

ELECTRICAL SYMBOL LEGEND

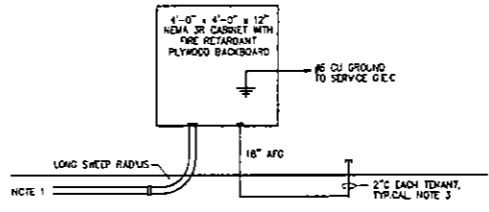
	WIRING SYSTEM CONCEALED IN WALL OR CEILING. DASHED LINES INDICATE WIRING RUN BELOW SLAB/GRADE.
	WIRING SYSTEM TO BE RUN EXPOSED. DASHED LINES INDICATE WIRING RUN BELOW SLAB/GRADE.
	BRANCH CIRCUIT NUMBER TO PANEL. NUMBER OF BRANCHES INDICATE NUMBER OF CIRCUITS. THREE CIRCUITS OF ALTERNATING PHASES MAY BE COMBINED IN ONE CIRCUIT SHARING A COMMON NEUTRAL UNLESS OTHERWISE NOTED.
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX
	SINGLE POLE SWITCH, 20A, 120/277 VOLT, +48" A.F.F. TO CENTER.
	3-WAY SWITCH, 20A, 120/277 VOLT, +48" A.F.F. TO CENTER.
	DUPLEX RECEPTACLE, 15 AMP, 120 VOLT, 48" A.F.F. TO CENTER FOR SINGLE RECEPTACLE ON A CIRCUIT. USE A 20A RECEPTACLE.
	"20" INDICATES GROUND FAULT PROTECTION
	"40" INDICATES ARC FAULT PROTECTION
	"WP" INDICATES WEATHERPROOF
	"SD" INDICATES SHADING DEVICE TO BE MOUNTED ABOVE COUNTER TOP (3'-4 1/2" AFF U.O.N.)
	DOUBLE DUPLEX (QUAD) RECEPTACLE
	HEAVY DUTY DISCONNECT SWITCH
	MOTOR PROVIDED AND INSTALLED BY MECH. CONTRACTOR. WIRED BY ELEC. CONTRACTOR. NUMERAL INDICATE HORSEPOWER.
	PANELBOARD, SURFACE OR RECESS MOUNTED. SEE SCHEDULE FOR DETAILS.
	TELEPHONE OUTLET, SAME HEIGHT AS ADJACENT RECEPTACLE, WITH 3/4" CONDUIT STUBBED OUT ABOVE ACCESSIBLE CEILING. "N" INDICATES 60" AFF MOUNTING.
	COMPUTER OUTLET, SAME HEIGHT AS ADJACENT RECEPTACLE, WITH 3/4" CONDUIT STUBBED OUT ABOVE ACCESSIBLE CEILING. "N" INDICATES 60" AFF MOUNTING.
	COMBINATION TELEPHONE/DATA OUTLET, SAME HEIGHT AS ADJACENT RECEPTACLE, WITH 1" CONDUIT STUBBED OUT ABOVE ACCESSIBLE CEILING.
	FIRE ALARM PULL STATION
	CEILING MOUNTED HEAT DETECTOR
	CEILING MOUNTED SMOKE DETECTOR
	DUST MOUNTED SMOKE DETECTOR
	AUDIBLE/VISUAL ALARM DEVICE
	VISUAL ONLY ALARM DEVICE

ELECTRICAL ABBREVIATIONS

A	AMPERE	A.F.	ABOVE FINISHED FLOOR	A.F.C.	ABOVE FINISHED GRADE	ANG	AMERICAN WIRE GAGE	C	CONDUIT	CB, CXT BKR	CIRCUIT BREAKER	CLG	CEILING	EC	ELECTRICAL CONTRACTOR	ES	ENERGY SAVING	EWT	ELECTRICAL METALLIC TUBING	FACP	FIRE ALARM CONTROL PANEL	GF	GROUND FAULT CIRCUIT INTERRUPTER	HDA	HAND-OFF-AUTOMATIC	HP	HORSEPOWER	J	JUNCTION	KVA	KILOVOLT-AMPERE	M.C.	MECHANICAL CONTRACTOR	N.E.C.	NATIONAL ELECTRICAL CODE	N/L	NIGHT LIGHT	PAL	PANEL	P.V.C.	POLY-VINYL-CHLORIDE (SCHEDULE 40, U.S.N.)	U.O.N.	UNLESS OTHERWISE NOTED	V	VOLT	VA	VOLT-AMPERE	W	WATT	WP	WEATHERPROOF
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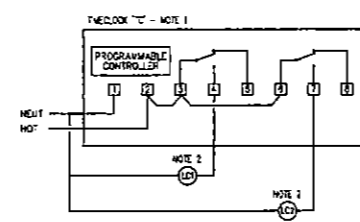
GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.
- ALL MATERIAL SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC. AND THE NATIONAL MANUFACTURERS ASSOCIATION.
- ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.
- DRAWINGS ARE DIAGNOSTIC ONLY AND INDICATE ONLY THE GENERAL ARRANGEMENT. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
- ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING, AND OTHER EQUIPMENT AS REQUIRED.
- A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
- ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- ALL WIRING SHALL BE INSTALLED IN GALVANIZED RIBBON CONDUIT, INTERMEDIATE METAL CONDUIT, OR EMT. EMT SHALL NOT BE USED IN OR UNDER CONCRETE SLABS, OR IN MASONRY WALLS, USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB.
- BRANCH CIRCUITS RATED 30 AMPS OR LESS MAY UTILIZE TYPE MC FLEXIBLE METAL CONDUIT SUPPORT WITHIN 12" OF ALL CONNECTIONS AND NOT MORE THAN 4'-8" ON CENTER.
- ALL RACEWAYS (EXCEPT THOSE BELOW SLAB OR GRADE) SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING LINES.
- CONDUCTORS SHALL BE COPPER RATED AT NOT LESS THAN 100 VOLTS. MINIMUM SIZE SHALL BE #12 AWG UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID UNLESS OTHERWISE NOTED.
- FEDERS RATED GREATER THAN 150 AMPERES MAY UTILIZE 75% COMPAT ALUMINUM CONDUCTORS OF EQUIVALENT AMPACITY, TYPE XHHW OR XHHW-2 INSULATION EQUIPMENT TO ALUMINUM SERIES 8000 CONDUCTORS. CONTRACTOR TO VERIFY CONDUIT SIZES REQUIRED FOR ALUMINUM FEEDERS.
- BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE THHN OR THWN AS REQ'D.
- PROVIDE A PULLWIRE IN ALL EMPTY CONDUITS.
- PROVIDE A TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS.
- PROVIDE ENGRAVED PANELBOARD NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES. BLACK LETTERS ON WHITE BACKGROUND.
- FUSES 0 - 600 AMPS SHALL BE UL CLASS "RK-1" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSS, UNLESS NOTED OTHERWISE.
- VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- PROVIDE SCHEDULE 40 PVC CONDUIT UNDERGROUND FROM TELEPHONE EQUIPMENT ROOM TO CONNECTION POINT AS DIRECTED BY LOCAL TELEPHONE COMPANY.
- ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC. SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.).
- PENETRATIONS OF REQUIRED SMOKE PARTITIONS SHALL BE SEALED USING METHODS APPROVED UNDER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS FIRE STOPPING IS ACCOMPLISHED. USE APPROVED ASSEMBLIES SUCH AS THE FOLLOWING:
UP TO 1" PENETRATIONS OF 1, 2, 3 & 4 HOUR GYPSUM WALLS - U.L. #R1001
UP TO 4" PENETRATIONS OF 1 & 2 HOUR GYPSUM WALLS - U.L. #R1001
UP TO 4" PENETRATIONS OF 1 & 2 HOUR CONCRETE OR BLOCK WALLS & FLOORS - U.L. #CA1002
UP TO 4" PENETRATIONS OF 3 & 4 HOUR CONCRETE OR BLOCK WALLS & FLOORS - U.L. #CB1002
- IN REQUIRED FIRE RATED WALLS AND PARTITIONS, OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 18 SQUARE INCHES SHALL BE PROTECTED AS REQ'D BY U.L. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THAT THE INTEGRITY OF THE U.L. RATING IS MAINTAINED.
- WHERE A WIRE RUN IS SHOWN THE CONDUIT SHALL BE INSTALLED IN A DEDICATED CONDUIT, DO NOT COMBINE WITH OTHER CIRCUITS. WHERE A CIRCUIT NUMBER IS NOT SHOWN, THE CONTRACTOR SHALL COMBINE CIRCUITS AS FOLLOWS:
A MAXIMUM OF THREE 20A BRANCH CIRCUITS MAY BE COMBINED IN A COMMON NEUTRAL SHARING A COMMON NEUTRAL OR WITH SEPARATE NEUTRALS FOR A MAXIMUM OF TOTAL OF SIX CURRENT CARRYING CONDUCTORS.
ALL BRANCH CIRCUITS LARGER THAN 20A SHALL BE SEPARATELY NUMBERED TO THE PANEL.
- ALL RACEWAYS SHALL BE CONCEALED UNLESS OTHERWISE NOTED AND THAT THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH CONCEALING RACEWAYS AFTER (INITIAL) BLOCK CONSTRUCTION.



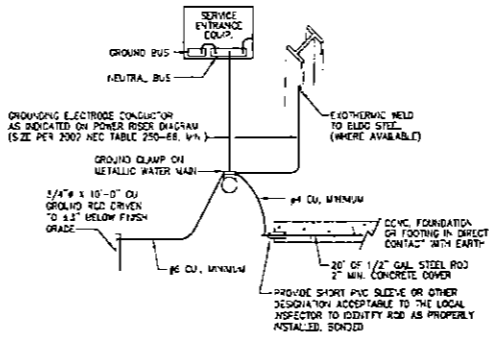
- TELEPHONE RISER NOTES:**
1. THE 4" TO PROPERTY LINE FOR SERVICE. COORDINATE WITH TELEPHONE UTILITY FOR LOCATION OF TERMINATION POINT.
 2. PROVIDE INSULATING BUSHING ON ENDS OF ALL CONDUITS.
 3. SEE PLANS FOR STUD-N LOCATIONS FOR PROPOSED TENANTS. FIELD VERIFY WITH G.C./OWNER AS REQUIRED.

1 TELEPHONE RISER DIAGRAM
EQ.1 NOT TO SCALE

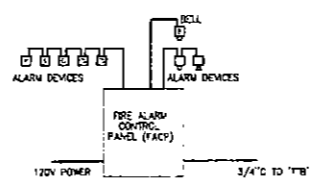


- NOTES:**
1. "TC" IS A 2-CIRCUIT, SEVEN DAY ASTRO, TIME CLOCK WITH POWER RESERVE EQUAL TO INTERMEDIATE ESTIMATING SERIES. THE CLOCK SHALL PROVIDE ONE "SWITCH-ON" TIME (NORMAL) AND ONE "SWITCH-OFF" (SECURITY) CIRCUIT, EACH INDEPENDENTLY PROGRAMMABLE. MANUAL OVERRIDE SHALL BE PROVIDED FOR EACH CIRCUIT.
 2. "LCT" ARE MULTI-POLE, ELECTRICALLY HELD, 120/277V, 20A, 2-POLE CONTRACTOR WITH 120V COIL TO CONTROL ALL HOT LEGS OF LIGHTING AS REQUIRED. VERIFY POLE QUANTITY AND ENCLOSURE AS REQUIRED.

2 LIGHTING CONTROL DIAGRAM - OUT PARCEL
EQ.1 NOT TO SCALE



3 GROUNDING DETAIL
EQ.1 NOT TO SCALE



- FIRE ALARM SYSTEM NOTES:**
1. FIRE ALARM DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND AEA.
 2. ACTUATION OF ANY PULL STATION, FLOW SWITCH OR SMOKE DETECTOR SHALL ACTIVATE ALARM.
 3. FIRE ALARM SYSTEM SHALL BE ADDRESSABLE, 24VDC, POWER LIMITED, FULLY SUPERVISED, WITH 60 HOUR STANDBY BATTERY, ADDRESS 3110 XM, WITH CENTRAL STATION COMMUNICATOR.
 4. ALL FIRE ALARM SWITCHES, MODULES, AND WIRING SHALL BE PROVIDED BY THE FIRE ALARM SUB-CONTRACTOR. FIRE ALARM SYSTEM SUB-CONTRACTOR SHALL BE RESPONSIBLE TO SUBMIT DETAILED SYSTEM DRAWINGS, CONNECTIONS, WIRING DIAGRAMS, ETC. AS REQUIRED FOR FINAL PERMITTING. ALL COMPONENTS NECESSARY FOR CERTIFICATE OF OCCUPANCY SHALL BE INCLUDED IN THE BID.
 5. SEE PLANS FOR MINIMUM NUMBER OF DEVICES.
 6. ALL TAMPER AND FLOW SWITCH CONNECTION LOCATIONS TO BE FIELD VERIFIED WITH SPRINKLER SUB-CONTRACTOR AS REQ'D.
 7. COORD. WITH M.C. TO PROVIDE SHUTDOWN INTERLOCK WIRING TO RESPECTIVE AHU AS REQUIRED.
 8. COORDINATE DUAL LINE TELEPHONE CONNECTION FOR VA LISTED CENTRAL STATION MONITORING.

4 FIRE ALARM RISER DETAIL
EQ.1 NOT TO SCALE

TENANT LOAD CALCULATION

SHOP 101	50 FT = 6852
WINDOW LENGTH = 85	
NON-CONTINUOUS LOADS	
RECEPTACLES - LOAD PER SQ FT	1 6852 VA
HVAC - LOAD PER SQ FT	16 109632 VA
WATER HEATER	25000 VA
SUBTOTAL	141484 VA
CONTINUOUS LOADS	
GENERAL LIGHTING - LOAD PER SQ FT	3.5 23874 VA
SHOW WINDOW - LOAD PER LN FT	200 17000 VA
EXTERIOR STORE SIGN	6000 VA
SUBTOTAL	46874 VA
NON-CONTINUOUS LOADS @ 100%	141484 VA
CONTINUOUS LOADS @ 125%	58728 VA
TOTAL	200212 VA
TOTAL / (208V x 1.73) =	556 AMPS

TENANT LOAD CALCULATION

SHOP 101	50 FT = 1344
WINDOW LENGTH = 25	
NON-CONTINUOUS LOADS	
RECEPTACLES - LOAD PER SQ FT	1 1344 VA
HVAC - LOAD PER SQ FT	16 21504 VA
WATER HEATER	5000 VA
SUBTOTAL	27848 VA
CONTINUOUS LOADS	
GENERAL LIGHTING - LOAD PER SQ FT	3.5 4704 VA
SHOW WINDOW - LOAD PER LN FT	200 3000 VA
EXTERIOR STORE SIGN	1200 VA
SUBTOTAL	10904 VA
NON-CONTINUOUS LOADS @ 100%	27848 VA
CONTINUOUS LOADS @ 125%	13630 VA
TOTAL	41478 VA
TOTAL / (208V x 1.73) =	116 AMPS

TENANT LOAD CALCULATION

SHOP 102	50 FT = 1377
WINDOW LENGTH = 15	
NON-CONTINUOUS LOADS	
RECEPTACLES - LOAD PER SQ FT	1 1377 VA
HVAC - LOAD PER SQ FT	16 22032 VA
WATER HEATER	5000 VA
SUBTOTAL	28409 VA
CONTINUOUS LOADS	
GENERAL LIGHTING - LOAD PER SQ FT	3.5 4820 VA
SHOW WINDOW - LOAD PER LN FT	200 3000 VA
EXTERIOR STORE SIGN	1200 VA
SUBTOTAL	9020 VA
NON-CONTINUOUS LOADS @ 100%	28409 VA
CONTINUOUS LOADS @ 125%	11274 VA
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SHOP 104	50 FT = 1377
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TENANT LOAD CALCULATION

SHOP 105	50 FT = 1377
WINDOW LENGTH = 15	
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RECEPTACLES - LOAD PER SQ FT	1 1377 VA
HVAC - LOAD PER SQ FT	16 22032 VA
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TENANT LOAD CALCULATION

SHOP 106-10	50 FT = 6852
WINDOW LENGTH = 85	
NON-CONTINUOUS LOADS	
RECEPTACLES - LOAD PER SQ FT	1 6852 VA
HVAC - LOAD PER SQ FT	16 109632 VA
WATER HEATER	25000 VA
SUBTOTAL	141484 VA
CONTINUOUS LOADS	
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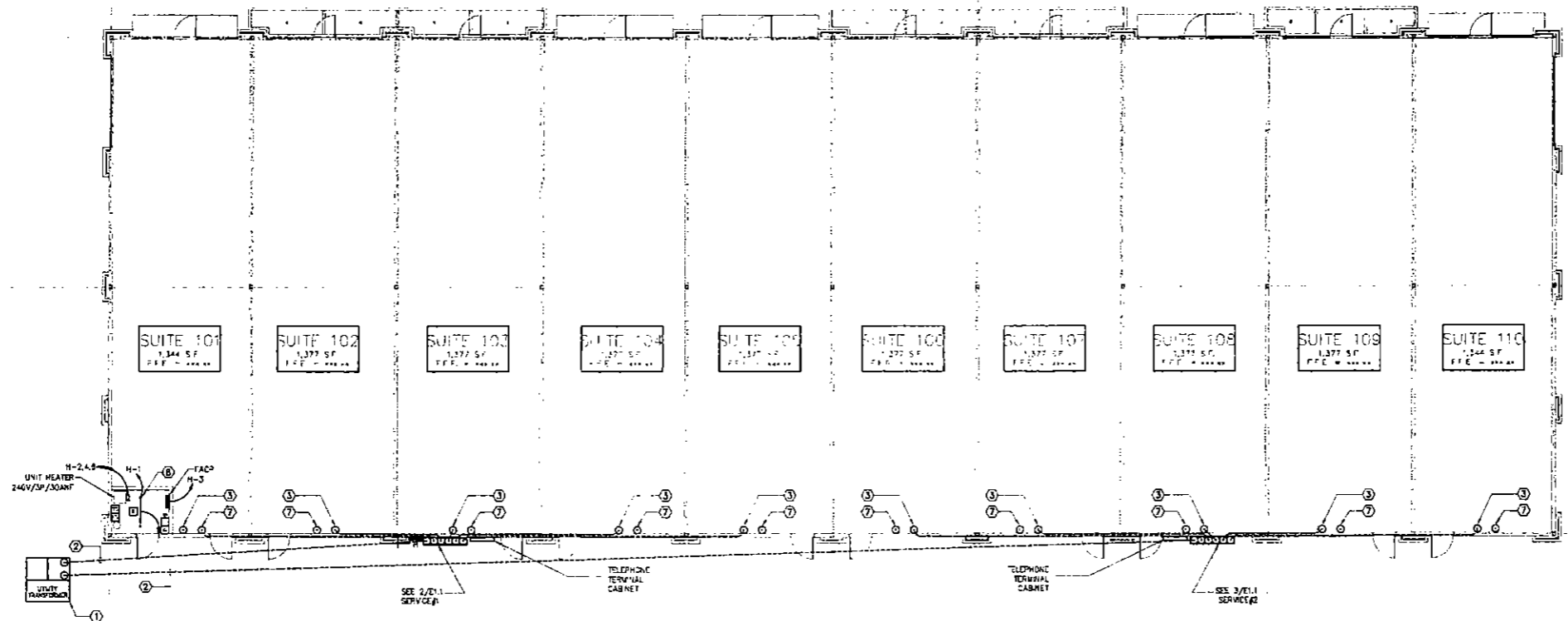
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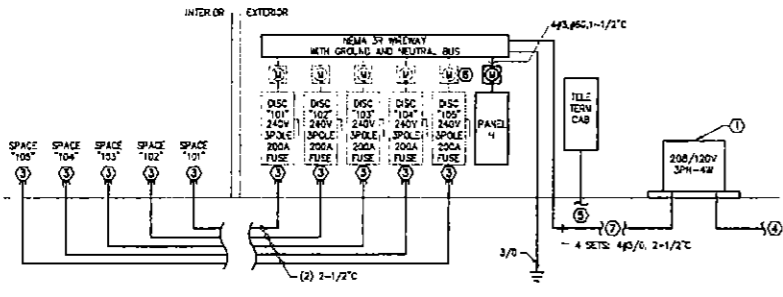
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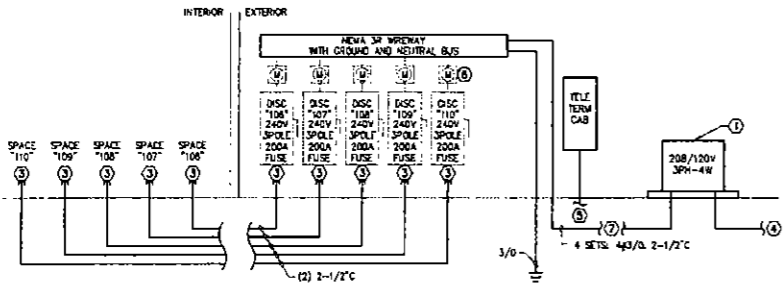
ELECTRICAL SIXES AND RIDGE ROAD DEVELOPMENT
NOTES AND LEGEND
3422 SIXES ROAD
CANTON, GA 30114
EO.1 IRAM PROPERTIES LLC. To order plans, go to www.idirepro.com
 160 TRINITY AVENUE SW, SUITE A
 ATLANTA, GA 30303 843.693.0610
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 MAVERICKS MANCINI
 ARCHITECTS & INTERIORS
 11-10-08
 Seal



1 FLOOR PLAN
E1.1 SCALE: 1/8" = 1' - 0"



2 RISER DIAGRAM - SERVICE "1"
E1.1 SCALE: NO SCALE



3 RISER DIAGRAM - SERVICE "2"
E1.1 SCALE: NO SCALE

KEY NOTES

- PROPOSED UTILITY COMPANY TRANSFORMER LOCATION. ELECTRICAL CONTRACTOR TO PROVIDE ONE (1) CONCRETE TRANSFORMER PAD AND PRIMARY CONDUITS PER LOCAL UTILITY COMPANY REQUIREMENTS.
- ELECTRICAL CONTRACTOR TO PROVIDE UNDERGROUND CONDUITS FROM UTILITY TRANSFORMER TO ELECTRICAL SERVICE LOCATION. COORDINATE EXACT REQUIREMENTS OF PRIMARY AND SECONDARY FEEDERS WITH UTILITY COMPANY.
- ELECTRICAL CONTRACTOR TO PROVIDE UNDERGROUND CONDUITS WITH PULL WIRES FROM FUTURE TENANT DISCONNECT SWITCH LOCATION TO THE RESPECTIVE TENANT SPACE FOR FUTURE ELECTRICAL SERVICE. E.G. TO STUD CONDUIT 18" ABOVE GRADE AT EXTERIOR SERVICE ENTRANCE AND 4" AFF AT INTERIOR LOCATION.
- ONE (1) 4" UNDER GROUND CONDUIT TO LOCAL UTILITY PRIMARY TERMINATION. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH UTILITY COMPANY.
- ELECTRICAL CONTRACTOR TO PROVIDE ONE (1) 4" SCHEDULE 40 PVC UNDERGROUND CONDUIT WITH PULL WIRE FROM TELEPHONE UTILITY PULLBOX OR PEDestal FOR TELEPHONE SERVICE. SEE TELEPHONE RISEP 1/201.
- COORDINATE EXACT REQUIREMENTS FOR INSTALLATION OF JURY METERING WITH UTILITY COMPANY.
- ELECTRICAL CONTRACTOR TO PROVIDE ONE (1) 2" SCHEDULE 40 PVC UNDERGROUND CONDUIT WITH PULL WIRE FROM TELEPHONE CABINET AND STUD CONDUIT TO 18" AFF IN EACH RESPECTIVE SPACE.
- 4-FT., 2-LAMP FLUORESCENT STRIP WITH WIRE GUARD. DAYBRITE #D32-120-1/2ED-CO-4 OR APPROVED EQUAL.

VOLTAGE: 120/208 PH: 3 WIRE 4
BUSSENG: 100A CU
WIRING: 100A MEG
MOUNTING: BOTTOM

PANEL H

DESCRIPTION	POLE	CMT	CONDUIT	WIRE	TRP	OCT	LOAD PER PHASE			OCT	TRP	WIRE	CONDUIT	OCT	POLE	DESCRIPTION
							A	B	C							
STRIP LIGH-1	1		12	20	1	2	0.1	1.0		2	12	12			UNIT HEATER	
FACP	1		12	20	3	4		0.2	1.0		4	20				
SPARE	1					2									SPARE	
SPARE	1					8									SPARE	
SPARE	1					10									SPARE	
SPARE	1					12									SPARE	
SPARE	1					14									SPARE	
SPARE	1					15									SPARE	
SPARE	1					17									SPARE	
SPARE	1					19									SPARE	
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SPARE	1					33									SPARE	
SPARE	1					35									SPARE	
SPARE	1					37									SPARE	
SPARE	1					38									SPARE	
SPARE	1					40									SPARE	
SPARE	1					41									SPARE	
SPARE	1					42									SPARE	
TOTAL kVA PER PHASE							1.1	1.2	1.0							
TOTAL CONNECTED kVA							3.3									

NOTES:
 1. * INDICATES LOCK-ON ATTACHMENT FOR BREAKER
 2. * CONDUIT TO BE 1/2" UNLESS OTHERWISE NOTED.
 3. PROVIDE "HAND" RATED BREAKERS FOR HVAC EQUIPMENT.
 4. ALL SINGLE POLE BREAKERS SHALL BE "SMO" RATED.
 5. * INDICATES GFCI BREAKERS.

LOADING: LIGHTING LOAD, RECEPT LOAD, HVAC LOAD, EQUIPMENT LOAD, WIREMEN LOAD, TOTAL LOAD, DEMAND AMPS

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Job Number: 06070
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ELECTRICAL ENGINEERING

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GENERAL PLUMBING NOTES

- IN THE PREPARATION OF THESE PLANS, THE ENGINEER HAS USED CERTAIN ABBREVIATIONS, CONVENTIONS, AND SYMBOLS, THE MEANING OF WHICH ARE ILLUSTRATED AND EXPLAINED WITHIN THE LEGEND.
- PLANS ARE DIAGNOSTIC ONLY. THEY ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER FEATURES WILL NOT BE REQUIRED.
- COORDINATE WITH THE OTHER TRADES TO INSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL WORK, ETC.).
- NOT APPLICABLE
- VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS AND FELD DIMENSIONS
- ALL RISES AND DROPS IN PIPING ARE NOT NECESSARILY SHOWN.
- PROVIDE STOP OR ANGLE VALVES ON EACH WATER CONNECTION TO EACH PLUMBING FIXTURE.
- PROVIDE ALL STRUCTURAL MEMBERS, SUPPORT BRACKETS, FLASHING, HARDWARE, ETC. REQUIRED TO INSTALL A COMPLETE SYSTEM.
- PROVIDE CHROME PLATED ESCUTCHEON PLATES AT ALL EXPOSED WALL PENETRATIONS AND C.L.G. PENETRATIONS.
- PROVIDE CLEANOUTS ON SANITARY LINES DRAIN LINES AS REQUIRED BY CODE.

PLUMBING LEGEND

---	COLD WATER PIPE
---	SOL OR WASTE PIPE
---	VENT PIPE
---	TURNED UP
---	TURNED DOWN
---	TEE, OUTLET DOWN
---	TEE, OUTLET UP
---	GATE VALVE
---	BALL VALVE
---	PLUMBING FIXTURE DESIGNATION (UNDERLINED)
---	GAS PIPE

GENERAL SYMBOLS

⊕	PLAN OR DETAIL NO. SHEET NUMBER
⊙	KEYED NOTE NUMBER
⊠	REVISION NUMBER
⊞	BUILDING NORTH ARROW

ABBREVIATIONS

AF	ABOVE FINISHED FLOOR
BTU	BRITISH THERMAL UNIT
CON	CONNECTION
CW	COLD WATER
ED	EQUIPMENT DRAIN
EX	EXISTING
FL	FLOOR
FU	FIXTURE UNIT
G.C.	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HA	HOT WATER
IN	INCHES
MIN	MINIMUM
P.C.	PLUMBING CONTRACTOR
SAN OR S	SANITARY
V	VENT
VTR	VENT TO ROOF
W	WATER
W/	WITH
W/O	WITHOUT
W	WASTE
DN	DOWN
HW	HOT WATER
HWR	HOT WATER RETURN
C.O.	CLEANOUT
W.C.	W.A.L. CLEANOUT
F.D.C.	FIRE DEPARTMENT CONNECTION

PIPE MATERIAL LIST:

- SANITARY, WASTE, AND VENT PIPING: FITTINGS SHALL BE LONG RADIUS FITTINGS, EXCEPT FITTINGS IN VENT PIPING MAY BE SHORT RADIUS FITTINGS. CONTRACTOR OPTIONS:
 - BELOW GRADE: CAST IRON, ASTM A74, STANDARD, SINGLE RIB, COATED.
 - ABOVE GRADE: CAST IRON, NO RIB, DSI, STANDARD 301.
 - BELOW GRADE: PVC, SCHEDULE 40, MEETING ASTM D1785.
- DOMESTIC WATER PIPING CONTRACTOR OPTIONS:
 - BELOW GRADE: TYPE L.
 - ABOVE GRADE: TYPE L.

PLUMBING TESTING AND DISINFECTION:

- TESTING:
 - SOL, WASTE, VENT SYSTEM:
 - TEMPORARILY PLUG ALL OUTLETS.
 - FLUSH LINES WITH WATER TO THE ROOF LEVEL.
 - ALLOW TO REMAIN FULL FOR 24 HOURS.
 - WATER SYSTEM:
 - TEST AT 150 PERCENT OF DESIGN PRESSURE BUT NOT LESS THAN 100 PSIG.
 - ALLOW PRESSURE TO REMAIN ON LINE FOR 24 HOURS.
 - REPAIR ALL DETECTABLE LEAKS IN PIPING SYSTEMS.
- DISINFECTION OF DOMESTIC WATER SYSTEM:
 - DISINFECT DOMESTIC WATER SYSTEM AFTER APPROVAL OF TEST RESULTS AND PIPING INSTALLATION BY BUILDING OFFICIAL.
 - PRIOR TO SUBSTANTIAL COMPLETION STERILIZE PIPING SYSTEM IN ACCORDANCE WITH LOCAL PLUMBING CODE REQUIREMENTS.
 - DELIVER CERTIFICATION TO BUILDING OFFICIAL.

PLUMBING FIXTURE SCHEDULE

DESIGNATION	MANUFACTURER	MODEL NO.	FIXTURE DESCRIPTION	CONNECTION SCHEDULE		
				BASIC	SEAL	CM
P-1	ZURN	Z-1300	FREEZE-PROOF WALL HYDRANT ENCASED, 1/2" SPIRAL, RECESSED WALL HYDRANT W/ LOCKABLE COVER PROVIDE OPTIONAL WALL CLAMP AND PLAIN BRONZE BOX	---	---	3/4"
P-2	ZURN	Z-415 N / TYPE "B" STRAINER	FLOOR DRAIN W/ 5" NICKALOY STRAINER TOP AND 3" OUTLET PROVIDE AUXILIARY INLET FITTING FOR TRAP PRIMER CONNECTION	5"	3"	---
FOO	ZURN	Z-1400	FLOOR CLEANOUT - PROVIDE SCREW COVER MATCH SIZE OF PIPE.	---	---	---

KEY NOTES TO PLUMBING PLAN

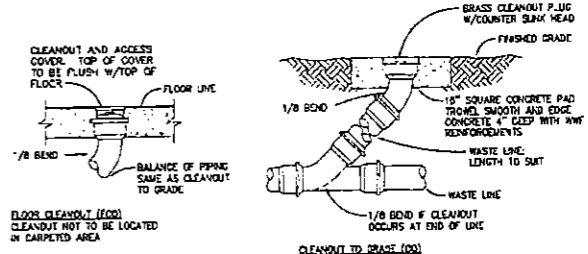
- PROVIDE A 4" SANITARY STUB OUT FOR FUTURE USE. CAP AND SEAL BELOW FLOOR SLAB.
- PROVIDE A 3" VENT THROUGH THE ROOF AND STUB INTO SPACE. CAP AND SEAL.
- STUB A 1" COLD WATER PIPE INTO SPACE. PROVIDE SHUT-OFF VALVE AND CAP AND SEAL FOR FUTURE USE. PROVIDE A SEPARATE WATER METER FOR TENANT.
- 4" FIRE MAIN AND FIRE RISER. EXTEND AND CONNECT TO SITE UTILITIES. SEE CIVIL.
- EACH TENANT TO HAVE A SEPARATE GAS METER. COORDINATE LOCATION OF METERS WITH CIVIL ENGINEER/ARCHITECT. PROVIDE AN 8" OAT LEG AT BASE OF EACH RISER. GAS LINE SIZES ARE BASED ON 2 PSI WITH 100% PRESSURE DROP.
- PROVIDE A 6" ROOF CAP AND STUB 8" x 26 INCH GAGE SHEET METAL DUCT INTO SPACE. CAP AND SEAL.
- PROVIDE A BADGER METER MODEL 4024 WATER METER WITH AN APPROPRIATE MODEL RTR TRANSMITTER REGISTER. LOCATE A MODEL RED REMOTE ELECTRONIC READ OUT DISPLAY ON EXTERIOR WALL.
- HOSE BIBB MOUNTED AT 18" ABOVE EXTERIOR GRADE/SOCCLES.
- CAP 1" GAS IN JOIST SPACE FOR FUTURE CONNECTION.

FIRE PROTECTION SYSTEM CRITERIA:

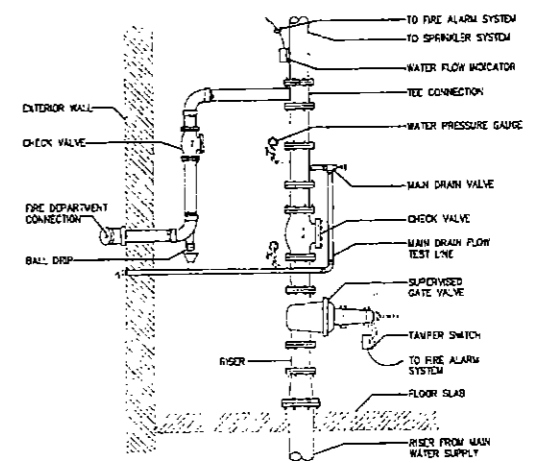
THIS BUILDING IS TO BE PROTECTED BY AN AUTOMATIC FIRE SPRINKLER SYSTEM DESIGNED TO MEET ALL APPLICABLE REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (N.F.P.A.), THE STATE FIRE MARSHAL AND ANY LOCAL AUTHORITIES HAVING JURISDICTION. IT SHALL BE THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR TO DESIGN THE SYSTEM IN COMPLIANCE WITH THE CRITERIA OF ALL GOVERNING AGENCIES AND TO VERIFY THAT PROPER WATER PRESSURES AND FLOWS ARE AVAILABLE TO ENSURE THE PROPER OPERATION OF THE SYSTEM.

THE SPRINKLER HEADS SHALL BE L-PROFIT-TYPE WITH BRASS FINISH (OR SIDEWALL TYPE WHERE UPRIGHT-TYPE HEADS WOULD BE IMPRACTICAL) IN ALL AREAS WITHOUT SUSPENDED CEILING. SPRINKLER HEADS IN AREAS WITH SUSPENDED CEILING SHALL BE CHROME-PLATED, PENDENT-TYPE, CHROME-PLATED, TWO-PIECE ESCUTCHEON PLATES SHALL BE INSTALLED AT PENDENT HEADS IN SUSPENDED CEILING TO FACILITATE EASY REMOVAL OF CEILING TILES.

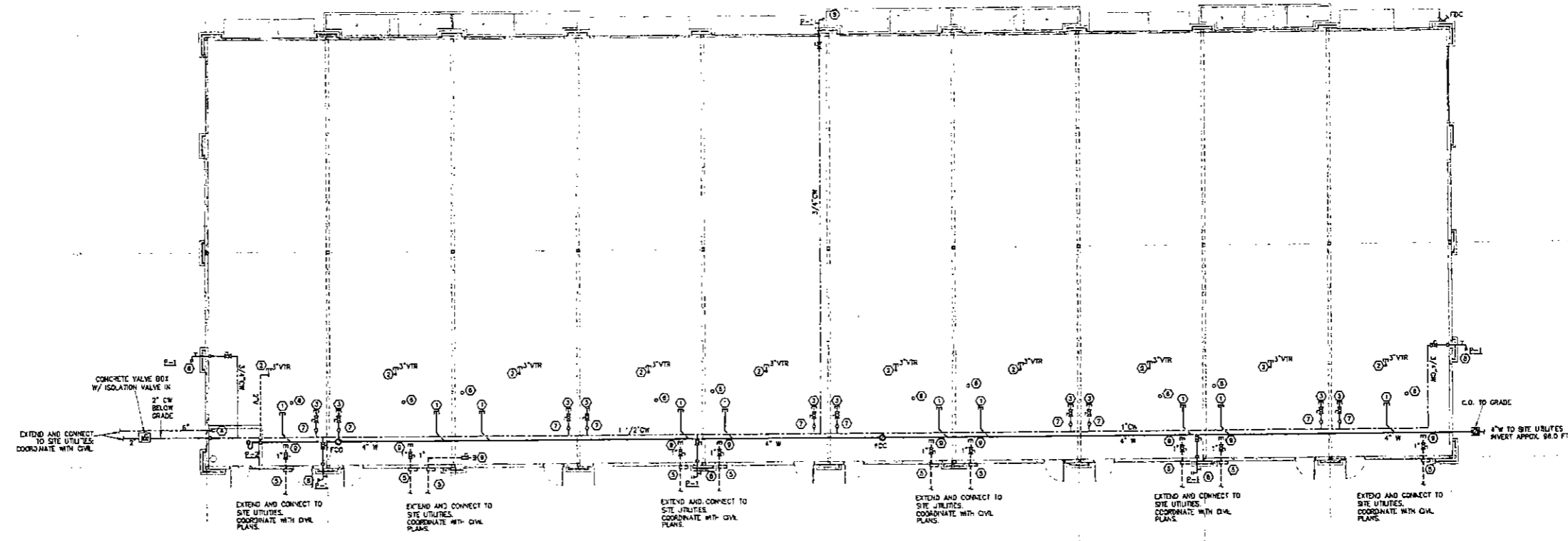
THE FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTAL OF SHOP DRAWINGS TO THE PROPER AUTHORITIES AT THE TIME OF BUILDING PERMIT APPLICATION. THE SPRINKLER SYSTEM DESIGN SHALL BE HYDRAULICALLY CALCULATED AND SHALL BE SUBMITTED WITH COMPLETE SIGNED AND SEALED DOCUMENTS (PIPING LAYOUTS, SPRINKLER HEAD LOCATIONS, HYDRAULIC CALCULATIONS, ETC.). SUBMITTAL DOCUMENTS SHALL INDICATE ALL CALCULATION CRITERIA, DESIGN TEST POINTS, SPRINKLER HEAD TYPES, SYSTEM TEST POINTS, LOCATION OF DRAIN VALVES, FIRE DEPT. CONNECTION LOCATIONS AND ANY OTHER INFORMATION DEEMED NECESSARY FOR REVIEW AND APPROVAL BY GOVERNING AUTHORITIES. THE PROTECTION CONTRACTOR SHALL ALSO BE RESPONSIBLE TO REVIEW AND COORDINATE WITH THE PLANS OF ALL OTHER TRADES TO ENSURE THAT PROPER CLEARANCES FOR HANGERS, WIRE ARE MAINTAINED. A MINIMUM OF SIX (6) COPIES OF SIGNED AND SEALED DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE REQUIRED FOR PERMIT APPLICATION SUBMITTAL.



3 CLEANOUT DETAILS
P1.1 SCALE: NTS



2 FIRE PROTECTION RISER DETAIL
P1.1 SCALE: NTS



PARTIAL PLUMBING PLAN
P1.1 SCALE: 1/8" = 1'-0"

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