

**1 FLOOR PLAN**  
SCALE: 1/4"=1'-0"

**CARPENTRY NOTES**

1. THE DRAWING IS DIMENSIONED FROM THE FACE OF A FINISH WALL TO THE FACE OF A FINISH WALL, UNLESS OTHERWISE NOTED. THE DENTAL EQUIPMENT WILL BE DIMENSIONED FROM THE FACE OF A FINISH WALL TO THE CENTERLINE OF THE EQUIPMENT, UNLESS OTHERWISE NOTED.
2. PARTITIONS SHOWN ARE 5" NOMINAL.
3. ALL BLOCKING WILL BE INSTALLED FLUSH WITH THE FACE OF THE STUDS.
4. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE TO BRACE AND PROTECT ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGES, COLLAPSE, DISTORTIONS, AND OFF-ALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD PRACTICE.
5. THE CARPENTER WILL BE RESPONSIBLE FOR BOTH THE STRUCTURAL INTEGRITY AND THE STABILITY OF ALL BLOCKING AND WALL SUPPORT.
6. THE CARPENTER WILL COMPLY WITH ALL BENCO INSPECTIONS, AS NOTED IN THE GENERAL NOTES ON THE FIRST PAGE OF THESE DOCUMENTS.

CONTRACTOR MAY PROVIDE ANY EQUIVALENT ALTERNATIVE WHICH GUARANTEES THAT THE AIR CONTAINED AROUND THE DEVICES SHALL NOT EXCEED 90°F, OR SHALL BE EXCHANGED WITH FRESH AIR AT LEAST EVERY SEVEN MINUTES, WITH THE AIRFLOW SWEEPING ACROSS THE PUMPS.

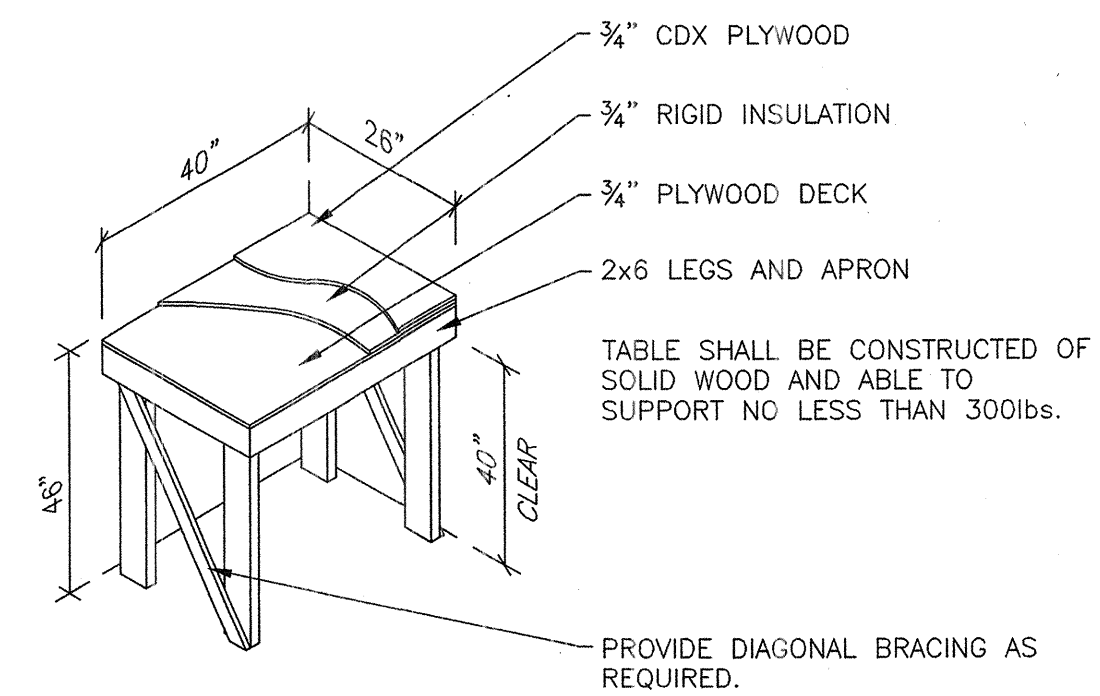
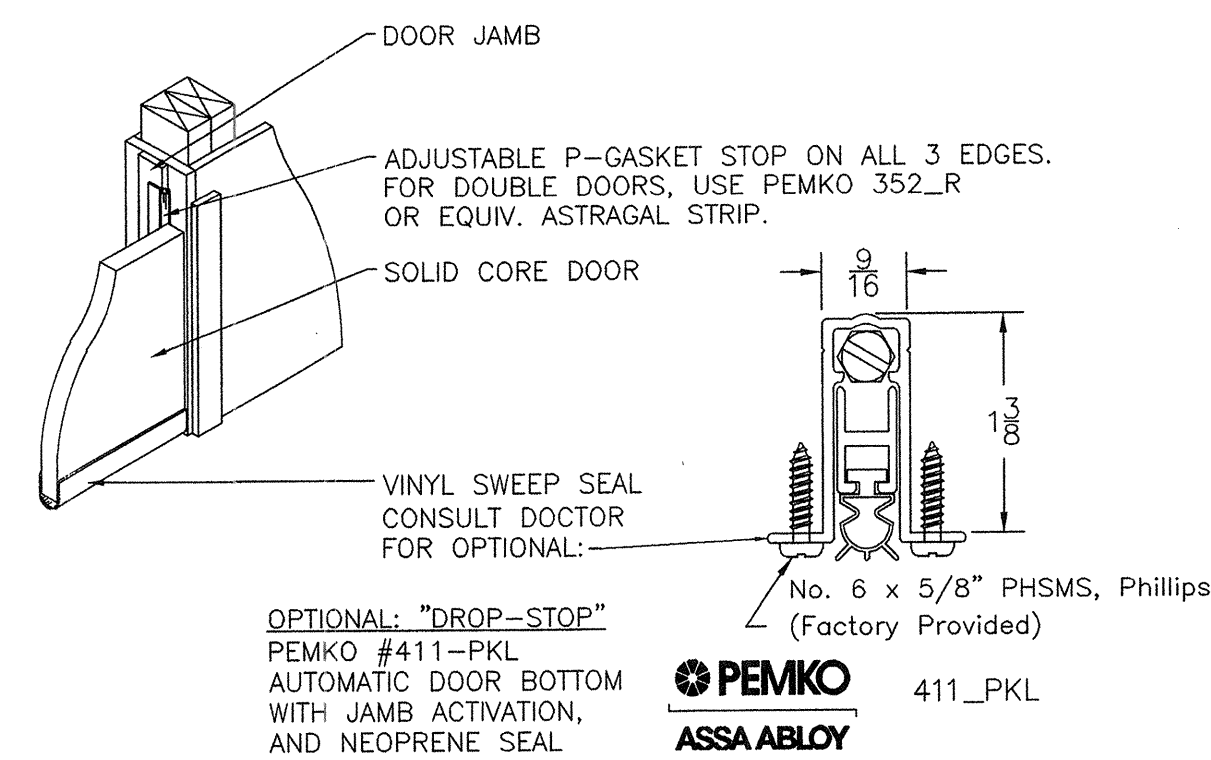
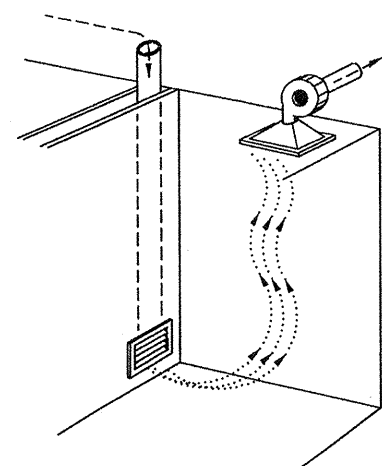
BENCO RECOMMENDS THE FOLLOWING:

INSTALL A STANDARD BATHROOM EXHAUST FAN IN THE CEILING, WHICH SHALL BE CONTROLLED BY A COOLING THERMOSTAT SET AT 90° F. PROVIDE RELIEF INLET AIR BY INSTALLING A 3"ID PVC PIPE DESCENDING FROM THE RETURN AIR DUCT OR EXTERIOR, TERMINATING AT 6" AFF.

CREATE CROSS-CONVECTION AIR FLOW BY PLACING THE RELIEF AIR INLET LOW AND TO ONE SIDE. PLACE THE EXHAUST FAN INLET HIGH AND TO THE OTHER SIDE.

CEILING SHALL BE EQUALLY SOUND-ATTENUATED BY LAYING 6" FIBERGLAS BATTS ABOVE A.C.T. OR BY INSTALLING A 5/8" DRYWALL CEILING.

ALL THE PERIMETER WALLS SHALL BE FILLED WITH UNFACED FIBERGLAS INSULATION, OR EQUIVALENT SOUND-ATTENUATING MATERIALS.



**DETAIL - MECHANICAL CLOSET**

REF.: SOURCE:

**01**

REF.: N.T.S.

**DETAIL - SEALED DOOR**

REF.: SOURCE:

**02**

REF.: N.T.S.

**DETAIL - EQUIPMENT PLATFORM**

REF.: SOURCE:

**03**

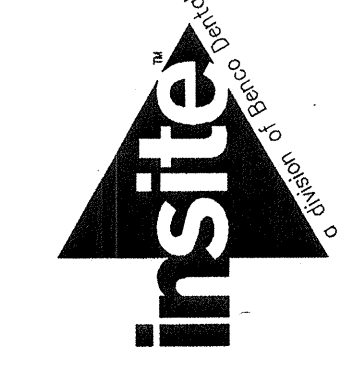
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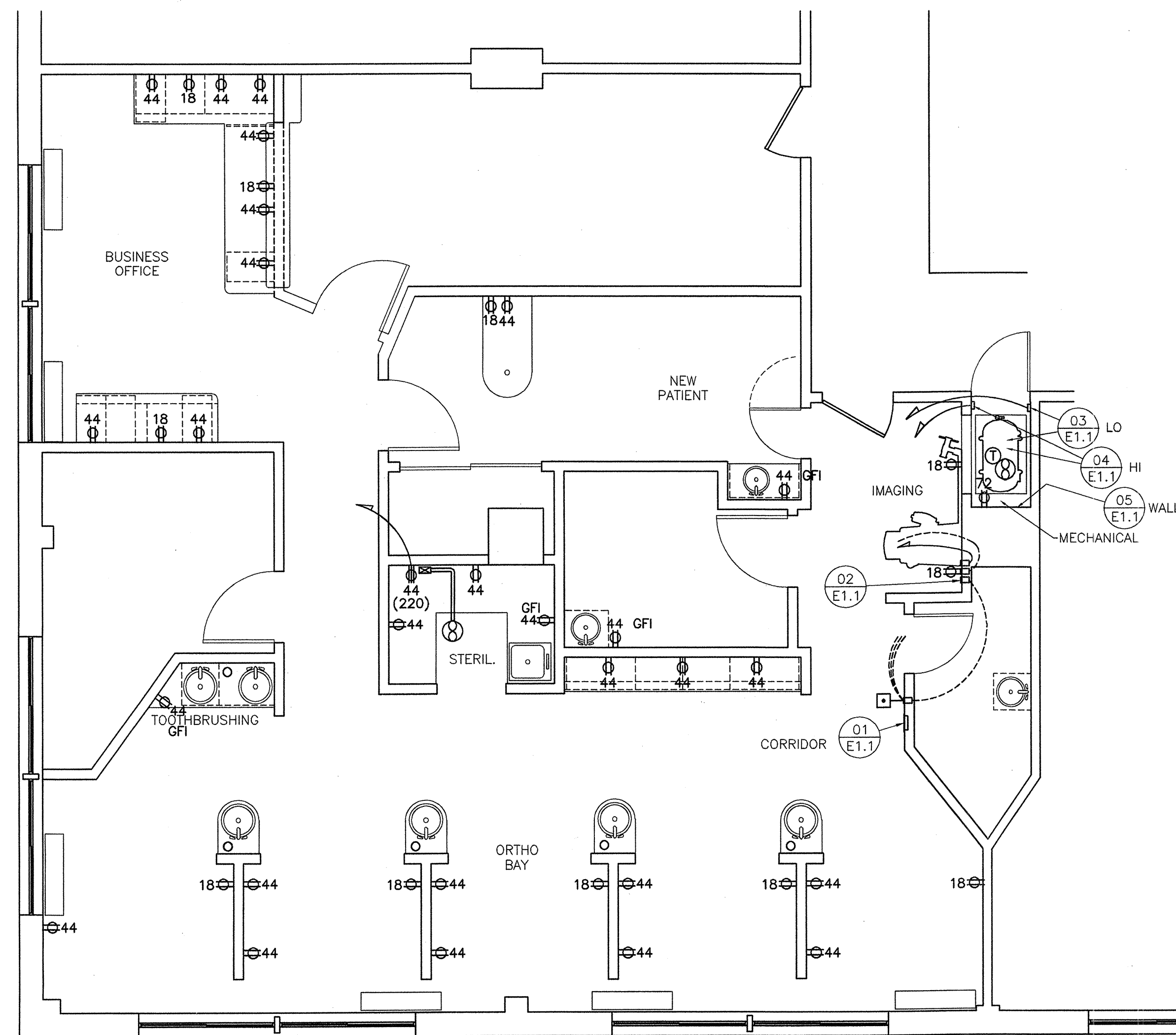
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| DRAWN BY:      |          |

| DRAWING TITLE:                 |
|--------------------------------|
| CARPENTRY FLOOR PLAN & DETAILS |
| <b>A2.1</b>                    |

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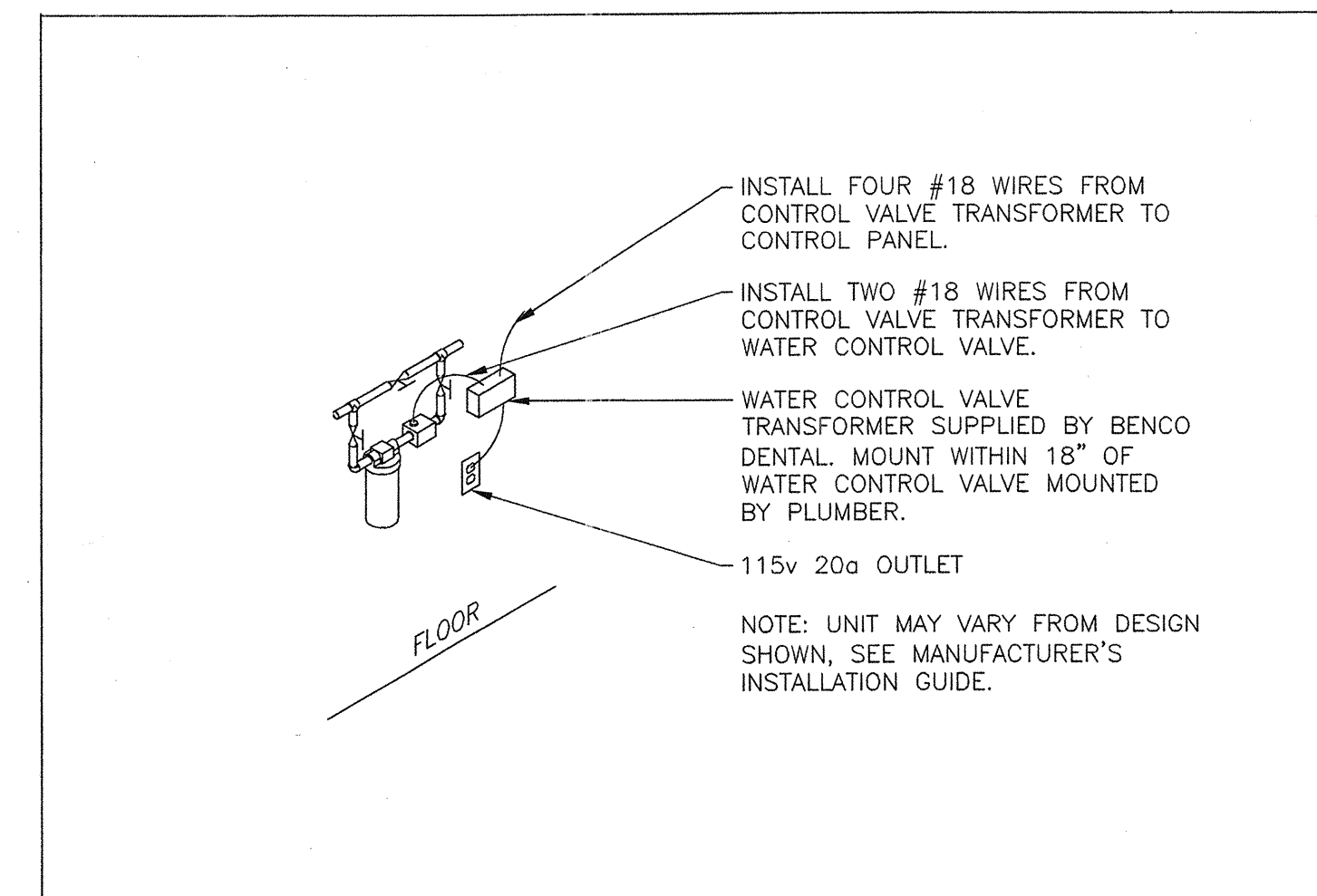


**1 ELECTRICAL PLAN**  
SCALE: 1/4"=1'-0"

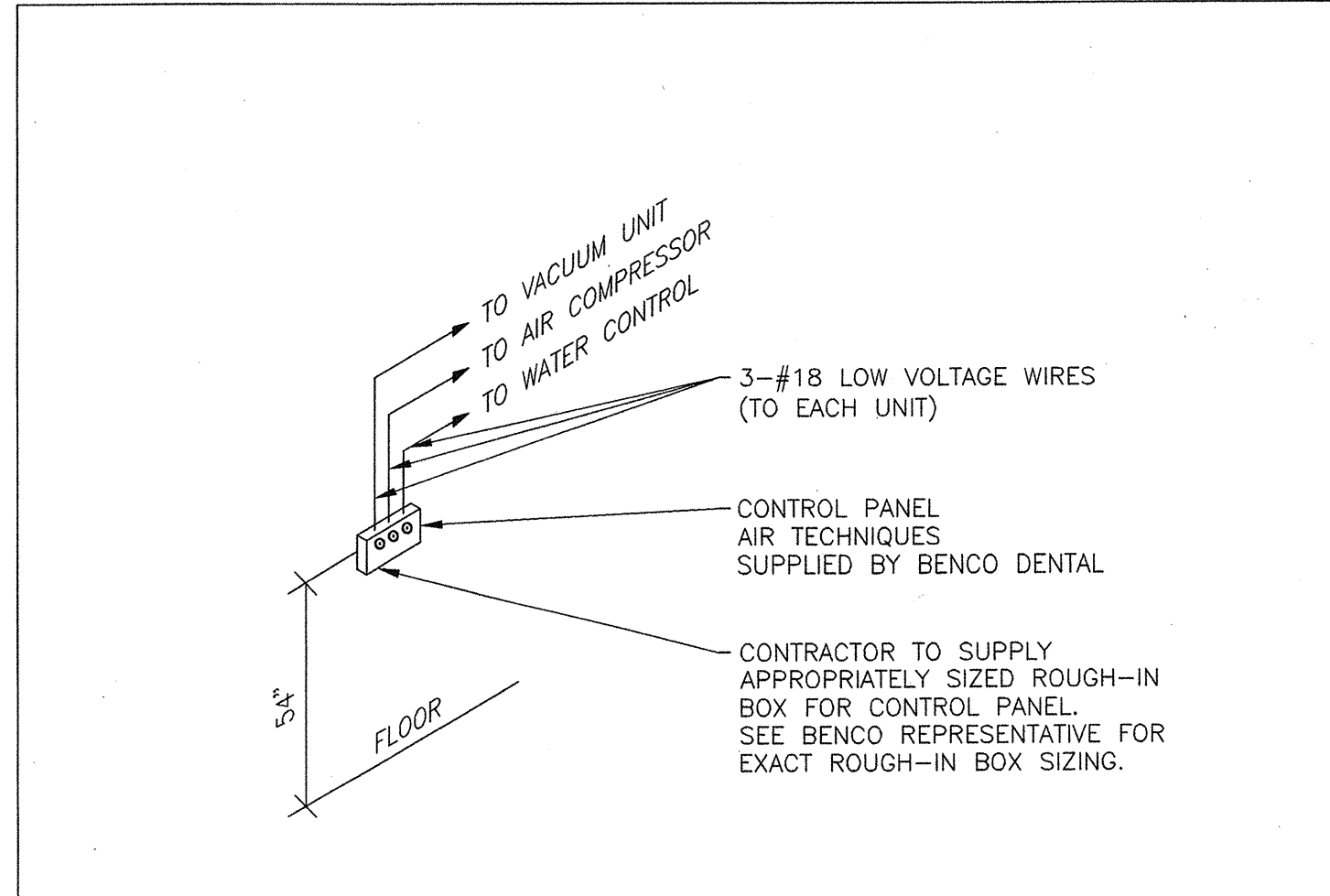
CONSULT DR. FOR ALL REQUIRED NON-DENTAL ELECTRICAL NEEDS.

| ELECTRICAL LEGEND |   |
|-------------------|---|
| SYMBOL            | DESCRIPTION   |
| ⊕-xx              | SINGLE RECEPTACLE, MTD. HEIGHT  |
| ⊕-xx              | DUPLEX RECEPTACLE, MTD. HEIGHT  |
| ⊕                 | EXISTING RECEPTACLE TO REMAIN   |
| ⊕-xx              | DUPLEX RECEPTACLE, MTD. HEIGHT TOP OUTLET ON SWITCH                           |
| ⊕-xx              | 220 VOLT-20AMP SINGLE RECEPTACLE, MTD. HEIGHT                                 |
| ⊕                 | SINGLE RECESSED FLOOR RECEPTACLE WITH METAL COVER PLATE                       |
| ⊕                 | DUPLEX RECESSED FLOOR RECEPTACLE WITH METAL COVER PLATE                       |
| ⊕-xx              | CABLE RECEPTACLE - PROVIDE 1" DIA. CONDUIT W/ PULL WIRES UP TO ABOVE CLG.     |
| ○                 | CONDUIT UP WALL THROUGH CEILING   |
| ⊙                 | CONDUIT DOWN WALL THROUGH FLOOR   |
| ⊙                 | JUNCTION BOX  |
| □                 | SINGLE WALL CASE BOX  |
| □                 | DISCONNECT BOX  |
| ⊕                 | EXPOSURE BUTTON   |
| ⊕                 | THERMOSTAT  |
| ⊕                 | CIRCUIT TO PANEL  |
| ---               | WIRING, CONCEALED IN WALL OR CEILING  |
| ---               | WIRING, CONCEALED IN FLOOR  |
| ---               | CONDUIT, CONCEALED IN FLOOR   |
| △                 | TELEPHONE/DATA OUTLET W/ 1" CONDUIT UP TO CEILING SPACE. OUTLET 18" A.F.F.    |
| ▲                 | DATA OUTLET W/ WALL PLATE & 1" CONDUIT UP TO CEILING SPACE. OUTLET 18" A.F.F. |
| ⊕                 | STANDARD 110 V FLEX W/ 12" PIGTAIL CONTRACTOR TO CONFIRM HGT. A.F.F.          |
| ⊕                 | EXHAUST FAN MOUNTED IN CEILING  |
| ⊕                 | SINGLE POLE SWITCH  |
| ⊕                 | 3 WAY OR 4 WAY SWITCH   |
| ⊕                 | DIMMER SWITCH   |
| ⊕                 | SWITCH W/ PILOT LAMP  |
| ⊕                 | CONTINUOUS POWER CIRCUIT/NON SWITCHED   |
| AFC               | ABOVE FINISHED CEILING  |

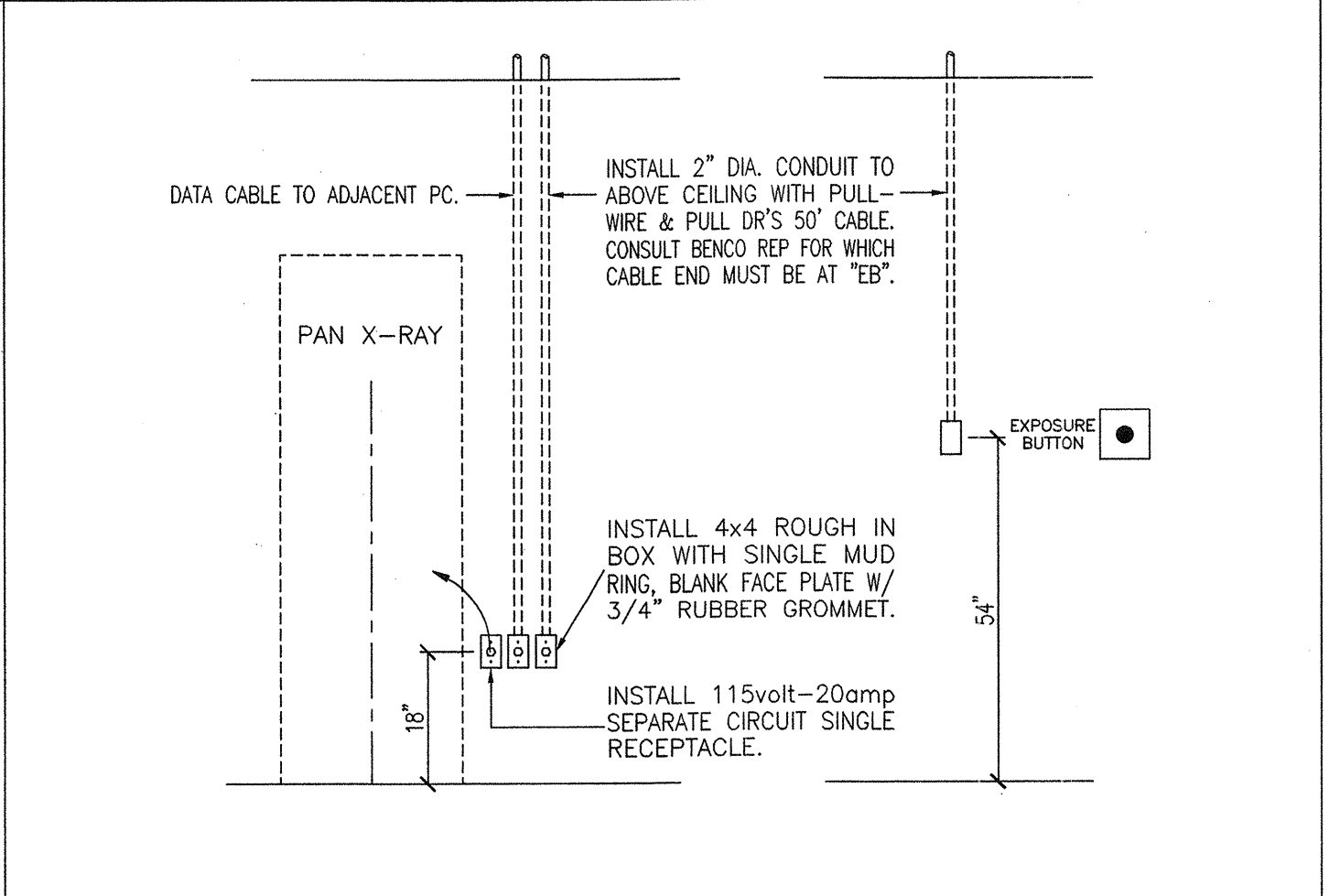
- ELECTRICAL NOTES**
- ALL EQUIPMENT WILL BE SINGLE PHASE, UNLESS OTHERWISE NOTED.
  - ALL WIRING WILL BE CONCEALED WITHIN THE WALLS AND/OR FLOOR, UNLESS OTHERWISE NOTED.
  - THE ELECTRICIAN WILL TAG ALL WIRES AT TERMINATION POINTS.
  - THE ELECTRICIAN WILL REMOVE ALL EXISTING RECEPTACLES AND SWITCHES IN THE AREA OF WORK. THE ELECTRICIAN WILL EITHER INSTALL A BLANK PLATE OVER RECEPTACLE OR SWITCH BOX OR REMOVE BOX ENTIRELY. THE ELECTRICIAN WILL TERMINATE WIRING AND CONDUIT IN A MANNER IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE.
  - THE ELECTRICIAN WILL INSTALL COMPLETE AND MAKE FINAL HOOK-UP TO THE FOLLOWING DENTAL EQUIPMENT, SUPPLIED BY EITHER THE DOCTOR OR BENCO DENTAL, INCLUDING, BUT NOT LIMITED TO:
    - AIR COMPRESSOR
    - VACUUM PUMP
    - WATER CONTROL VALVE
    - CONTROL PANEL
    - RECESSED VIEWBOX(ES)
  - THE ELECTRICIAN WILL BE ONSITE ON THE DAY(S) OF INSTALLATION TO WORK WITH THE BENCO REPRESENTATIVE ON FINAL HOOK-UP. THE ELECTRICIAN WILL SUPPLY AND INSTALL ANY AND ALL MATERIALS INDICATED IN THE ELECTRICAL DETAILS SHOWN AND MANUFACTURER'S INSTALLATION INSTRUCTION SHEETS.
  - IN THE EVENT OF ANY EQUIPMENT BEING RELOCATED TO ANOTHER LOCATION, ANY AND ALL CIRCUITS MUST BE TERMINATED BY THE ELECTRICIAN IN ACCORDANCE WITH LOCAL CODE. VERIFY RESPONSIBILITY WITH THE OWNER.
  - THE ELECTRICIAN WILL SEAL ALL PENETRATIONS THROUGH THE FLOOR WITH A FIRESTOP OR EQUIVALENT WATERPROOFING.
  - THE ELECTRICIAN WILL COMPLY WITH ALL BENCO INSPECTIONS, AS NOTED IN THE GENERAL NOTES ON THE FIRST PAGE OF THESE DOCUMENTS.



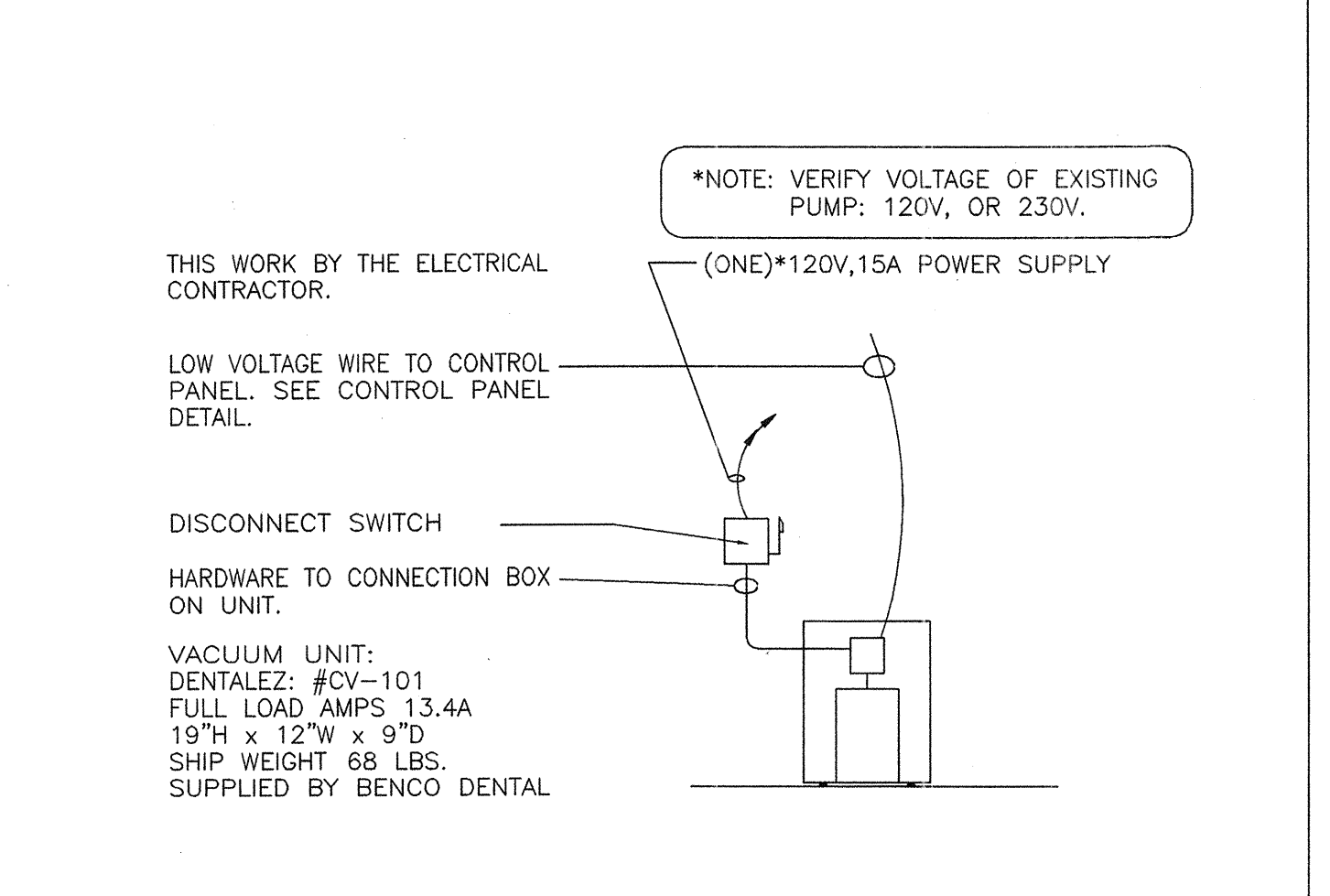
**DETAIL - WATER CONTROL VALVE** REF.: SOURCE: N.T.S.



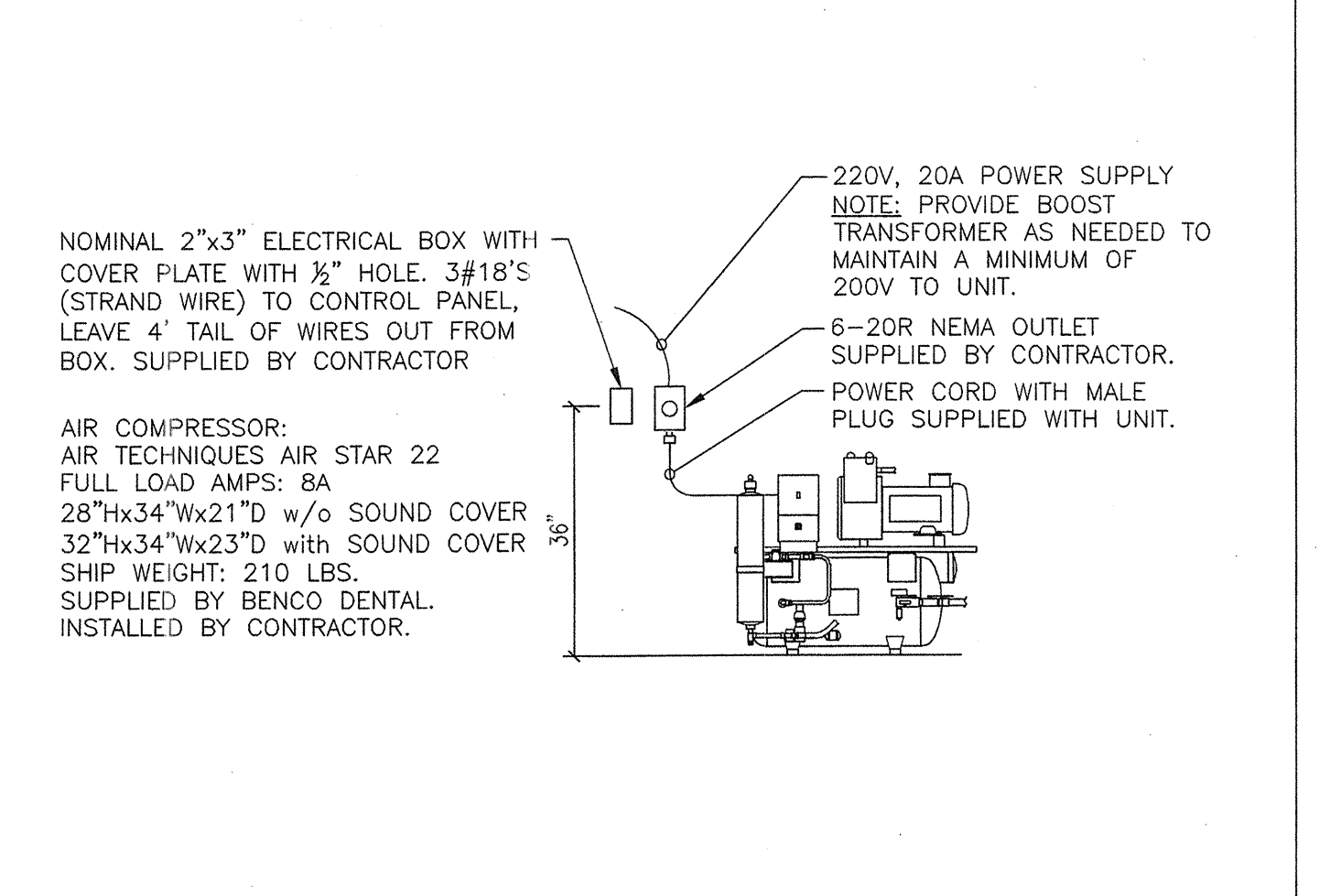
**DETAIL - CONTROL PANEL** REF.: SOURCE: N.T.S.



**DETAIL - PANORAMIC X-RAY WIRING** REF.: SOURCE: N.T.S.

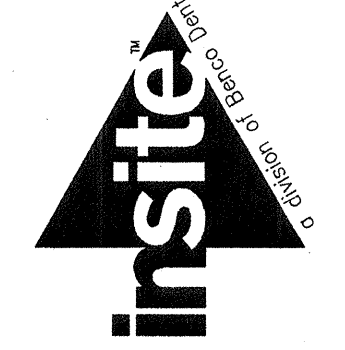


**DETAIL - VACUUM PUMP** REF.: SOURCE: N.T.S.



**DETAIL - AIR COMPRESSOR** REF.: SOURCE: N.T.S.

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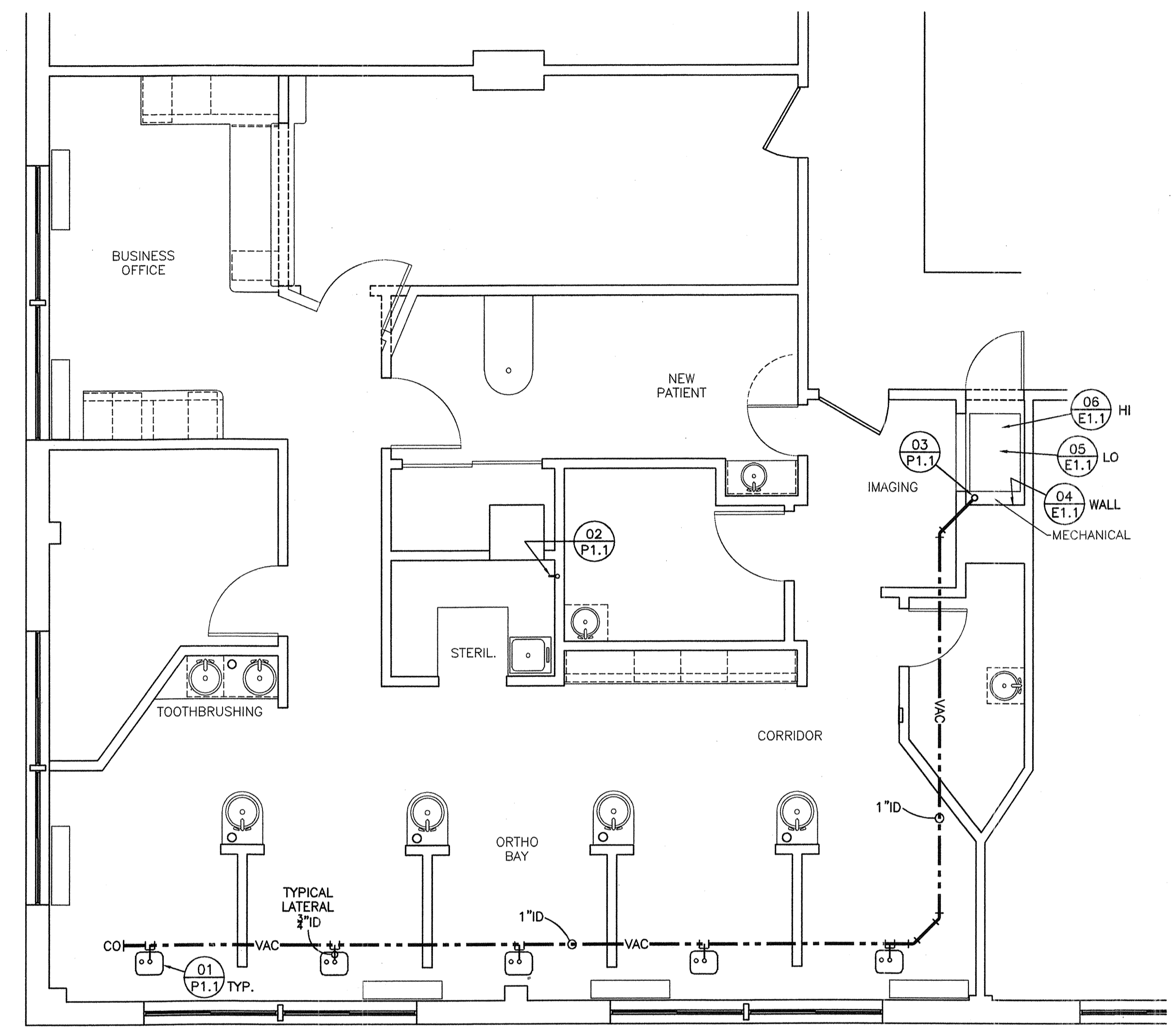
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DRAWING TITLE:  
**ELECTRICAL PLAN**  
**E1.1**

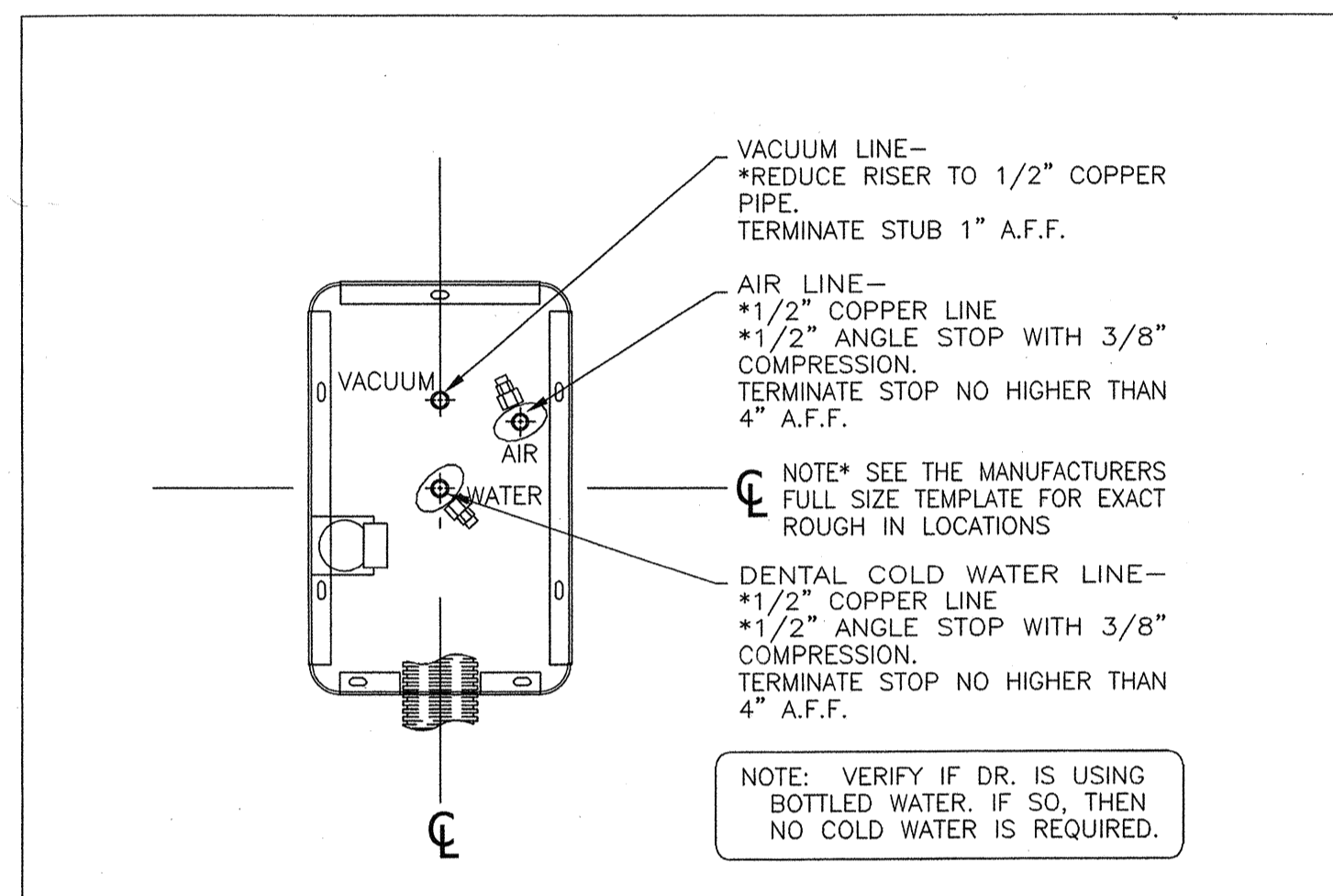
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| DRAWING TITLE: |          |
| PLUMBING PLAN  |          |
| P1.1           |          |

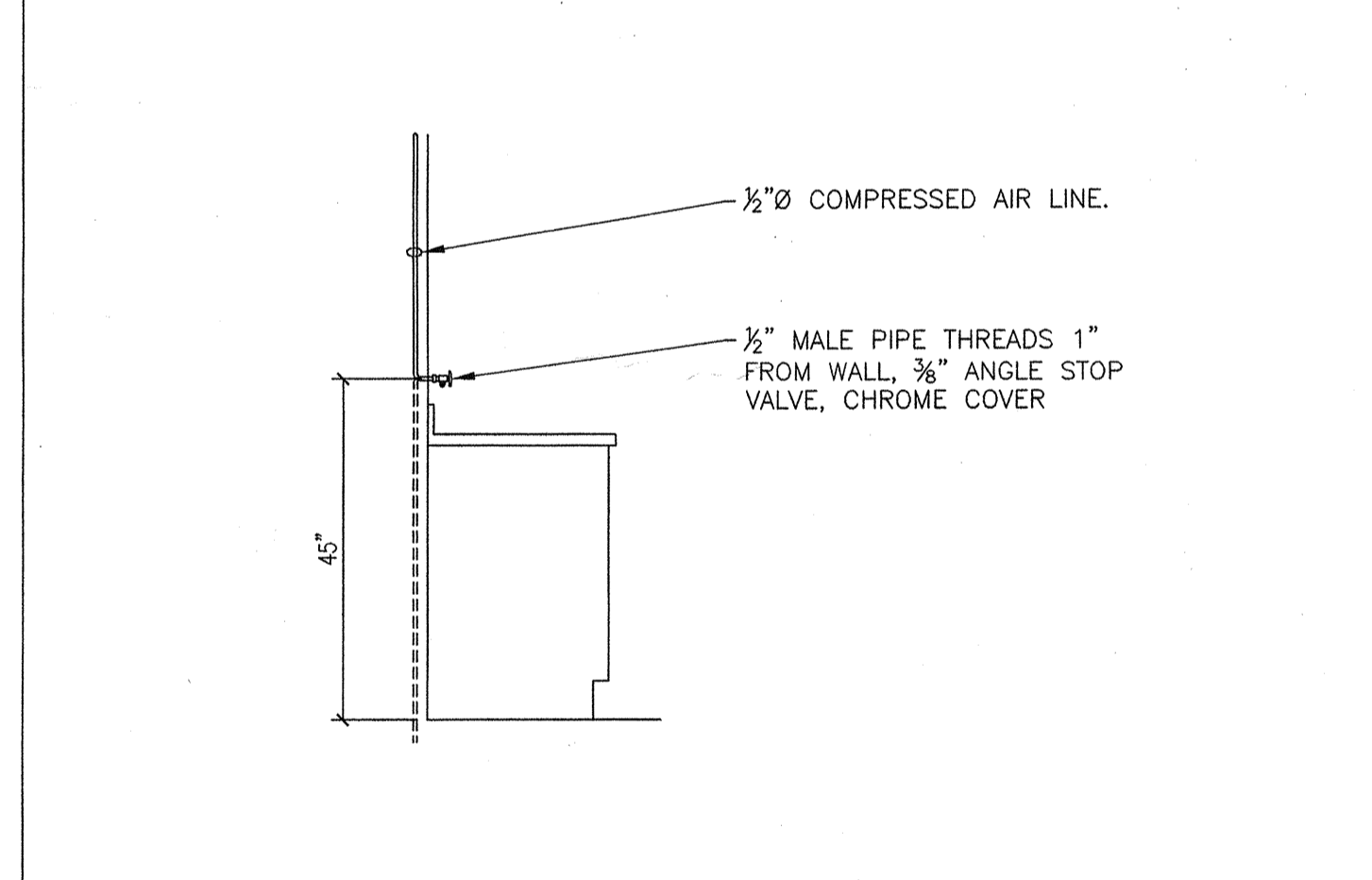
- PLUMBING NOTES**
- THE PLUMBER WILL SUPPLY AND INSTALL A WATER PRESSURE REGULATOR ON INCOMING WATER SUPPLY. THE PLUMBER WILL SET THE REGULATOR NOT TO EXCEED 65 PSI.
  - THE PLUMBER WILL INSTALL THE WATER FILTER (AND THE WATER SOFTENER, AS NEEDED) ON THE COLD WATER MAIN ENTERING THE DENTAL SUITE. THE WATER FILTER WILL BE SUPPLIED BY EITHER BENCO DENTAL OR THE DOCTOR.
  - THE PLUMBER WILL SUPPLY AND INSTALL SEPARATE MANUAL SHUT-OFF VALVES ON ALL SINKS, DENTAL UNITS, AND OUTLETS REQUIRING WATER AND/OR AIR.
  - ALL SINKS AND FAUCETS WILL BE CONNECTED BY THE PLUMBER.
  - ALL PIPES WILL BE CONCEALED WITHIN THE WALLS AND/OR THE FLOOR, UNLESS OTHERWISE NOTED ON THE Benco DRAWINGS.
  - THE PLUMBER WILL SEAL ALL PENETRATIONS THROUGH THE FLOOR WITH A FIRESTOP OR EQUIVALENT WATERPROOFING.
  - ALL PIPES WILL BE FLUSHED CLEAR OF ALL DEBRIS BY THE PLUMBER.
  - THE PLUMBER WILL BE ONSITE ON THE DAY(S) OF INSTALLATION TO WORK WITH THE BENCO REPRESENTATIVE ON THE FINAL HOOK-UP. THE PLUMBER WILL SUPPLY AND INSTALL ANY AND ALL MATERIALS INDICATED IN THE PLUMBING DETAILS SHOWN AND THE MANUFACTURER'S INSTALLATION INSTRUCTION SHEETS.
  - THE PLUMBER WILL PROVIDE AND INSTALL ALL WATER SAFETY DEVICES (I.E. CHECK VALVES, BACKFLOW PREVENTERS, ETC.) IN ACCORDANCE WITH LOCAL CODE.
  - THE PLUMBER WILL INSTALL COMPLETE AND MAKE FINAL HOOK-UP TO THE FOLLOWING DENTAL EQUIPMENT, SUPPLIED BY THE DOCTOR AND/OR BENCO DENTAL, INCLUDING, BUT NOT LIMITED TO:
    - AIR COMPRESSOR
    - VACUUM PUMP
    - AIR/WATER SEPARATORS
    - WATER CONTROL VALVE
  - AN ELECTRIC MASTER WATER SHUT-OFF VALVE IS REQUIRED FOR ANY/ALL COLD WATER LINES FEEDING ALL DENTAL EQUIPMENT. THIS WATER SHUT-OFF VALVE IS REQUIRED WHETHER SUPPLIED BY BENCO, THE DOCTOR, OR THE PLUMBER.
  - THE PLUMBER WILL COMPLY WITH ALL BENCO INSPECTIONS, AS NOTED IN THE GENERAL NOTES ON THE FIRST PAGE OF THESE DOCUMENTS.



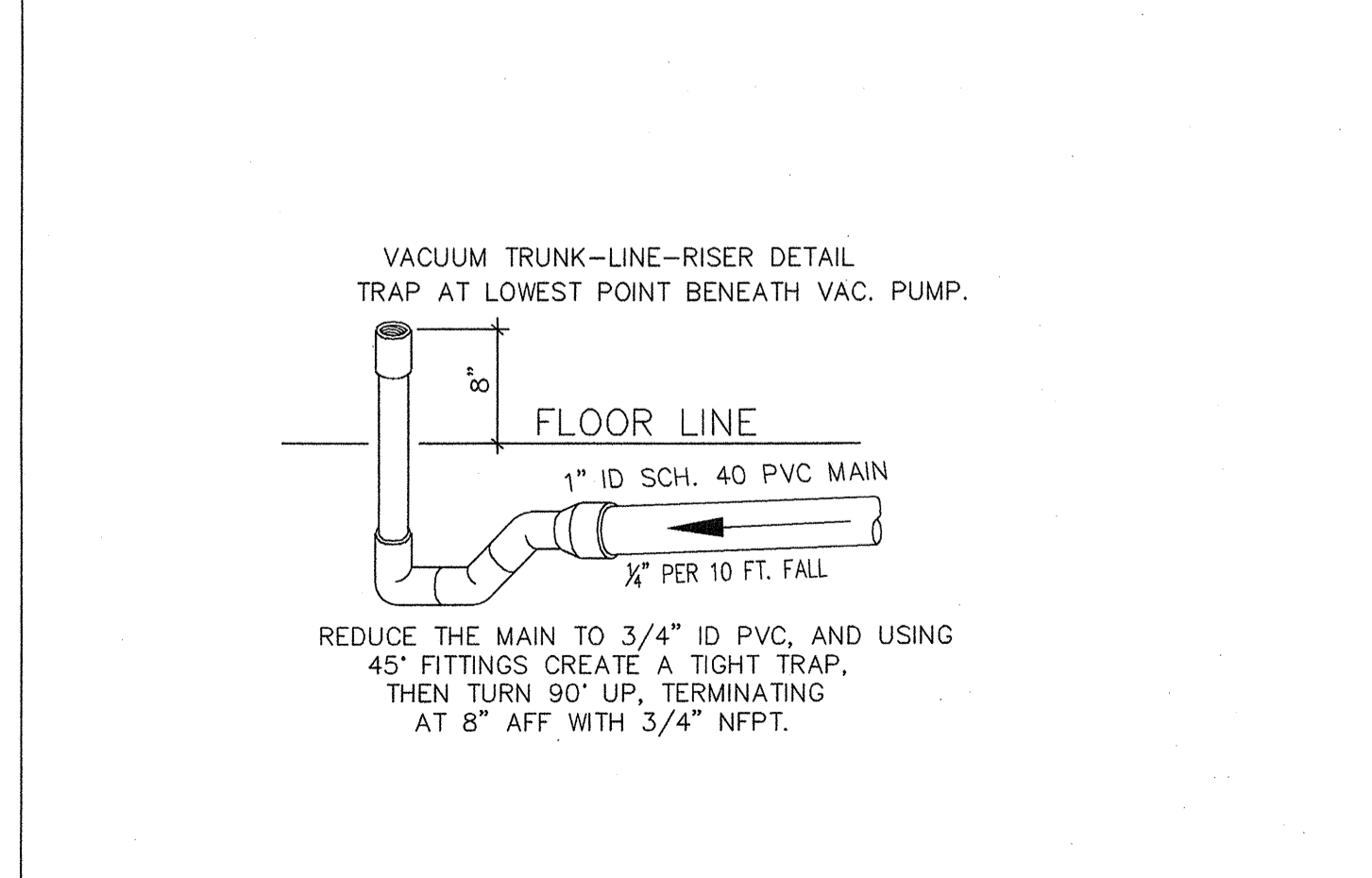
**1 PLUMBING PLAN**  
SCALE: 1/4" = 1'-0"



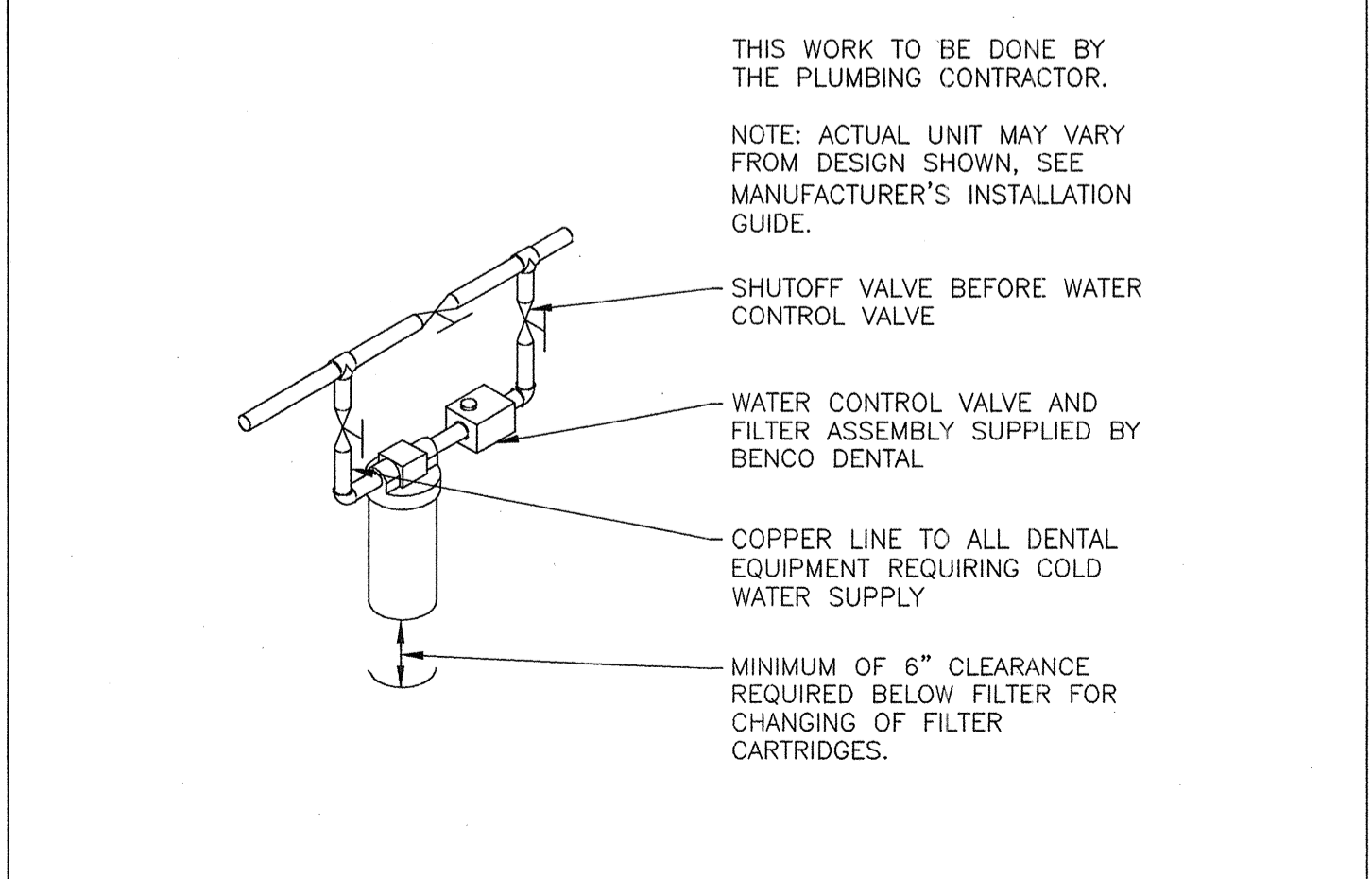
**DETAIL - TYPICAL UTILITY CENTER** 01  
REF.: SOURCE: N.T.S.



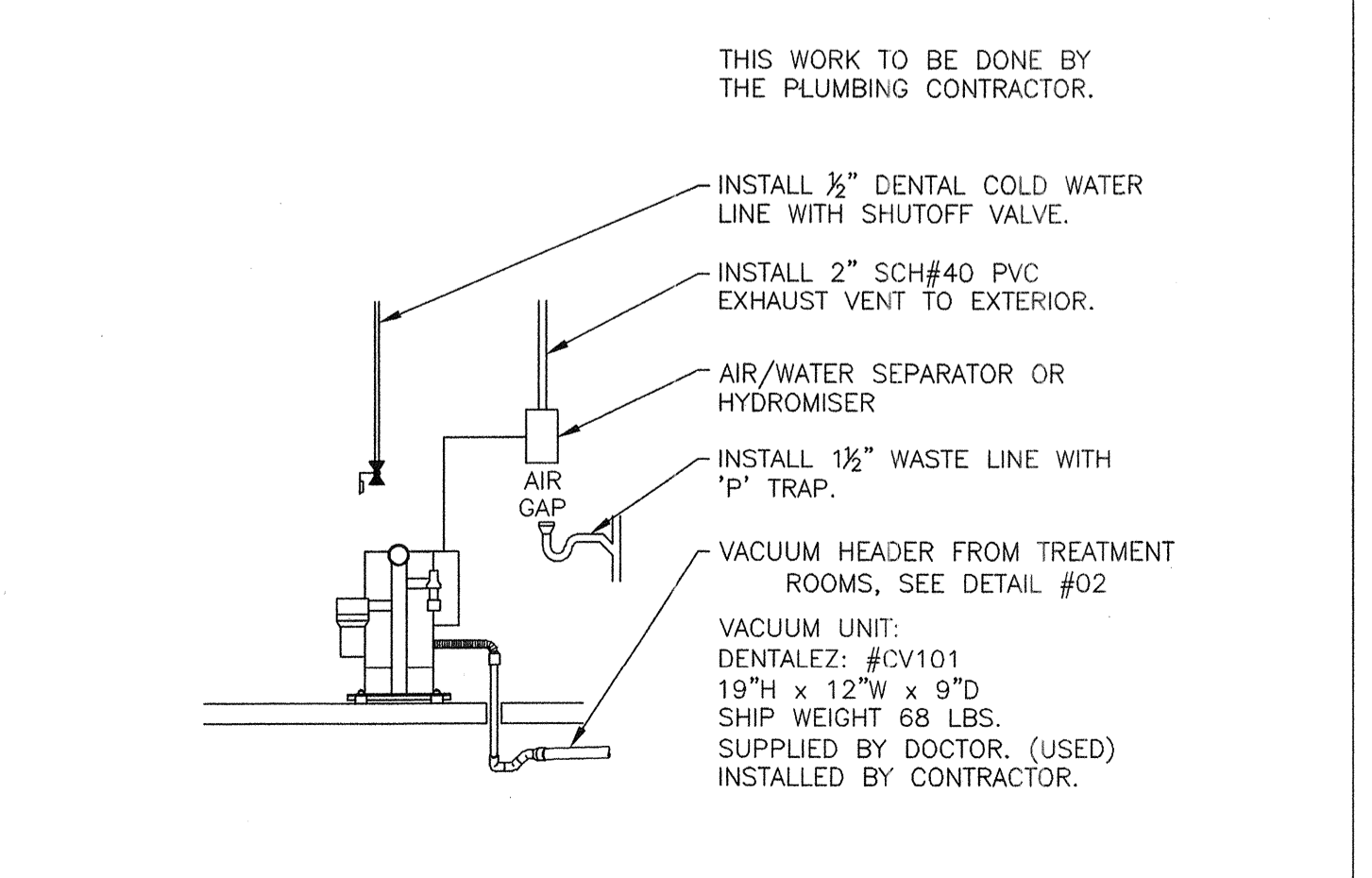
**DETAIL - TYPICAL AIR OUTLET** 02  
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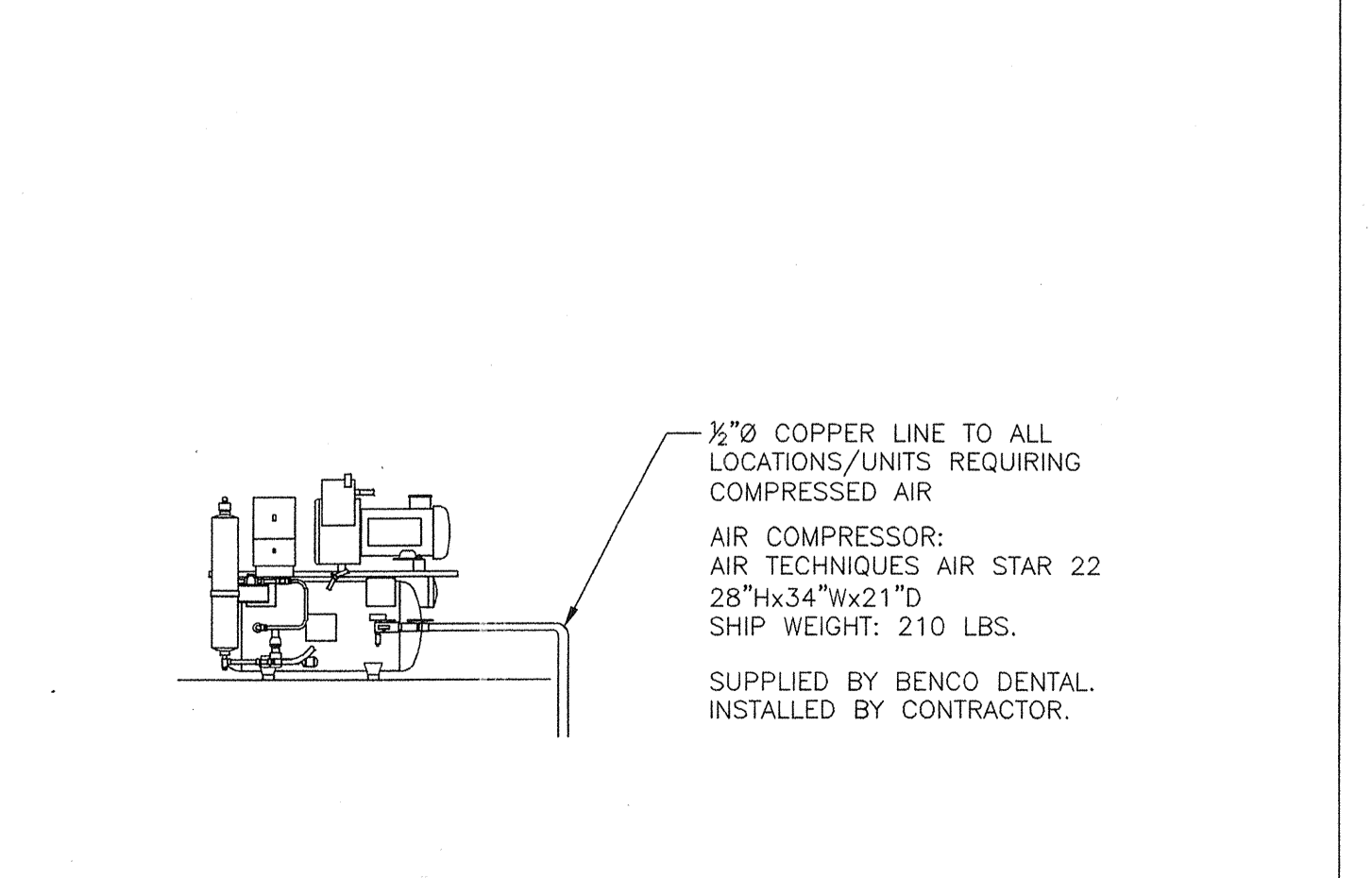
**DETAIL - VACUUM RISER BELOW VAC. PUMP** 03  
REF.: SOURCE: N.T.S.



**DETAIL - WATER CONTROL VALVE** 04  
REF.: SOURCE: N.T.S.



**DETAIL - VACUUM PUMP** 05  
REF.: SOURCE: N.T.S.



**DETAIL - AIR COMPRESSOR** 06  
REF.: SOURCE: N.T.S.

5'  
4'  
3'  
2'  
1'  
1/2"