS, INC.

DRAWINGS SHALL NOT BE SCALED. QUESTIONS ON DIMENSIONS SHALL BE REFERRED TO THE ARCHITECT'S OFFICE.

CONTRACTORS SHALL VERIFY AND COORDINATE ALL DIMENSIONS, DETAILS, AND JOB CONDITIONS.

NOTE:

CONTRACTOR SHALL PROVIDE AN INTERIOR CLEAR, NO BUILD ZONE BETWEEN 8'-0" & 9'-0" A.F.F. (I.E. NO DUCTS, DIFFUSERS, HANGERS OR FIXTURES ETC.)



NOTE:

ALL FIRE DETECTION SYSTEM WORK IS NOT A PART OF THIS CONTRACT AND SHALL BE BY OWNER'S CONTRACTOR AS FOLLOWS:

MARTY MASSMAN
ORR FIRE PROTECTION SYSTEMS
2416 E. WASHINGTON ST., SUITE B
BLOOMINGTON, IL 61704
(309) 661-8585

COORDINATE ALL RELEVANT WORK AND DETAILS WITH THIS CONTRACTOR.

verizon inc.
Addition to R.S.U. Building
Hillman Remote
1235 Bryan Lane
O'Fallon, Missouri 63366

mitzel + scroggs
architects designers planners

2401 East Broadway Bldg A
Columbia, MO 65201-6118
Telephone (573) 449-0951
Fax (573) 449-0921

FIRE ALARM SYSTEM

Scale	AS NOTED	
Date	04-23-01	Comm No. 001998
In Charge	DCM	E5
Drawn By	FLC	
Checked By	SSB	