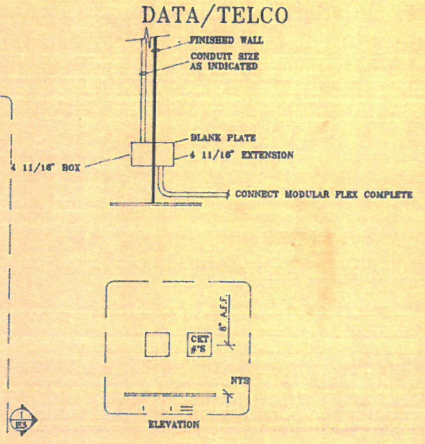
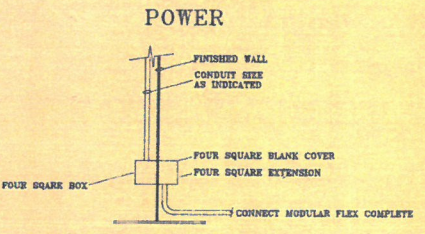
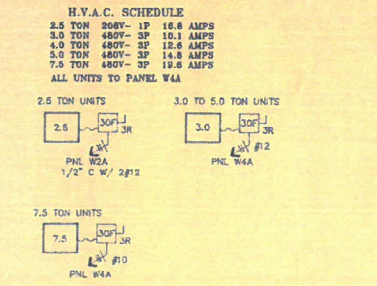


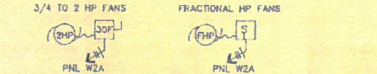
1 FIRST FLOOR SOUTH POWER PLAN
1/8" = 1'-0"



3 MOD. OFFICE COMPONENT DETAIL



4 H.V.A.C. WIRING (TYP)



5 EXHAUST FANS

- POWER LEGEND**
CONNECT MODULAR OFFICE EQUIPMENT COMPLETE.
- 1 1/4" CHASE W/ PULLWIRE
 - 4 1 1/2" BOX W/ EXTENSION (SEE 3)
 - 4 CKTS W/ I.C.
 - 1" CHASE W/ PULLWIRE
 - 6 CKTS
 - 5/16" WIREMOLD POWER POLE (6 CKTS) W/ I.C.
 - 277/480V PLUG BANK, M4D 8,10,12 30A
 - 120/240V PLUG BANK, BUSS B DEX #4 50A
 - DUPLX RECEPT. (SEE CIRC. #)
 - DUPLX RECEPT. DEDICATED
 - DUPLX RECEPT. +48"
 - QUADPLX RECEPT. (SEE CIRC. #)
 - GROUND FAULT INTERRUPTER
 - TELCO/DATA 3/4" C W/ BOX & MUD RING TO ACCESSIBLE SPACE
 - EXHAUST FAN
 - OVERHEAD DOOR MOTOR
 - MULTI PLUG BANK (SEE ELEVATION)

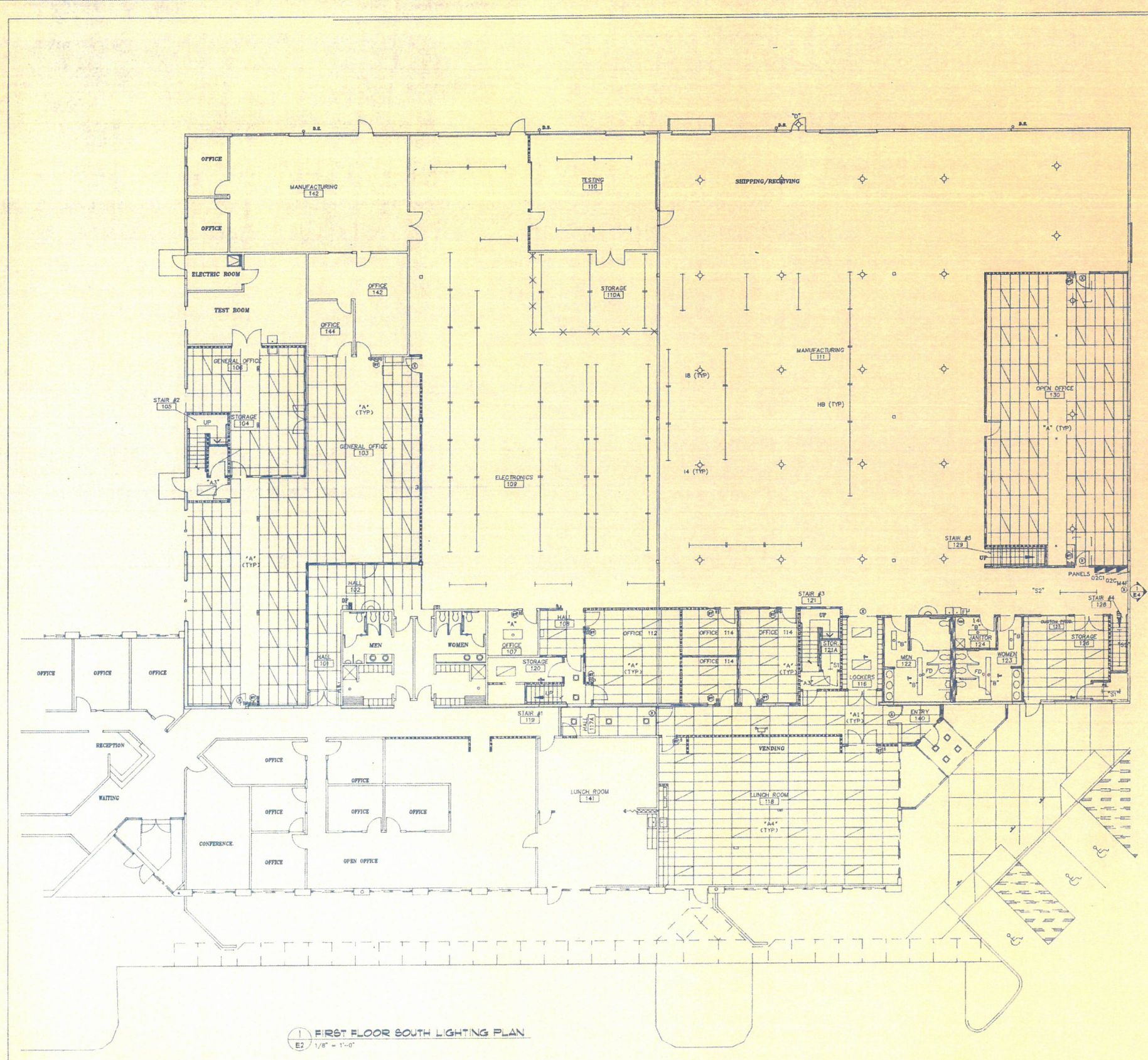
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Architects/Interior Design
4880 S.W. Boonville Road, Box 89039
Portland, Oregon 97201-0039
Phone: (503)224-9570 • FAX: (503)228-1285

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Vancouver, Washington

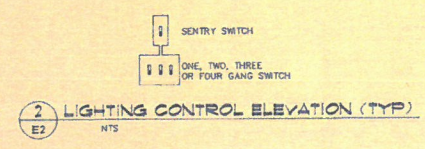
POWER PLAN

DATE:	04-13-94
DRAWN BY:	RWS
CHECKED BY:	DOB
REVISION	DATE
1	02-06-94
2	05-18-94
	06-13-94
	AS-BUILT
	10-18-94
	02-03-95
SHEET	
E1	
1 of 6	
JOB NO. 293467	





1 FIRST FLOOR SOUTH LIGHTING PLAN
E2 1/8" = 1'-0"



- FIXTURE SCHEDULE**
- "A" THREE LAMP PARABOLIC
 - "A1" TWO LAMP PARABOLIC
 - "A2" TWO LAMP 2'X2' PARABOLIC
 - "A3" TWO LAMP SURFACE PARABOLIC
 - "A4" THREE LAMP PARABOLIC 1 BALLAST
 - "B" TWO LAMP WRAP
 - "C" THREE LAMP DIFFUSED
 - "D" 70 WATT TIPS
 - "E" EGRESS FIXTURE
 - "E1" MANUFACTURERS EGRESS FIXTURE
 - "E2" HIGH BAY METAL HALIDE
 - "F" FOUR FT. HO STRIP
 - "H" EIGHT FT. HO STRIP
 - "S1" FOUR FT. STRIP FIXTURE
 - "S2" EIGHT FT. STRIP FIXTURE
 - "X" EXIT FIXTURE

- LIGHTING LEGEND**
- NL NIGHT LIGHT (1 OR 2 LAMP)
 - BATTERY EXIT PACK FIXTURE (TYPE X TYP)
 - LAY-IN PARABOLIC 2'X4' FIXTURE
 - LAY-IN PRISMATIC 2'X4' FIXTURE
 - SURFACE MOUNT PRISMATIC 2'X4' FIXTURE
 - LAY-IN PARABOLIC 2'X2' FIXTURE
 - 8' FIXTURE
 - 4' FIXTURE
 - 8' WRAP FIXTURE
 - 4' WRAP FIXTURE
 - 400 WATT MH
 - MOTION SENSOR
 - AREA SWEEP TIME PROGRAM SWITCH
 - CAN FIXTURE

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Vancouver, Washington

LIGHTING PLAN

DATE: 04-13-94
DRAWN BY: RWS
CHECKED BY: DOB

NO.	REVISION	DATE
1	05-25-94	
2	05-18-94	
3	06-15-94	
4	AS-BUILT	
5	10-19-94	
6	02-03-95	

REVISION
EDITION
CLOSING
DATE

E2

2 OF 6
JOB NO. 293467



DATE: 04-13-94
 DRAWN BY: RWS
 CHECKED BY: DOB

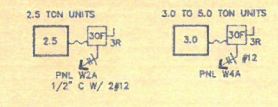
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2	05-18-94	CLOSING
3	06-15-94	DATE
4	AS-BUILT	
5	10-19-94	
6	02-03-95	

SHCET

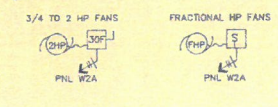
E3
 3 of 6

JOB NO.
 293467

H.V.A.C. SCHEDULE
 3.0 TON 208V-1P 16.0 AMPS
 3.0 TON 480V-3P 16.1 AMPS
 4.0 TON 480V-3P 16.6 AMPS
 6.0 TON 480V-3P 16.8 AMPS
 7.5 TON 480V-3P 16.8 AMPS
 ALL UNITS TO PANEL W4A



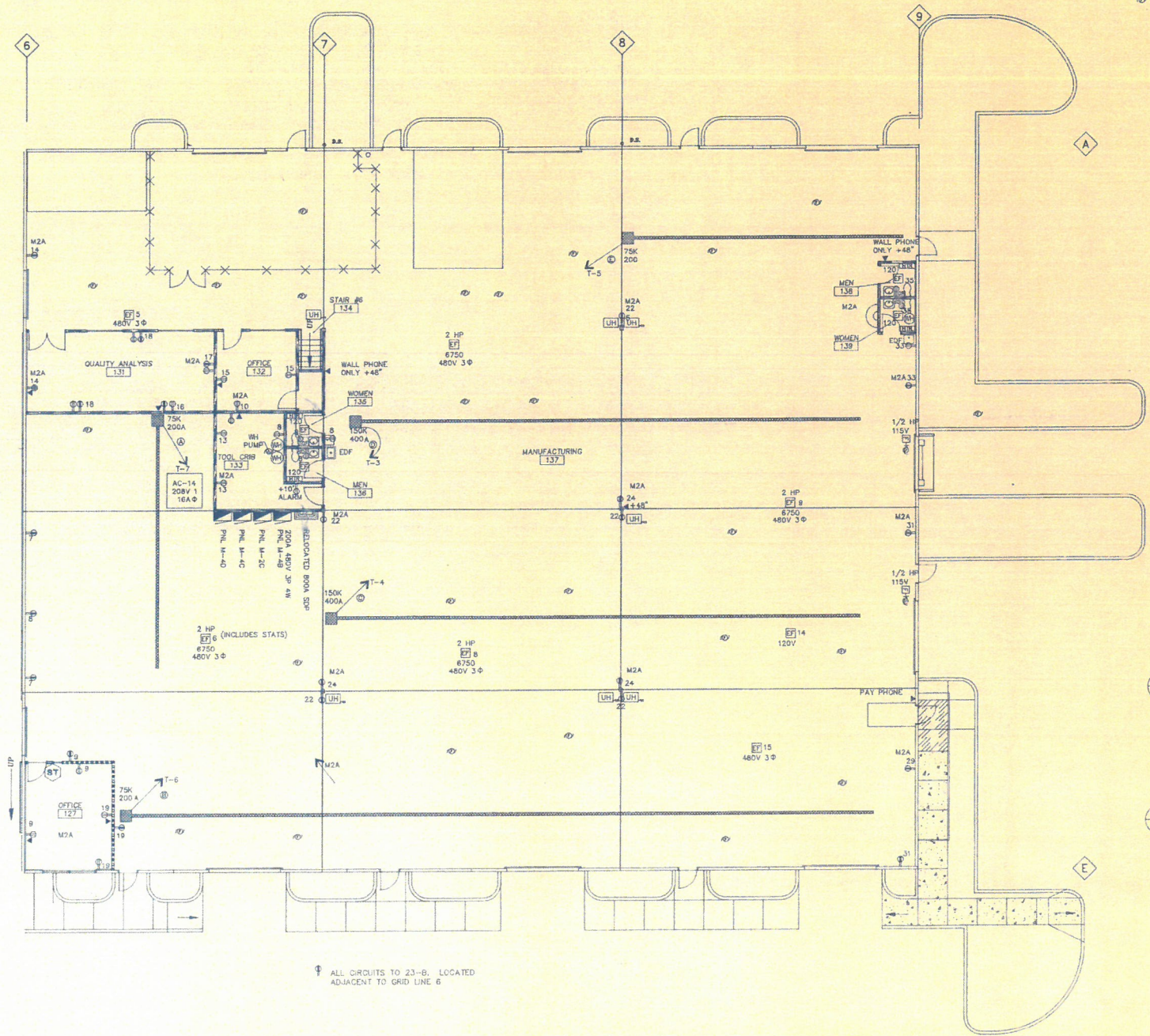
4 H.V.A.C. WIRING (TYP)
 EI



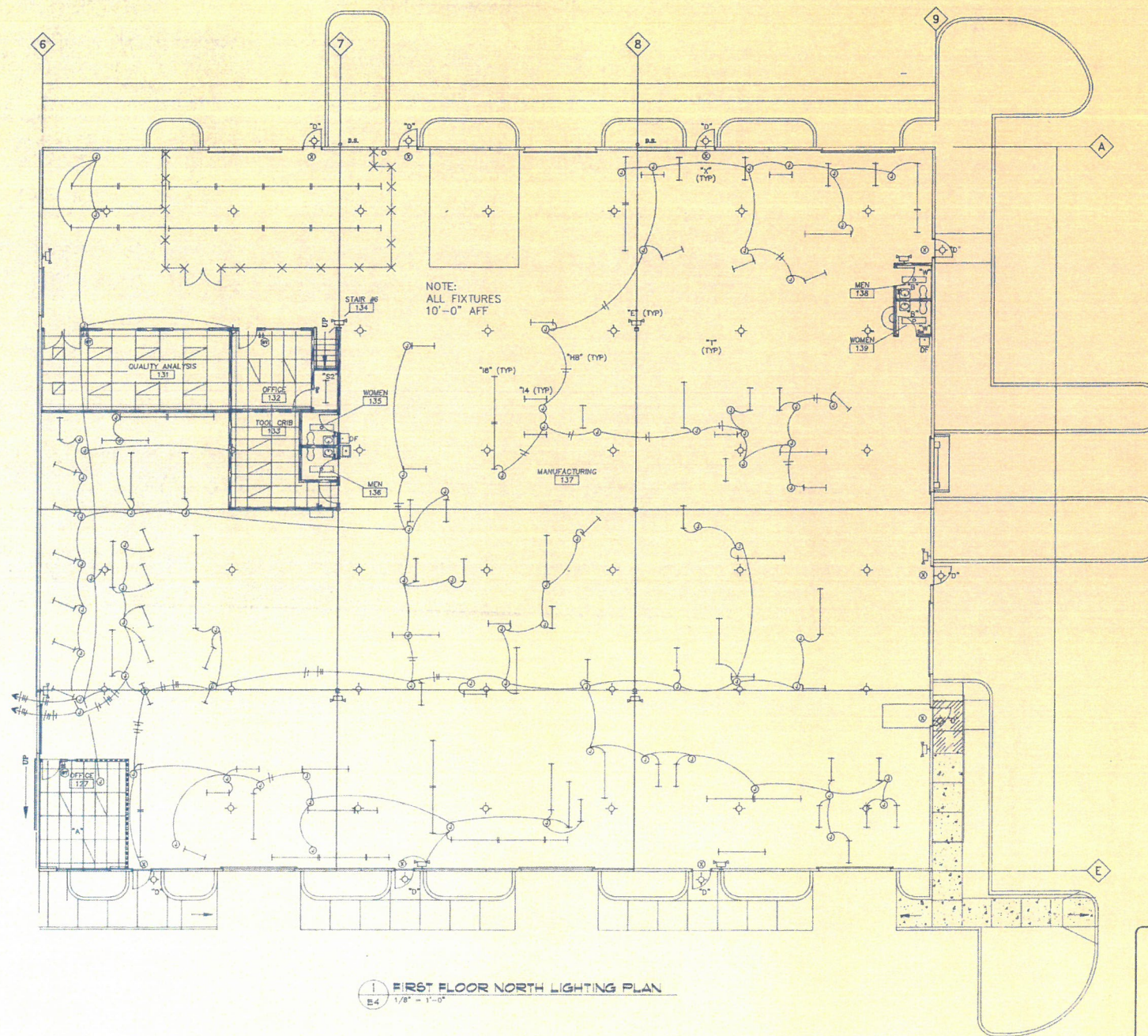
5 EXHAUST FANS
 EI

POWER LEGEND
 CONNECT MODULAR OFFICE EQUIPMENT COMPLETE.

- 1 1/4" CHASE W/ PULLWIRE W/ L.G.
- 4 1 1/4" BOX W/ EXTENSION (SEE 1/2)
- 4 CKTS W/ L.G.
- 1" CHASE W/ PULLWIRE
- 2 CKTS
- 25TP4 WIREMOLD POWER POLE (6 CKTS) W/ L.G.
- DUPLX RECEPT. (SEE CIRC. #)
- DUPLX RECEPT. DEDICATED
- DUPLX RECEPT. +48"
- QUADPLX RECEPT. (SEE CIRC. #)
- GROUND FAULT INTERRUPTER
- TELCO/DATA 3/4" C W/ BOX & MUD RING TO ACCESSIBLE SPACE
- EXHAUST FAN
- OVERHEAD DOOR



ALL CIRCUITS TO 23-B, LOCATED ADJACENT TO GRID LINE 6



FIXTURE SCHEDULE

"A"	THREE LAMP PARABOLIC
"A1"	TWO LAMP PARABOLIC
"A2"	TWO LAMP 2'X2' PARABOLIC
"A3"	TWO LAMP SURFACE PARABOLIC
"A4"	THREE LAMP PARABOLIC 1 BALLAST
"B"	TWO LAMP WRAP
"C"	THREE LAMP DIFFUSED
"D"	70 WATT HPS
"E1"	EGRESS FIXTURE
"E2"	MANUFACTURERS EGRESS FIXTURE
"HF"	HIGH BAY METAL HALIDE
"M"	FOUR FT. HO STRIP
"M1"	EIGHT FT. HO STRIP
"S1"	FOUR FT. STRIP FIXTURE
"S2"	EIGHT FT. STRIP FIXTURE
"X"	EXIT FIXTURE

LIGHTING LEGEND

NL	NIGHT LIGHT (1 OR 2 LAMP)
[Symbol]	BATTERY EXIT PACK FIXTURE (TYPE X TYP)
[Symbol]	BATTERY EGRESS PACK FIXTURE (TYPE E TYP)
[Symbol]	LAY-IN PARABOLIC 2'X4' FIXTURE
[Symbol]	LAY-IN PRISMATIC 2'X4' FIXTURE
[Symbol]	SURFACE MOUNT PRISMATIC 2'X4' FIXTURE
[Symbol]	LAY-IN PARABOLIC 2'X2' FIXTURE
[Symbol]	8' FIXTURE
[Symbol]	4' FIXTURE
[Symbol]	8' WRAP FIXTURE
[Symbol]	4' WRAP FIXTURE
[Symbol]	400 WATT MH
[Symbol]	MOTION SENSOR
[Symbol]	AREA SWEEP TIME PROGRAM SWITCH

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 Vancouver, Washington

LIGHTING PLAN

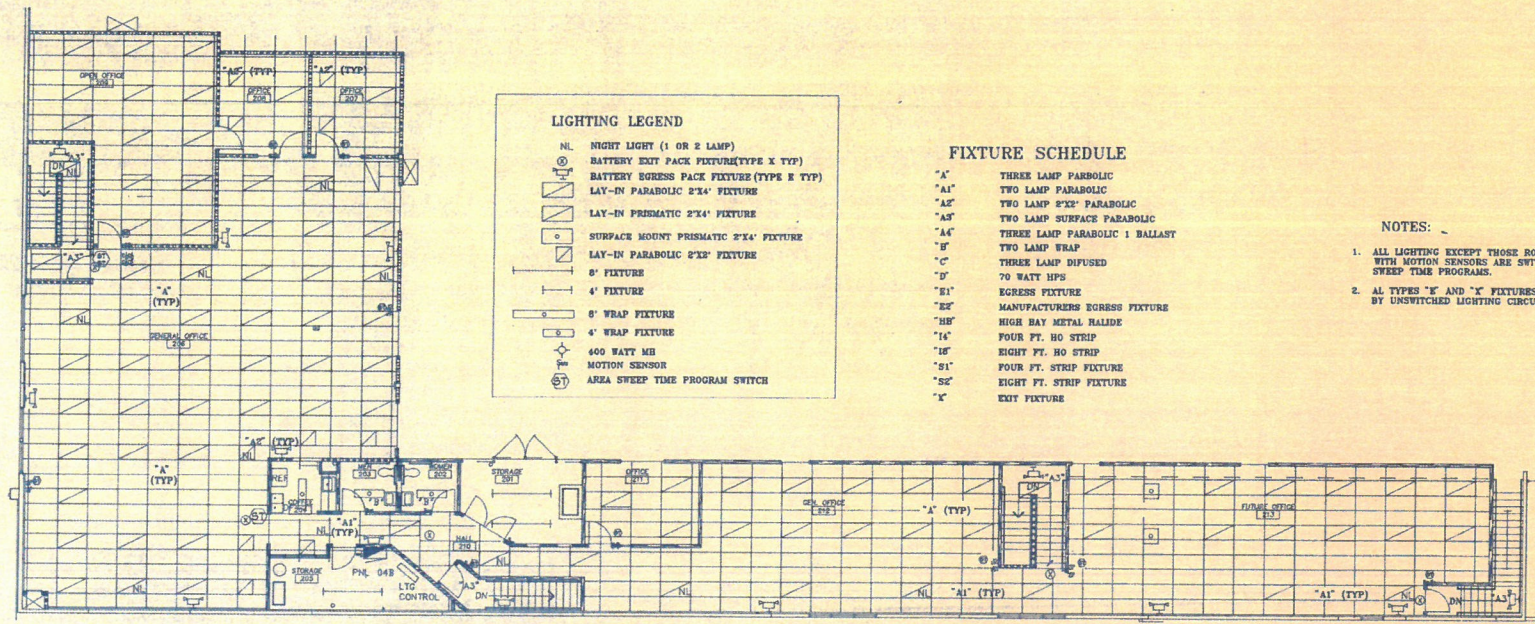
DATE: 04-13-94
 DRAWN BY: RWS
 CHECKED BY: DOB

NO.	DATE	REVISION
1	05-05-94	EDITION
2	05-18-94	CLOSING
	06-15-94	DATE
	AS-BUILT	
	02-03-95	

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 STORAGE AND RETRIEVAL SYSTEM.
 SHEET

E4
 4 of 6
 JOB NO. 293467





LIGHTING LEGEND

- NL NIGHT LIGHT (1 OR 2 LAMP)
- BATTERY EXIT PACK FIXTURE (TYPE X TYP)
- BATTERY EGRESS PACK FIXTURE (TYPE B TYP)
- LAY-IN PARABOLIC 2'X4' FIXTURE
- LAY-IN PRISMATIC 2'X4' FIXTURE
- SURFACE MOUNT PRISMATIC 2'X4' FIXTURE
- LAY-IN PARABOLIC 2'X2' FIXTURE
- 8' FIXTURE
- 4' FIXTURE
- 8' WRAP FIXTURE
- 4' WRAP FIXTURE
- 600 WATT MH
- MOTION SENSOR
- AREA SWEEP TIME PROGRAM SWITCH

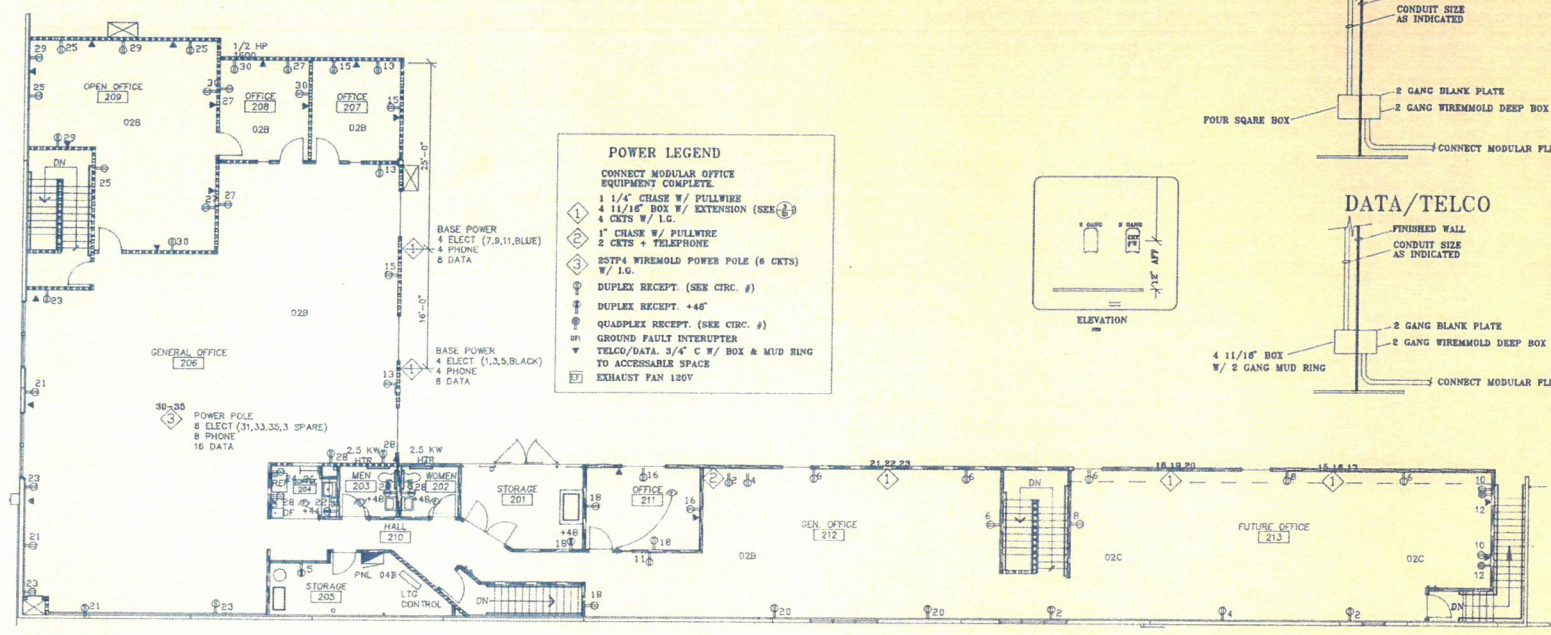
FIXTURE SCHEDULE

- "A" THREE LAMP PARABOLIC
- "A1" TWO LAMP PARABOLIC
- "A2" TWO LAMP 2'X2' PARABOLIC
- "A3" TWO LAMP SURFACE PARABOLIC
- "A4" THREE LAMP PARABOLIC 1 BALLAST
- "B" TWO LAMP WRAP
- "C" THREE LAMP DIFFUSED
- "D" 70 WATT HPS
- "E1" EGRESS FIXTURE
- "E2" MANUFACTURERS EGRESS FIXTURE
- "H8" HIGH BAY METAL HALIDE
- "I4" FOUR FT. HO STRIP
- "I8" EIGHT FT. HO STRIP
- "S1" FOUR FT. STRIP FIXTURE
- "S2" EIGHT FT. STRIP FIXTURE
- "X" EXIT FIXTURE

NOTES:

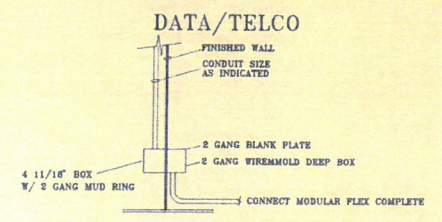
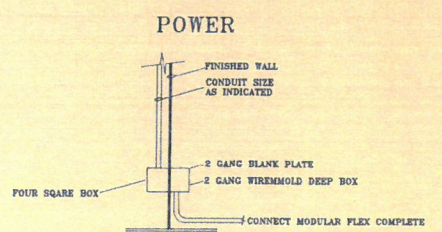
- ALL LIGHTING EXCEPT THOSE ROOMS CONTROLLED WITH MOTION SENSORS ARE SWITCHED VIA AREA SWEEP TIME PROGRAMS.
- ALL TYPES "E" AND "X" FIXTURES ARE POWERED BY UNSWITCHED LIGHTING CIRCUITS.

1 MEZZANINE LIGHTING PLAN
1/8" = 1'-0"



POWER LEGEND

- CONNECT MODULAR OFFICE EQUIPMENT COMPLETE
- 1 1/4" CHASE W/ PULLWIRE
- 4 1 1/16" BOX W/ EXTENSION (SEE 2)
- 4 CKTS W/ I.O.
- 1" CHASE W/ PULLWIRE
- 2 CKTS + TELEPHONE
- 25TP4 WIREMOLD POWER POLE (8 CKTS) W/ I.O.
- DUPLX RECEPT. (SEE CIRC. #)
- DUPLX RECEPT. +48"
- QUADPLX RECEPT. (SEE CIRC. #)
- GROUND FAULT INTERRUPTER
- TELCO/DATA: 3/4" C W/ BOX & MUD RING TO ACCESSIBLE SPACE
- EXHAUST FAN 120V



2 MEZZANINE POWER PLAN
1/8" = 1'-0"

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MICROPUMP
Vancouver, Washington

LIGHTING PLAN
POWER PLAN

DATE: 04-14-94

DRAWN BY: RWS

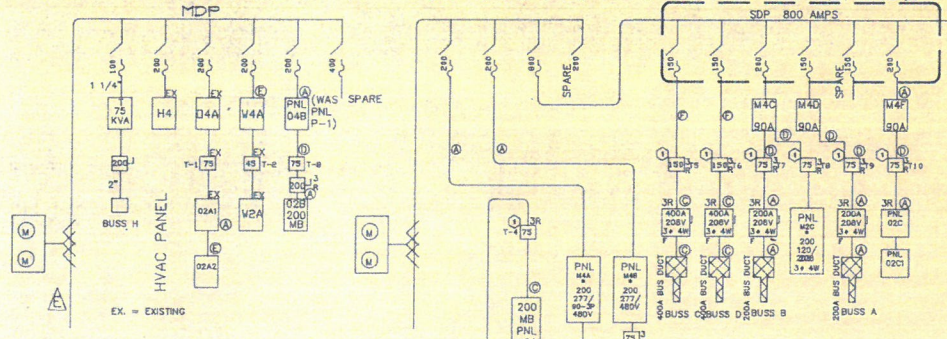
CHECKED BY: DOB

NO.	REVISION	DATE
1	AS-BUILT	02-18-94
2	CLOSING	02-18-94
	ALARM	02-03-95

E5
5 of 6
JOB NO. 293467



EXISTING 2000 AMP 277/480 3Ø 4W NEW 1600 AMP 277/480V 3Ø 4W SERVICE

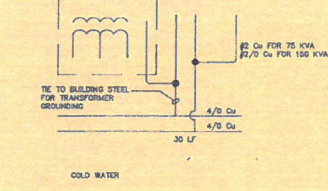


NOTE: TRANSFORMERS ARE LOCATED ON ROOF ABOVE OFFICE 132, TOOL CRIB 133, AND ARE NEMA 3R.
NOTE: 32"X32"X12" J BOX, TAP 1200A FEEDER 10FT MAXIMUM FOR 800A ADP 400 PANEL M4A

ONE-LINE DIAGRAM

EQUIPMENT 733,542 W
LIGHTING 44,000 W
MISC. (DUPLIX) 20,000 W
DEDICATED CIRCUITS 232,575 W
H.V.A.C. 12,000 W
EXHAUST FANS 1,052,325 WATTS
X 1.25
1,385,406.25 WATTS
1638.50 AMPS
Ø 277/480V 3P 4W

EXISTING 2000 AMP SERVICE ADEQUATE FOR EXISTING LOADS AND NEW INSTALLATION
EXISTING PEAK DEMAND 146 KW 197.1 AMPS



ELECTRICAL LOADS

- ① 2 1/2" C W 4-400CM AL #2 Cu GND
- ② 3 EA -4" C W 8-400CM AL 2/0 Cu GND
- ③ 2 EA -4" C W 8-400CM AL 2/0 Cu GND
- ④ 1 Ø 4" C W 8-300CM AL #2 Cu GND
- ⑤ 1 1/4" C W 3Ø
- ⑥ 1 1/4" C W 4Ø #2 Cu GND
- ⑦ 1 1/2" C W 3Ø/0 Cu

TRANSFORMER (TYP)

PANEL M4A	EXISTING	PANEL M4A	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M4B	EXISTING	PANEL M4B	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M4C	EXISTING	PANEL M4C	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M4D	EXISTING	PANEL M4D	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M4E	EXISTING	PANEL M4E	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M2A	EXISTING	PANEL M2A	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M2B	EXISTING	PANEL M2B	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M2C	EXISTING	PANEL M2C	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M2D	EXISTING	PANEL M2D	200A MLO 277/480V 3P4W W 42 CKTS
PANEL M2E	EXISTING	PANEL M2E	200A MLO 120/208V 3P4W W 42 CKTS

FEEDER SCHEDULE

PANEL & TRANSFORMER DETAIL

PANEL M-4	PANEL M-2	PANEL M-4A	PANEL M-4B	PANEL M-4C	PANEL M-4D	PANEL M-4E	PANEL M-2A	PANEL M-2B	PANEL M-2C	PANEL M-2D	PANEL M-2E
VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 277/480 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 120/208 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 120/208 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 120/208 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 120/208 SURFACE SEMI-RECESSED RECESSED	VOLTAGE 120/208 SURFACE SEMI-RECESSED RECESSED
ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM	ITEM AMP POLE A B C A B C AMP/POLE ITEM
TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs	TOTALS PHASE A PHASE B PHASE C KW Gf AMPs

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MICROPUMP
Vancouver, Washington

DIAGRAMS & SCHEDULES

DATE	05-05-94
DRAWN BY	RWS
CHECKED BY	DOB
REVISION	
NO.	DATE
1	05-05-94
1	05-18-94
1	06-13-94
1	05-18-94
1	06-13-94
1	02-03-95

E6
6 of 6
293467