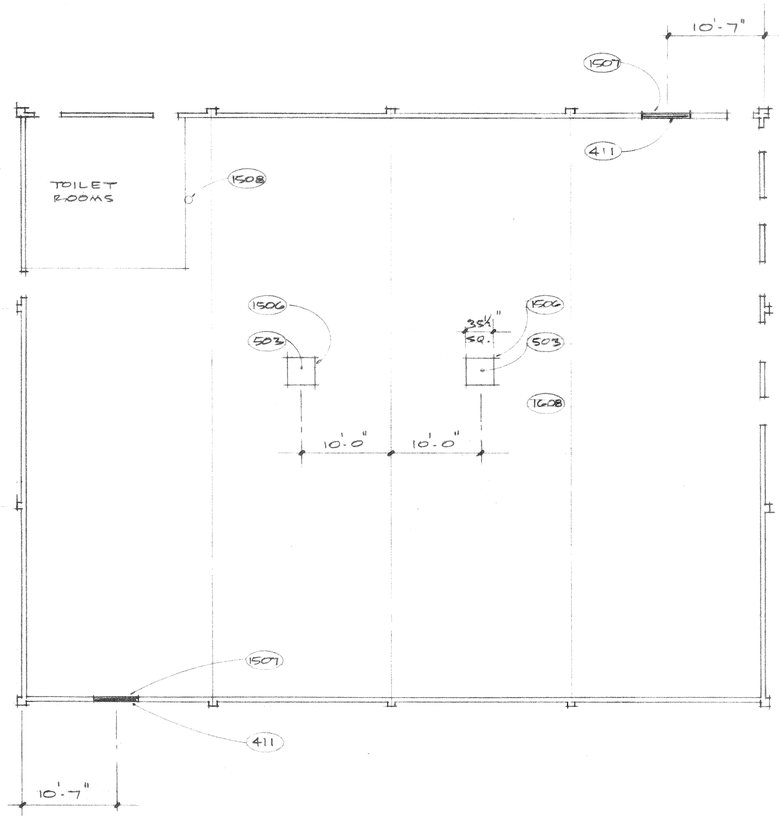
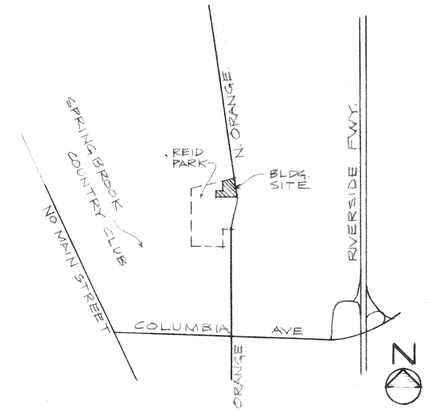
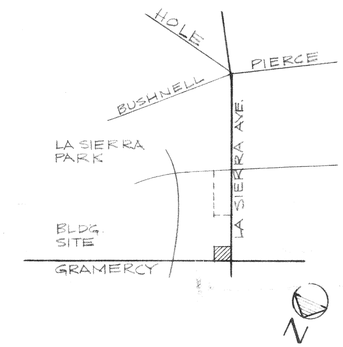


FLOOR PLAN
1/8" = 1'-0"



REID PARK
NOT TO SCALE
VICINITY MAP



LASIERRA PARK
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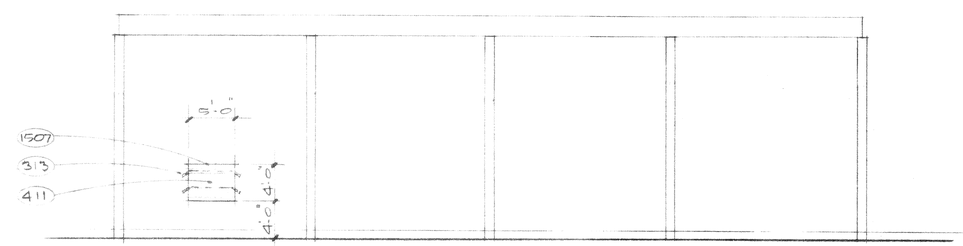
VICINITY MAP



ELEVATION TYP OF TWO
1/8" = 1'-0"

NOTES

(1506) REMOVE POWER, ROOF EXHAUSTER.

(1507) REMOVE WALL LOUVERS 60" WIDE 48" HIGH

(503) PROVIDE 14 GA CAP FOR EXHAUSTER. LAP CURB 4" SECURE W/ # 14 x 1½" O.H.W.S. @ 12"

(411) 6 x 6 x 16" GREY CMU ALL CELLS GROUTED

(313) DRILL 6" DEEP 1" HOLE @ 30" L. SET # 4 x 24" BAR. SECURE WITH POXO K.

(1508) DE-ENERGISE THERMOSTAT CIRCUIT. CAP THERMOSTAT OUTLET BOX.

(1608) DE-ENERGISE CIRCUITS TO ROOF EXHAUSTERS IDENTIFY AS SPARES

NOTES.

ROOF EXHAUSTERS TO REMAIN PROPERTY OF OWNER.

POWER ROOF EXHAUST. UNIT LOCATIONS VARY EA. SIDE OF RIDGE. VERIFY LOCATION.

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CONSULTANT

DEMOLITION & REPAIR

AIR CONDITIONING FOR GYMNASIUMS
REID & LA SIERRA PARKS
PARKS AND RECREATION DEPARTMENT
CITY OF RIVERSIDE, CALIFORNIA.

DATE	MAY 1980
DRAWN	EWB
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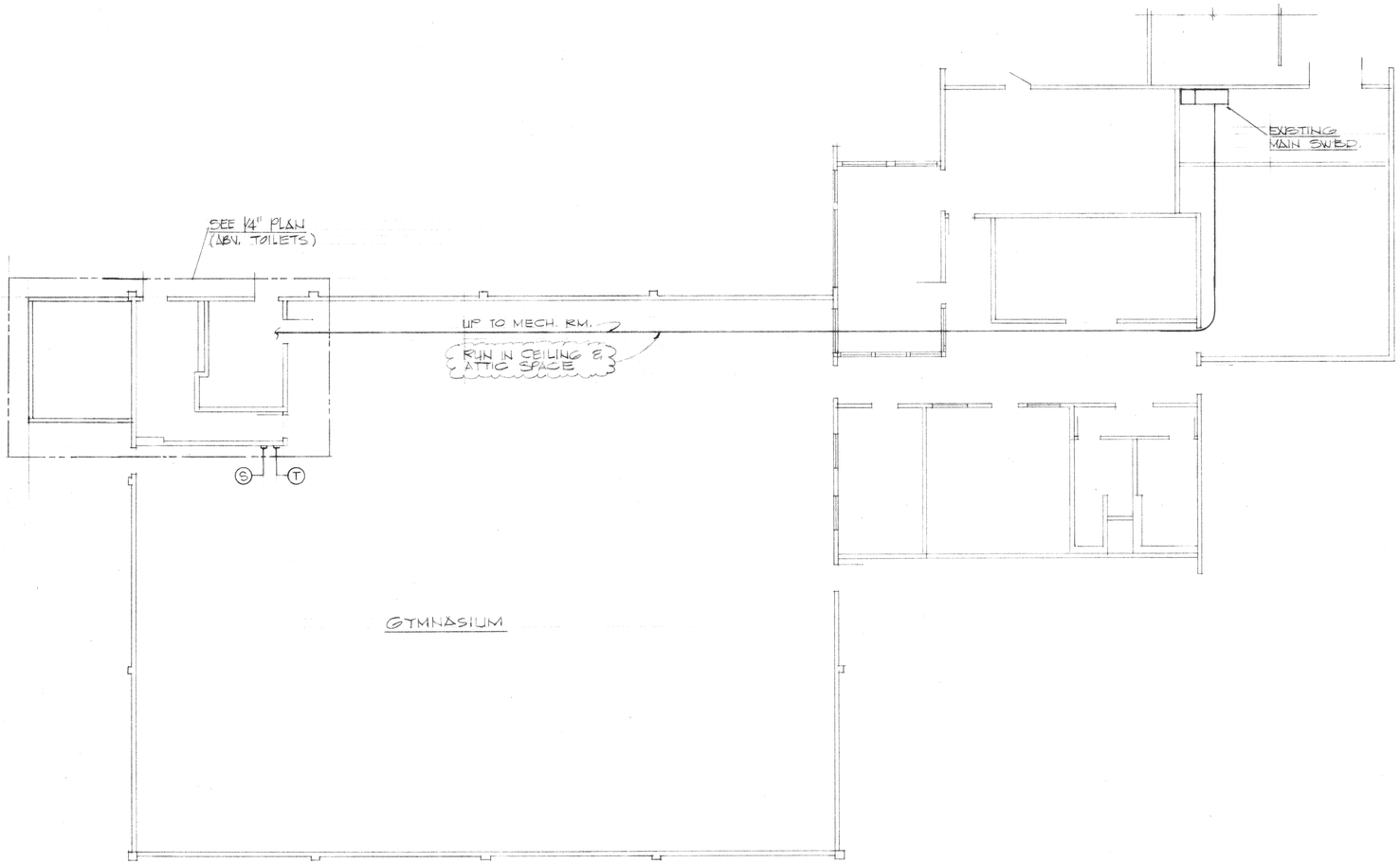
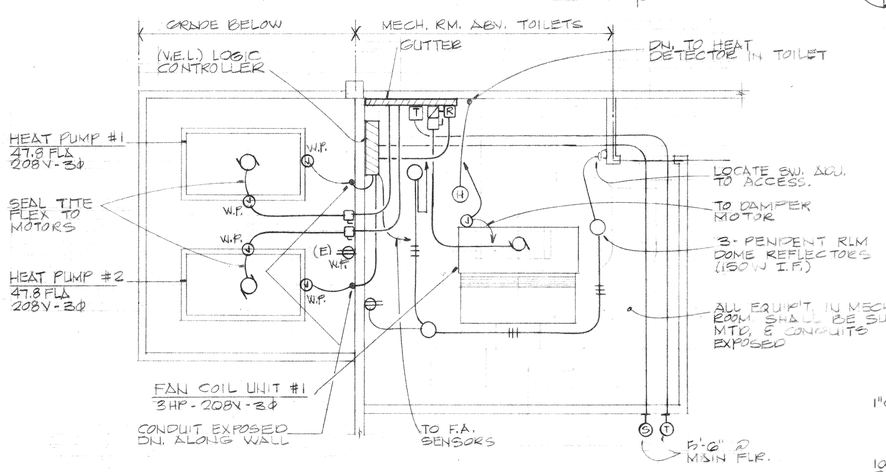
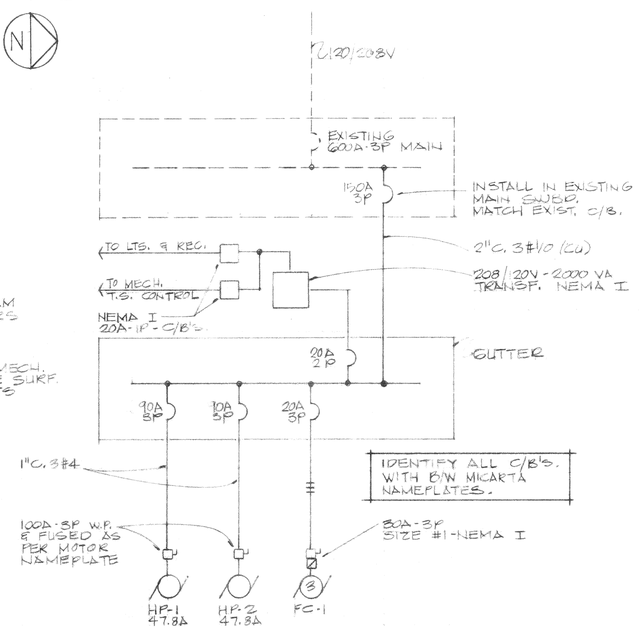
REVISED	
JOB	80201



FLOOR PLAN
1/8" = 1'-0"



MECHANICAL ROOM PLAN
1/4" = 1'-0"



SINGLE LINE DIAGRAM
N.T.S.

SECTION 16A - ELECTRICAL

A. GENERAL: The Contractor shall furnish all labor, material and equipment for the installation of the electrical work. All requirements of the mechanical and plumbing system requiring electrical connection shall be part of electrical work. All work shall be accomplished in strict accordance with applicable County, City and State Laws, the regulations of the STate of California Accident Commission, the National Electric Code, and the rules of the National Board of Underwriter's governing the installation of this character of the work.

B. MATERIAL:

Switches: Local single pole switches shall be flush, tumbler type A.C. rated, quiet type, heavy duty, back or side wired with binding screws, rated 20 amperes, 120-277 volts. Bryant #4901-I.

Receptacles: Convenience outlets shall consist of a duplex convenience receptacles mounted in an outlet box in the wall, flush with the finish surface and shall be complete with plate. Receptacles shall be located 12" above the finish floor unless otherwise noted or specified. Receptacles for convenience outlets, unless otherwise noted shall be standard duplex 3 wire grounding type, 15 ampere, 125 volt, Hubbell #5262-I.

Plates: Standard plates for all switches, convenience outlets, telephone outlets and all otherwise noted, be straight line plastic.

Wire: All conductors shall be copper 600V A.C. THWN/THHN.

Signal wire and low voltage control conductors shall be General Electric "FLamenol" S 1-58170.

No conductor carrying 115 volts or 230 volts shall be smaller than #12 AWG.

All exposed conduits @ exterior shall be hot dipped, galvanized or sherardized and shall be Republic Steel Company's rigid, hot dipped galvanized conduit. All interior exposed conduits shall be EMT with gland tite connectors.

Outlet Boxes: Outlet boxes and covers shall be galvanized one piece processed steel, knockout type. Fixture outlets shall be equipped with 3/8" fixture studs and plaster rings where required.

Outlet boxes in plaster covered walls shall have raised covers or plaster rings to finish flush with plaster. All boxes shall be covered with outlet box protector and locate Appleton No. SBCK to keep plaster and dirt from entering box.

C. INSTALLATION:

Convenience outlets and switch locations shown on the drawings are diagrammatic. Unless otherwise indicated or required, for clearance, all convenience outlets shall be installed 12" above finished floor; all switches shall be installed 48" above the finished floor.

All work shall be executed in a workmanship like manner and shall present a neat and mechanical appearance upon completion. All mechanics be capable, experienced electricians, and shall be guided by the State of California Electrical Code and governing ordinances in the execution of their work.

Cutting and Patching: This Contractor shall do all cutting and patching of the rough finish and trim which may be required for the installation of the electrical equipment and material under this Contract. All patching shall be of the same material, workmanship and finish as surrounding work. Cutting of any structural member is not permitted.

D. CLEAN-UP: The Contractor shall remove all debris and waste material resulting from this operation. This shall be done to the satisfaction of the Owner.

E. GUARANTEE: All work and equipment shall be guaranteed for a period of one year after completion is filed.

F. U.L. LABEL: All materials shall be new and with U.L. Label.

G. PERMITS AND INSURANCE: Contractor shall obtain and pay for all permits, licenses, etc., and for all insurance required to render Owner free from any damages to claims for this project.

H. SITE INVESTIGATION: Contractor shall visit site and verify existing conditions. Allow for any modifications required to complete work as per plans and specifications.

I. POWER OUTAGE: Power outage shall be kept at minimum. Contractor shall arrange with Owner for time of outages 48 hours in advance.

KEY TO SYMBOLS

———	AS NOTED, OR 1/2"C. 2#12
	MOTOR
J	J-BOX
	DISCONNECT SWITCH
(E)	CONVENIENCE OUTLET (E = EXISTING) +1'-6"
	LIGHT FIXTURE, CEILING
H	HEAT DETECTOR, MATCH EXISTING
R	RELAY
T	THERMOSTAT +5'-6"
	SIZE #1 MAGNETIC STARTER WITH H.O.A. & RED PILOT LITE, AMBIENT COMPENSATING TYPE.
S	BY-PASS TIMER OUTLET +5'-6"
C/B	CIRCUIT BREAKER
(E)	EXISTING

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CONSULTANT

MAD
ENGINEERING & DESIGN
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P.O. BOX 1140 RIVERSIDE, CALIFORNIA 92502
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ELECTRICAL PLANS
SINGLE LINE DIAGRAM
SPECIFICATIONS

AIRCONDITIONING FOR GYMNASIUMS
REID AND LA SIERRA PARKS
PARK AND RECREATION DEPARTMENT
CITY OF RIVERSIDE, CALIFORNIA

DATE	MAY 1980
DRAWN	RL
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REVISED	
JOB	83201

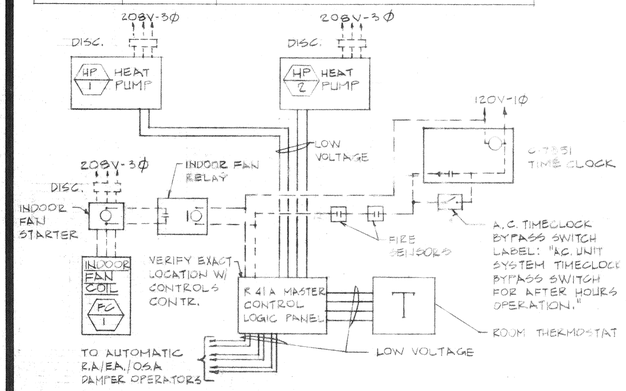
OF 1 SHEETS
OF 3 SHEETS

MECHANICAL LEGEND

SYMBOL	ABBREV.	DESCRIPTION
		NEW DUCTWORK
		EXIST. DUCTWORK
	T.V.	SQUARE ELBOW W/ TURNING VANES
	F.D.	FIRE DAMPER (EXIST)
	M.O.D.	MOTOR OPERATED DAMPER
	S.A.	SUPPLY AIR DUCT
	R.A.	RETURN AIR DUCT
	ABV.	ABOVE
	BEL.	BELOW
	CLG.	CEILING
	CONC.	CONCRETE
	CONN.	CONNECT OR CONNECTION
	CONT.	CONTINUE OR CONTINUATION
	CONTR.	CONTRACTOR
	F.C.	FLEXIBLE CONNECTION
	O.S.A.	OUTSIDE AIR
	P.O.C.	POINT OF CONNECTION
	TYP.	TYPICAL
(S)		A.C. SYSTEM BY PASS SWITCH.

EQUIPMENT SCHEDULE

ITEM	DESCRIPTION
FC 1	FAN COIL UNIT - "CARRIER" OR APPROVED EQUAL MODEL NO. 38 AQ 012 U & L. FAN SHALL DELIVER 6800 CFM @ 2.5" TOTAL STATIC PRESSURE. FAN MOTOR 3 HP @ 208V-3Ø-60HZ PROVIDE (3) 16×25×1 & (3) 20×25×1 FILTERS. UNIT WEIGHT 670 LBS.
HP 1 & HP 2	HEAT PUMP (SPLIT SYSTEM) - "CARRIER" OR APPROVED EQUAL MODEL NO 40 RR 024 WHEN MATCHED WITH FAN COIL UNIT ABOVE THEY SHALL HAVE THE FOLLOWING COMBINATION STANDARD ARI RATINGS @ 8000 CFM: COOLING 227 MBH TOTAL CAPACITY, 8.47 EER; HI-TEMP HEAT 239 MBH, 3.19 C.O.P., LO-TEMP HEAT 133.4 MBH, 2.20 COP ELECTRICAL DATA: @ 208 V - 3Ø - 60 HZ. COMPRESSOR 43.6 RLA (1) FAN MOTOR 2.3 FLA & (1) FAN MOTOR 1.9 FLA UNIT WEIGHT 750 LBS.
RV 1	ROOF VENTILATOR - EXIT AIRE MODEL RFG 24×30 TO RELIEF 6800 CFM @ .2" S.P. PROVIDE BIRDSCREEN.
RV 2	ROOF VENTILATOR - EXIT AIRE" MODEL RFG 24×30 TO INTAKE 6800 CFM @ .2" S.P. PROVIDE BIRDSCREEN

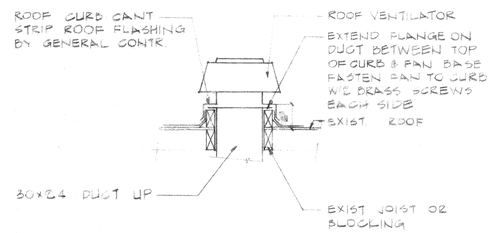


NOTES: ALL WIRING & EQUIPMENT SHOWN BY DASHED LINES & ALL CONDUIT TO BE FURNISHED & INSTALLED BY ELECTRICAL CONTR.

ALL WIRING & EQUIPMENT SHOWN BY SOLID LINES TO BE FURNISHED & INSTALLED BY MECHANICAL CONTRACTOR.

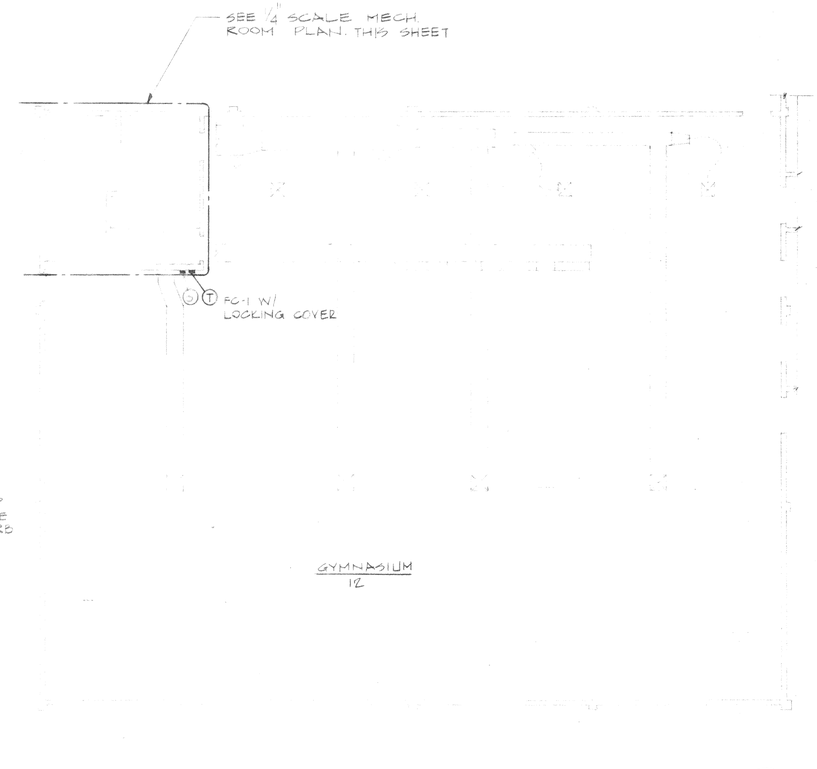
CONTROLS ARE JOHNSON CONTROLS, INC.

A.C. SYSTEM CONTROL DIAGRAM



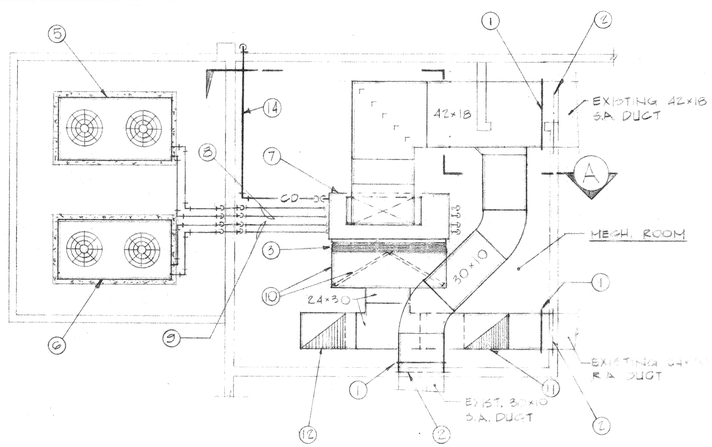
R.V. MOUNTING DETAIL (1)

NOT TO SCALE



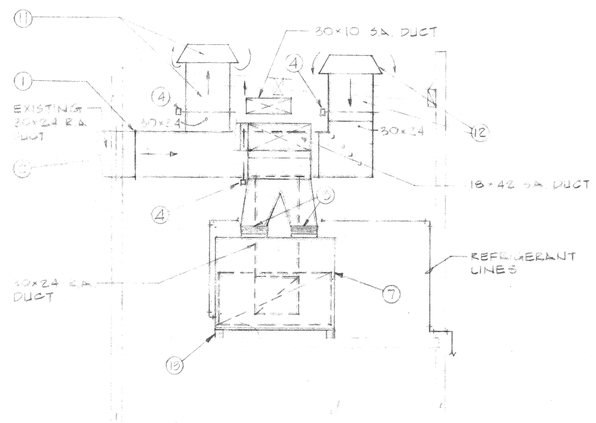
MECHANICAL FLOOR PLAN

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



MECHANICAL ROOM PLAN

SCALE: 1/4" = 1'-0"



SECTION (A)

SCALE: 1/4" = 1'-0"

SEQUENCE OF OPERATION

7 DAY TIME CLOCK WITH BY-PASS TIMER SHALL ENERGIZE FC-1 SYSTEM HEATING CONTROLS AS REQUIRED TO SATISFY THE SPACE SET POINTS. OUTSIDE AIR DAMPERS SHALL HEAT THEIR MIN. POSITION. UPON A CALL FOR COOLING THE OUTSIDE AIR, RETURN AIR AND EXHAUST AIR DAMPER SHALL MODULATE TO MAINTAIN THE SPACE SET POINT WHENEVER THE OUTSIDE AIR IS BELOW 72°F (ADJUSTABLE). WHEN THE OUTSIDE AIR IS ABOVE 72°F THE OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL GO TO THEIR MINIMUM POSITION AND A STAGING NETWORK SHALL STAGE THE COOLING CYCLES AS REQUIRED. OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL GO TO THEIR FULL CLOSED POSITION WHEN FAN IS DE-ENERGIZED. PROVIDE FIRE STATS IN THE SUPPLY AND RETURN AIR DUCT TO SHUT-OFF FAN WHEN A FIRE IS DETECTED.

THE MECHANICAL PLANS SUBMITTED HEREWITH ARE IN SUBSTANTIAL CONFORMANCE WITH THE REQUIREMENTS OF THE STATE OF CALIFORNIA

NOTES

1. POINT OF CONNECTION TO EXISTING DUCT
2. EXISTING FIRE DAMPER
3. FLEXIBLE CONNECTION
4. AUTOMATIC VOLUME DAMPER
5. HP 1 OUTDOOR UNIT MOUNT ON 6" HIGH CONC. PAD
6. HP 2 OUTDOOR UNIT MOUNT ON 6" HIGH CONC. PAD
7. FC 1 INDOOR UNIT
8. 7/8" LIQUID & 1 3/8" VAPOR LINES CONNECT TO FC 1 UPPER INDOOR COIL OF.
9. 7/8" LIQUID & 1 3/8" VAPOR LINES CONNECT TO FC 1 LOWER INDOOR COIL OF
10. RETURN AIR PLENUM W/ FILTERS
11. 24×30 UP TO RV 1 ON ROOF
12. 24×30 UP TO RV 1 ON ROOF
13. SPRING TYPE VIBRATION ISOLATOR
14. 1" CONDENSATE DRAIN RUN TO DRYWELL

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AIR CONDITIONING SYSTEMS

AIR CONDITIONING FOR GYMNASIUMS
REID & LA SIERRA PARKS
PARK AND RECREATION DEPARTMENT
CITY OF RIVERSIDE, CALIFORNIA

DATE	MAY 1980
DRAWN	H.R.
CHECKED	H.N.S.
REVISED	
JOB	80201

REVISIONS

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OF 1 SHEETS

OF 3 SHEETS