

MECHANICAL ABBREVIATIONS

| | |
|------|-------------------------------|
| A/C | AIR CONDITIONING |
| AT | AIR FRESHENING |
| AVG | AVERAGE |
| BAL | BALANCE |
| BLW | BLOWDOWN |
| CAN | CANISTER |
| CHG | CHARGE |
| COOL | COLD |
| DAM | DAMPER |
| DEH | DEHUMIDIFYING |
| EVAP | EVAPORATOR |
| FAN | FAN |
| FLW | FLOW |
| GAS | GAS |
| HFC | HIGH FLUOROCARBON |
| HGR | HORIZONTAL GRILLE |
| HGT | HORIZONTAL TUBE |
| HRV | HEAT RECOVERY VENTILATION |
| HTC | HEAT TRANSFER COUPLE |
| IAC | INTEGRATED AIR CONDIT. |
| IND | INDOOR |
| INT | INTERNAL |
| ITC | INTEGRATED THERMOACOUSTIC |
| LT | LIGHT |
| MAR | MATERIAL |
| MCB | MOTOR CONTROL CENTER |
| MIN | MINIMUM |
| MIX | MIXTURE |
| MOL | MOLDED |
| MTR | MOTOR |
| NAT | NATURAL |
| NC | NO CONTACT |
| NEUT | NEUTRAL |
| NO | NOT |
| NTL | NOT TO SCALE |
| OPN | OPEN |
| OUT | OUTSIDE |
| PAN | PAN |
| PE | POWER SOURCE |
| PLC | PROGRAMMABLE LOGIC CONTROLLER |
| POW | POWER |
| PROT | PROTECTION |
| R&D | RESEARCH AND DEVELOPMENT |
| REC | RECEIVE |
| REF | REFRESH |
| REG | REGULATOR |
| REL | RELAY |
| ROD | ROD |
| RT | ROOM TEMPERATURE |
| SAC | SUPER ABSORBENT |
| SC | SELECTIVE COOLING |
| SDC | SUPER DRY CLOTHES |
| SHR | SHRINK |
| SIG | SIGNAL |
| SOL | SOLVENT |
| SPC | SPARE PARTS |
| SPR | SPRING |
| STC | STANDING THERMAL COMFORT |
| SWR | SWITCHING |
| THER | TERMINAL |
| TRI | TRI-POINT |
| TRV | TRAVELER |
| UL | UNIVERSAL |
| VAL | VALVE |
| VAV | VARIABLE AIR VOLUME |
| WT | WEIGHT |
| WTR | WATER |
| YR | YEAR |

MECHANICAL DUCTWORK SYMBOLS

MECHANICAL PIPING SYMBOLS

MECHANICAL CONTROL SYMBOLS

This legend provides a comprehensive guide to P&ID symbols, organized into several categories:

- Piping Components:** Includes symbols for straight pipe, tee, cross, elbow, valve, and various types of fittings like reducers, flanges, and unions.
- Control Elements:** Shows symbols for pressure gauges, flow meters, temperature sensors, and various types of switches and detectors.
- Actuators and Drives:** Displays symbols for electric actuators, pneumatic actuators, and various drive mechanisms.
- Valves:** Features symbols for globe valves, check valves, ball valves, and other specialized valve types.
- Accessories:** Includes symbols for supports, hangers, insulation, and piping accessories.
- Special Symbols:** Contains symbols for ground connections, reference points, and specific industry standards like ASME B16.5.

PAGE INDEX

MECHANICAL GENERAL NOTES

A. PROVIDE INFORMATION IN FIELD TRUNKS TO THE CONTRACTOR FOR USE IN FIELD WORK. THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR AS SOON AS POSSIBLE AND AS REQUIRED.

B. UNLESS OTHERWISE AGREED, SUPPLY PARTS AND EQUIPMENT IN FIELD IN THE SAME SIZE AS THE CONTRACTOR NEEDS THEM. IF ALL ITEM'S ARE SHIPPED TO THE CONTRACTOR, UNLESS OTHERWISE AGREED, SUPPLY PARTS AND EQUIPMENT IN FIELD IN THE SAME SIZE AS THE CONTRACTOR NEEDS THEM. IF ALL ITEM'S ARE SHIPPED TO THE CONTRACTOR, UNLESS OTHERWISE AGREED, SUPPLY PARTS AND EQUIPMENT IN FIELD IN THE SAME SIZE AS THE CONTRACTOR NEEDS THEM.

C. DUCT SIZES INDICATED IN CONNECTOR TO EQUIPMENT MAY DIFFER FROM Duct LANT CONDUIT SIZES. DUCT SIZES ARE TO BE DETERMINED BY THE CONTRACTOR. DUCT SIZES LISTED TO CONTRACTOR ARE DUCT SIZES AS INDICATED IN THE CONTRACTOR'S BIDDING DOCUMENTS.

D. TERMINAL ENDINGS SHALL BE PROVIDED IF, AT THE CONTRACTOR'S REQUEST.

E. THE CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

F. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

G. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

H. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

I. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

J. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

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U. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

V. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

W. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

X. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

Y. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

Z. CONTRACTOR SHALL PAY FOR PARTS USED IN FIELD WORK IF NOT USED OTHERWISE.

CONVERSION TABLE

SYSTEM AC UNIT SCHEDULE

CONTINUING EDUCATION

VAV TERMINAL UNIT SCHEDULE

REMARKS: ① 1. SINGLE DUCT TERMINAL UNIT FURNISHED WITH CONTROLS, EXCLUSION, HOT WATER HEATING COIL,
AND DIFFERENTIAL PRESSURE SAMPLING TUBES.

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REFERENCES

DIEE ISEB REGISTER AND GB/E SCHEDULE

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2. PAINT SOUND GRILLE FLAT BLACK.
3. FINISH WITH A [100 mm (4") x 100 mm (4")] SITE MOULDED STUB INSTALLATION IN LAVIN COATING.

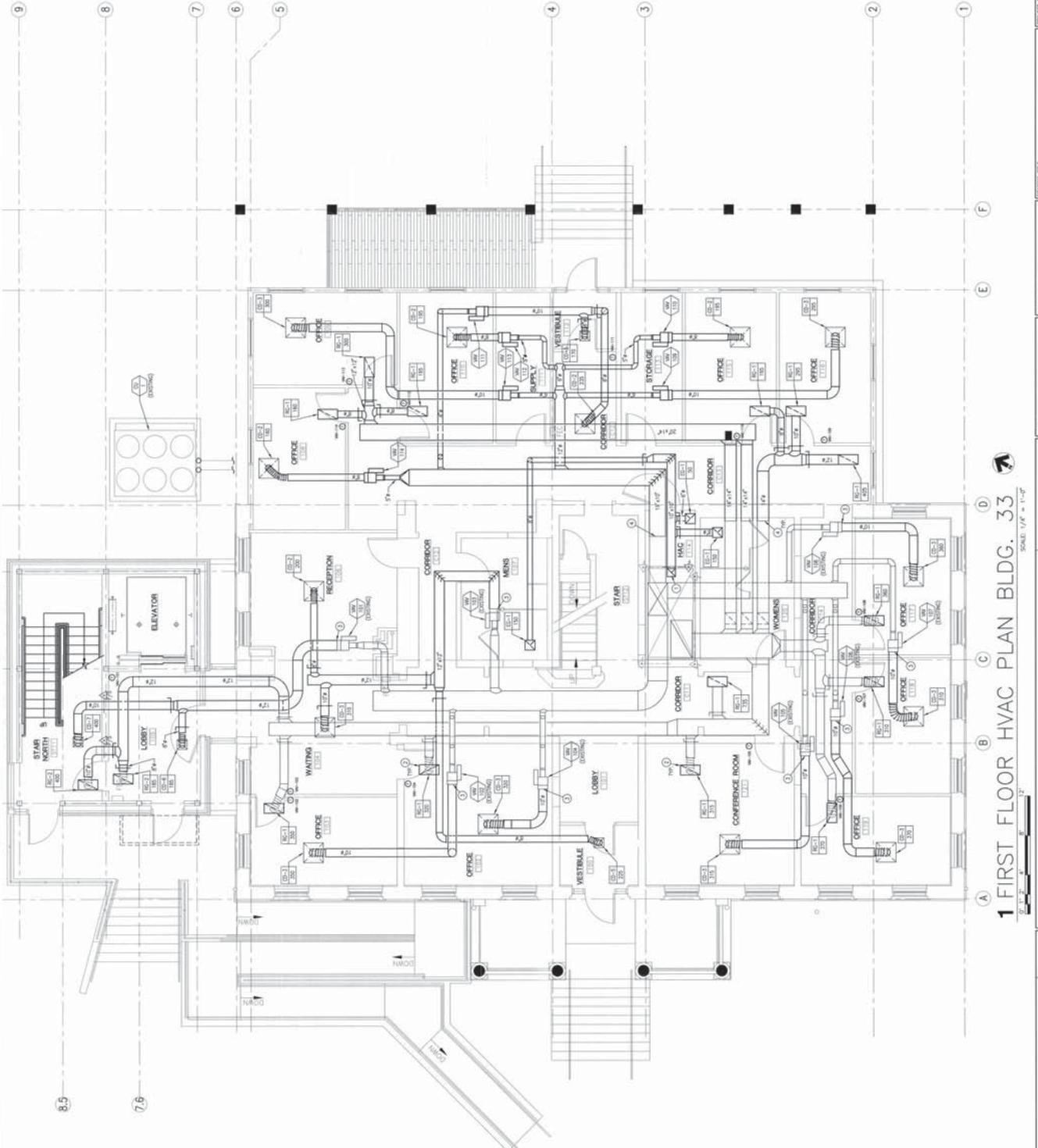
WIRKUNGSWEISE: Ein Volumen-LAS ist ein rein L-AS und erfordert kein Anpassungs- oder Anlaufzeit.



GENERAL NOTES:

SHEET NOTES:

1. 254mm x 754mm (10" x 30") EXHAUST DUCT UP TO EP-1 IN ATTIC.
REF. #E2-32 FOR CONSTRUCTION.
 2. REMOVE EXISTING FILTER MEDIA AND EXTEND RETURN DUCT FULL
SIZE TO NEW HEATIN GRILLE AS SHOWN.
 3. REMOVE EXISTING FILTER MEDIA AND TRANSITION AS REQUIRED FROM
EXISTING WARM AIR TO NEW LOW PRESSURE DUCTWORK. ALL FINAL
CONNECTORS TO NEW DUCTS SHALL BE FLEXIBLE.



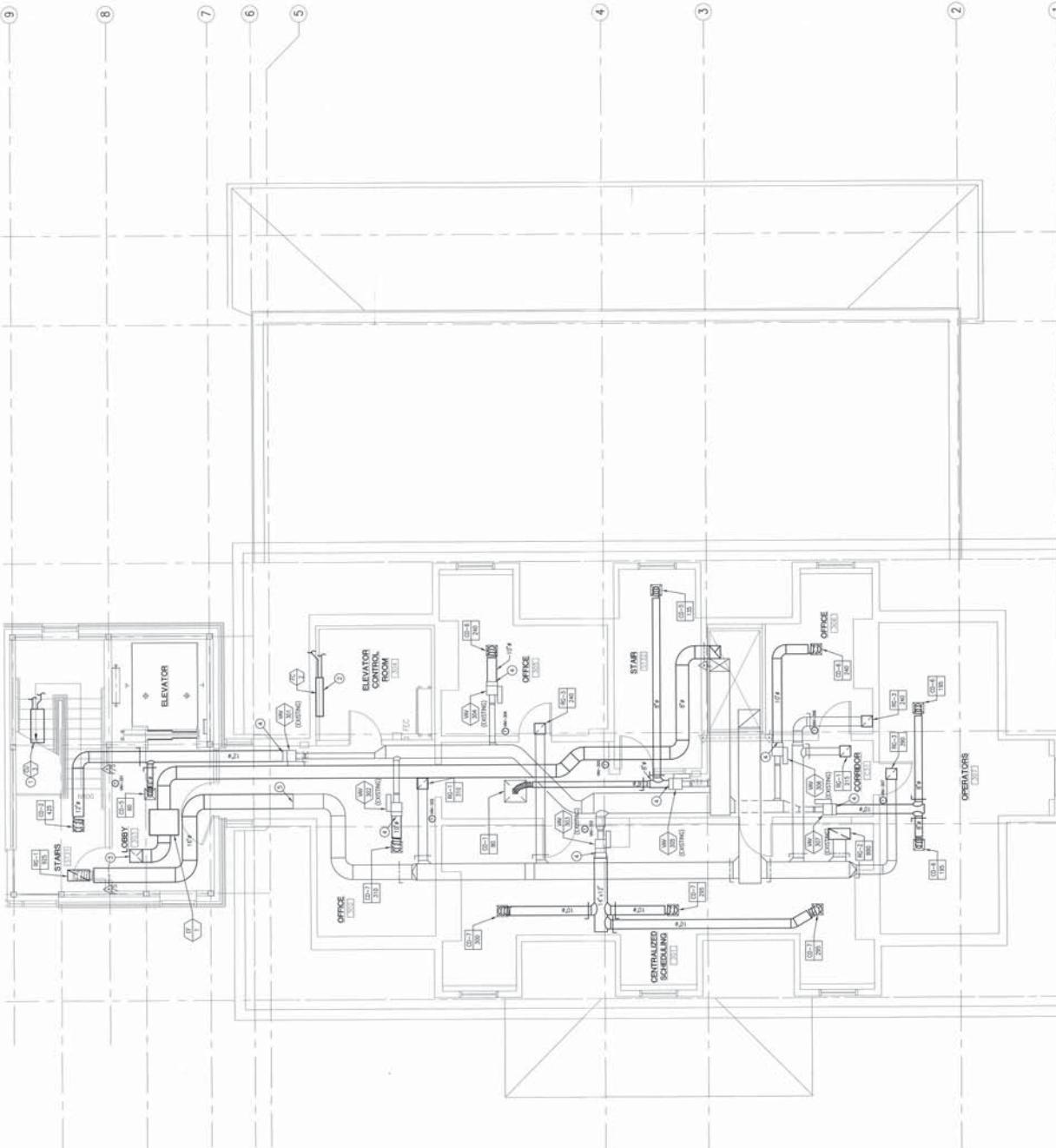
GENERAL NOTES:

© SHEET NOTES:

1. MOUNT CONDENSING UNIT ON ROOF. INSURE AND SIZE
REFRIGERATION Piping TO ASSOCIATED FAN COIL (FC-12) PER
MANUFACTURER'S REQUIREMENTS.
 2. MOUNT FC-12 COIL, FAN, COIL, PLenums, Ductwork, Fan
and Fan Plenum, Ductwork, COORDINATE EXACT LOCATION
ON PLUMBING PLATE. COORDINATE EXACT LOCATION
ON EQUIPMENT IN ROOM.
 3. CONNECT 35mm x 350mm ($1\frac{1}{2}$ " x 14") EXHAUST DUCT UP THROUGH
ROOF TO EXHAUST CAP.
 4. REMOVE FILTER MEDIA AND TRANSITION AS REQUIRED FROM
EXISTING DUCT, ROOF TO NEW DUCT PRESSURE DUCTWORK. ALL FINAL
CONNECTIONS MUST BE TIGHT. NO LEAKS.

67

11 THIRD FLOOR PLAN BLDG. 33



| | | |
|---|--|--|
|  | CSHEA C. W. MORSE PLAZA 200 S. 5TH ST., APT. 807C (205) 345-4655 | BIRMINGHAM, ALABAMA 35203 (205) 345-4655 |
| RECOMMENDATION | DATE | |

| | | | | | |
|------------------------------------|--|-------------------------------------|--|----------------|--|
| CITY NAME: 531-10-114-M2.4 | | VAMC BOISE, IDAHO | | 08/05/11 | |
| STATE NAME: 531-10-114-M2.4 | | PHASE II: BUILDING 33 RENOVATION | | M2.4 | |
| CITY CODE: 531-10-114-M2.4 | | BUILDING NUMBER: 33 | | DASH PERIOD | |
| STREET ADDRESS: 531-10-114-M2.4 | | FACILITY MANAGEMENT SOURCE: | | 101 | |
| CITY ZIP CODE: 531-10-114-M2.4 | | APPROVED MEDICAL CENTER DIRECTOR: | | | |

GENERAL NOTES:

- A. ROUTE DOCUMENTATION AND COORDINATION WITH OTHER TRADES, TRADE SOURCES AS WELL AS POSSIBLE, AND BOSCH DOCUMENTATION OF THE PROJECT.

B. SOURCE OF TRADE INFORMATION: THE CONTRACTOR IS TO ACQUIRE THE LOCATION OF THE TRADES AND THE TRADES ARE TO ACQUIRE THE LOCATION OF THE CONTRACTOR.

C. DOCUMENTATION FOR CONNECTIONS TO EXISTING SYSTEMS: THE CONTRACTOR IS TO DOCUMENT THE EXISTING SYSTEMS AS WELL AS THE NEW SYSTEMS. THE CONTRACTOR IS TO DOCUMENT THE EXISTING SYSTEMS AS WELL AS THE NEW SYSTEMS.

D. TRADES LOCATED ON THE PROJECT SITE SHALL BE INFORMED BY THE CONTRACTOR OF THE EXISTING SYSTEMS.

E. THE Bidders shall, in 1-7 days after rates, documents, revised.

F. CONTRACTORS ARE TO MAKE ALL NECESSARY ARRANGEMENTS TO DETERMINE THE EXISTING SYSTEMS AND TO MAKE THE CONTRACTOR RESPONSIBLE FOR THE COSTS OF REMOVING OR MODIFYING THE EXISTING SYSTEMS.

G. ALL CHANGES DEFERRED SHALL BE PROVIDED IN A NEW BIDDER PASTURE UNLESS NOTIFICATION IS MADE BY THE CONTRACTOR.

H. DOCUMENTATION FOR TRADES LOCATED ON THE PROJECT SITE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.

I. PLANNING, DESIGN, ENGINEERING, AND CONSTRUCTION THROUGH TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

J. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

K. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

L. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

M. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

N. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

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S. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

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X. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

Y. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

Z. DOCUMENTATION FOR TRADES IDENTIFIED IN THE CONTRACTOR'S BID.

SHEET NOTES:

- 10000 - 100000 - 1000000 - 10000000 - 100000000

1 ROOF PLAN BLDG. 33



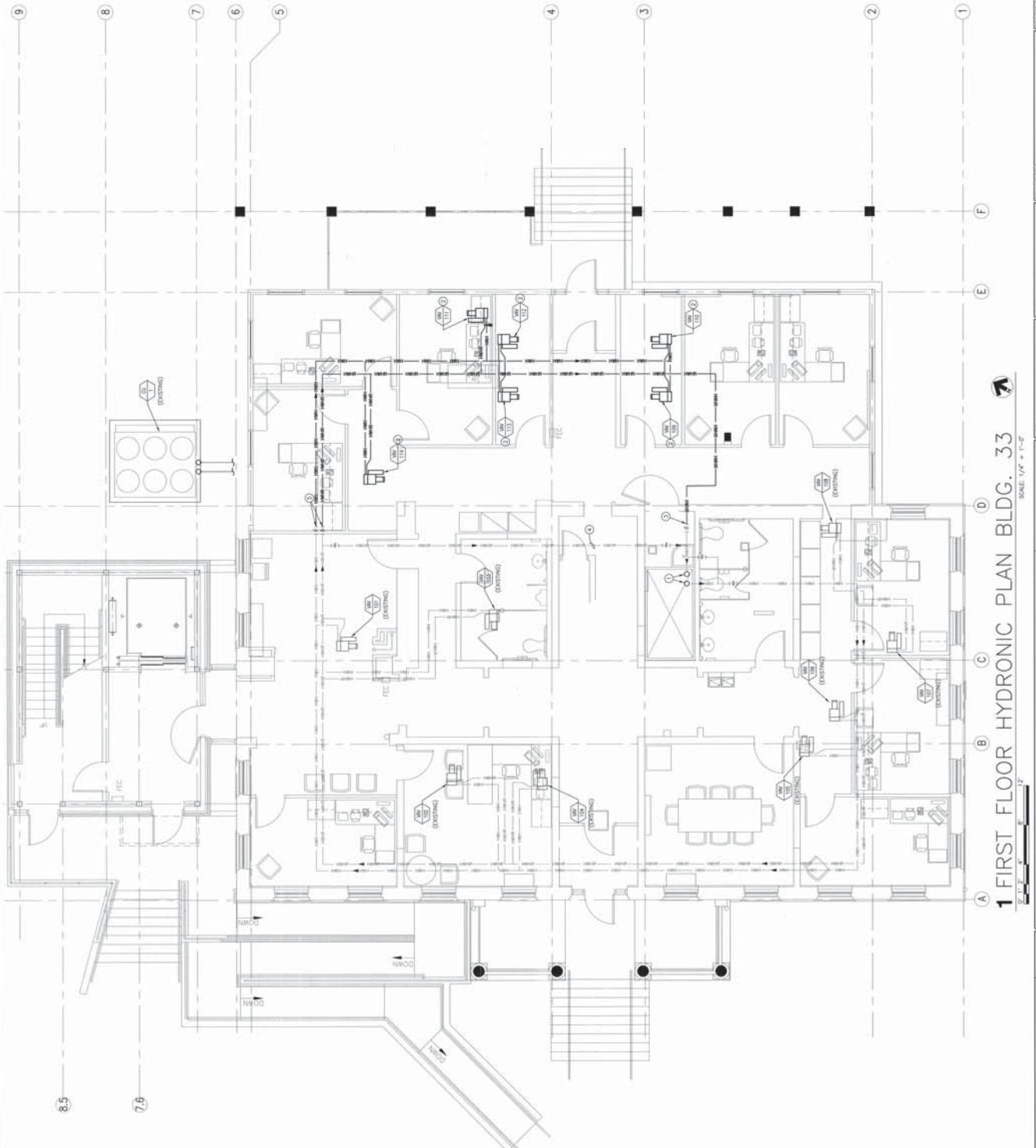
| | |
|---|---|
|  | <p>ROCK MOUNTAIN T.A.</p> <p>C.R. ROBINSON DACH 300 E. 12TH ST. SUITE 1000 DENVER, CO 80203 PHONE: 303-295-4447 FAX: 303-550-0008</p> <p>C.W. MORSE PLAZA 290 S. ETHN ST. EVANSTON, IL 60201 (847) 865-4465 FAX: (847) 865-4466 http://www.cwmpg.com</p> |
| DATE: | DATE: |

CSHEA

GENERAL NOTES:

SHEET NOTES:

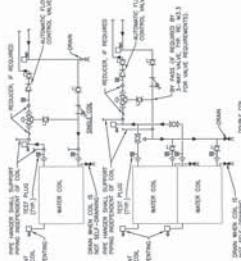
- EATING, HAVING AND HAVING PIRING IN CHARGE TO REMAIN.
 - PROHIBITED UNLESS IT IS COMPLETELY FREE FROM CONTROL VALVE, POSITION, VALUE AND STANDEE. FURNISH RELEASING UNITS AND REDUCING VALVE FOR AUTOMATIC CONTROL OF THE SYSTEM.
 - CONNECT AUTOMATIC PIRING TO COIL CONNECTION, ROUTE SUCH THAT CONDUCTOR ABLE TO CARRY 10 AMPS. IF AVAILABLE, USE ZIPPER LINE FOR BONDING.
 - CONNECT NEW 20MM (WHT) PIPE LINE TO EXISTING 20MM (WHT) ISOLATION VALVE.
 - OPEN AUTOMATIC AND MANUAL THERMOPROBE RETURN LINE IF REQUIRED.



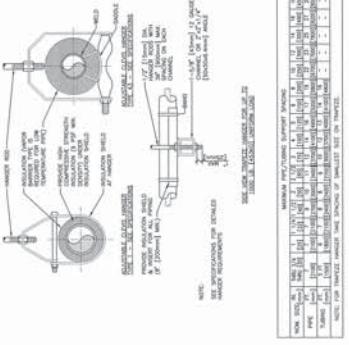
1 FIRST FLOOR HYDROSTATIC PLAN BLDG. 33

| | | |
|---|--|--|
| W | | DEPARTMENT OF VETERANS AFFAIRS |
| FIRST FLOOR HYDRONIC PLAN | | DATE: 08/05/11 PROJECT NO.: 531-10-114 DRAWING NO.: 531-10-114 |
| PHASE II: BUILDING 33 RENOVATION | | SECTION: RHE VIEW: DASH |
| EMPLOYED: CHIEF FACILITY MAINTENANCE SERVICE APPROVED: MEDICAL CENTER DIRECTOR | | LOCATION: VANCOUVER, IDAHO |
| | | REV'D: 6/1/01 |

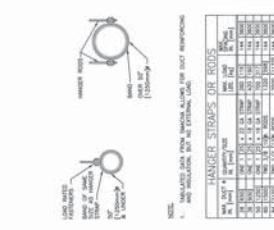
CSH&A



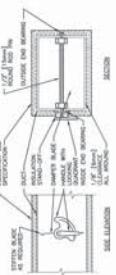
WATER COILS - PIPING CONNECTIONS



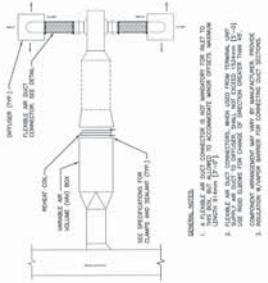
3 SMOKE DAMPER C
PIPE HANGERS **2**



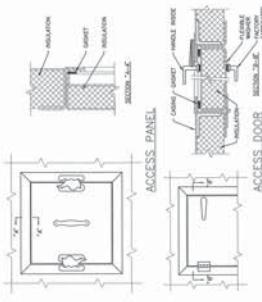
7 ROUND DUCT HANGERS



POLY(1,4-BUTYL-2-PHENYL-1,3-DIOL) 103



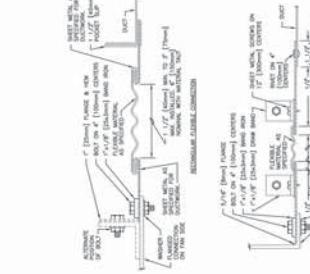
DUCT CONNECTIONS - AIR TERMINAL UNITS



4 ACCESS PANEL AND DOOR DETAIL

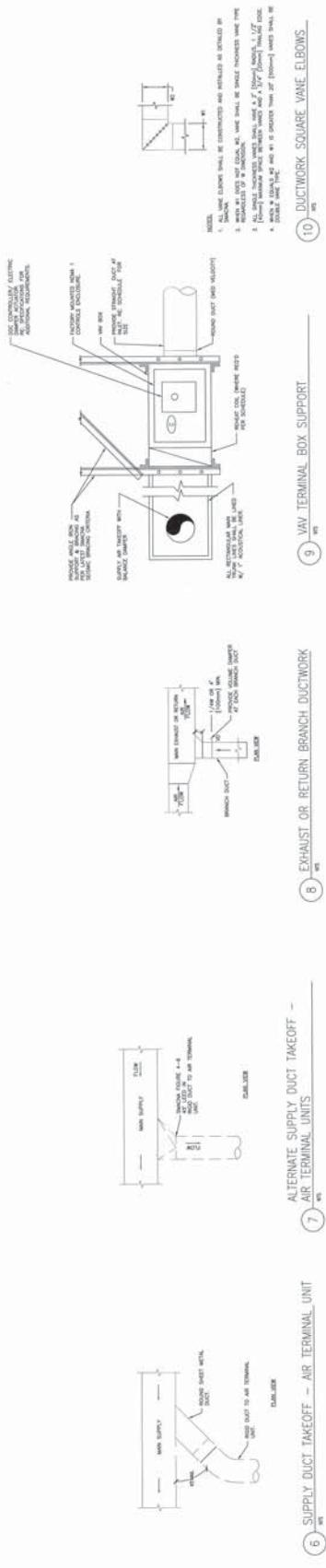
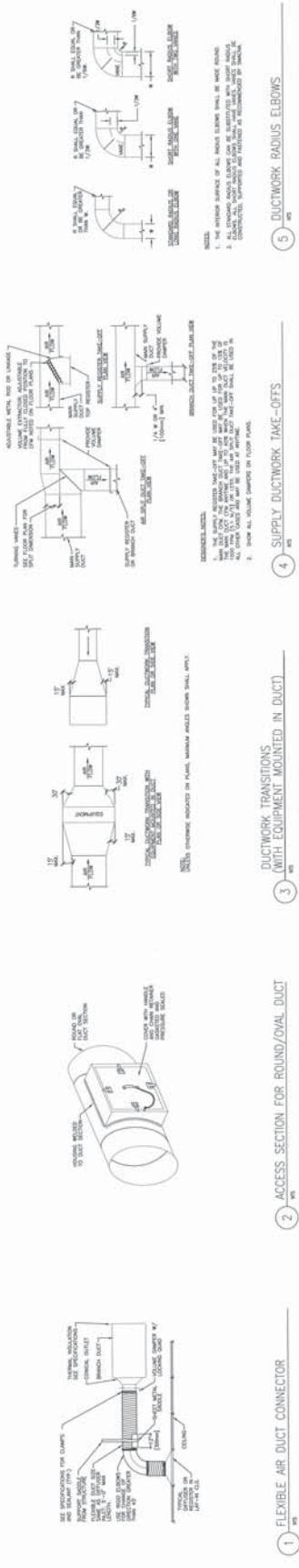


WATER COILS - PIPING CONNECTIONS

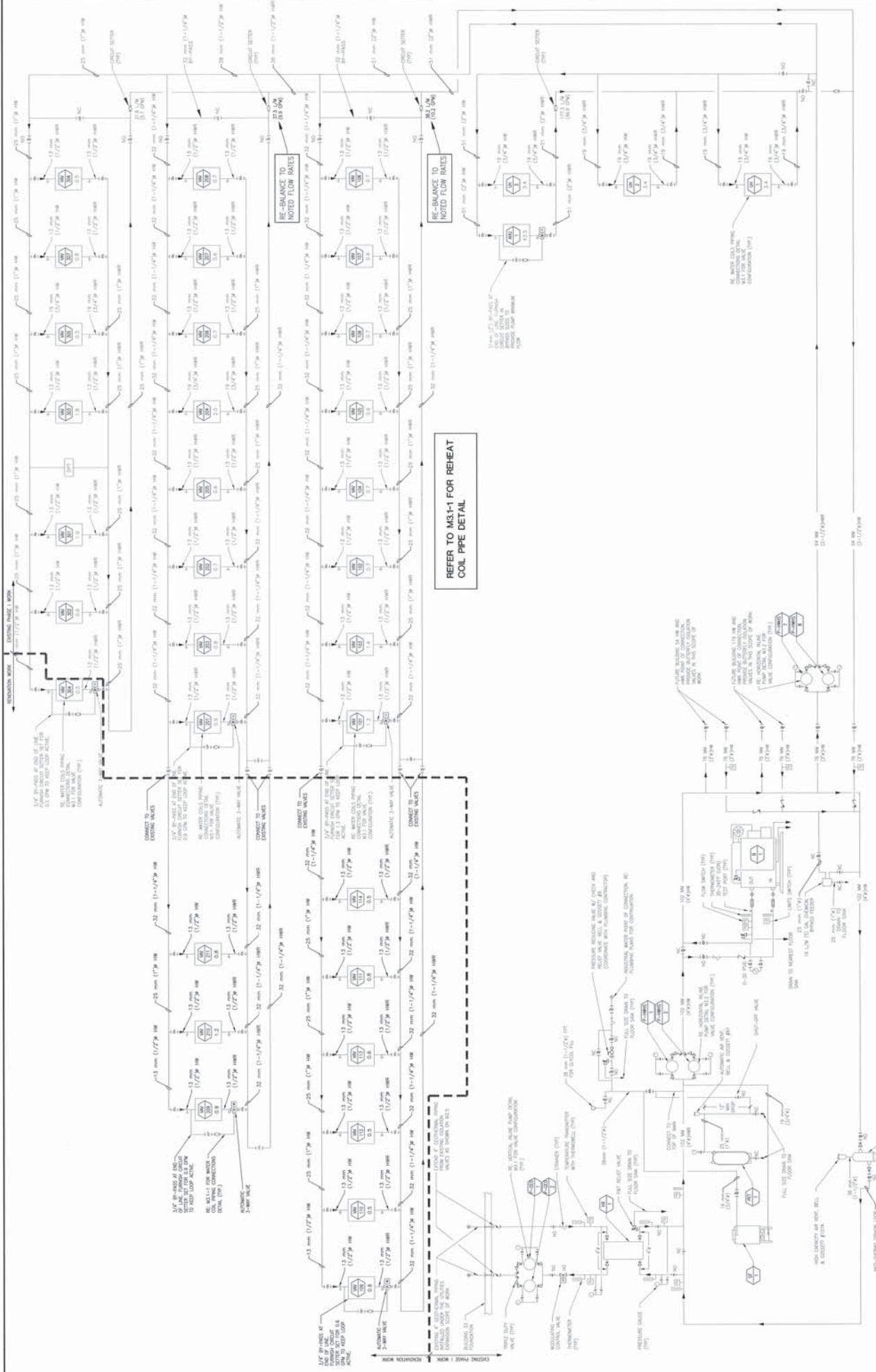


FLEXIBLE DUCT CONNECTIONS





| | |
|--|--|
|  | |
| PROJECT TITLE: VAMC BOISE, IDAHO, BUILDING 33 RENOVATION | |
| PHASE NO.: 53.1 - 10-114...M3.2 | |
| DETAILS | |
| SUBMISSION DATE: 08/05/11 | |
| SUBMISSION TIME: 53.1 - 10-114 | |
| SUBMISSION UNIT: FACILITY MANAGEMENT SERVICE | |
| REVIEWER: DIAH | |
| LOCATOR: VAMC BOISE, IDAHO | |
| DATE: 08-05-103 | |
| REVISIONS: | |
|  STATE OF IDAHO GOVERNOR STATE SEAL JAMES H. BROWN, GOVERNOR JULY 1, 1991 S. 11739 1991 REGULAR SESSION STATE OF IDAHO | CSHEA CIVIC MEDICAL CENTER HOSPITAL CIVIC MEDICAL CENTER HOSPITAL 250 S. 5TH ST., BOX 12, 83702 (208) 343-4645, FAX (208) 343-4600 E-mail: cmc@idahomed.org |

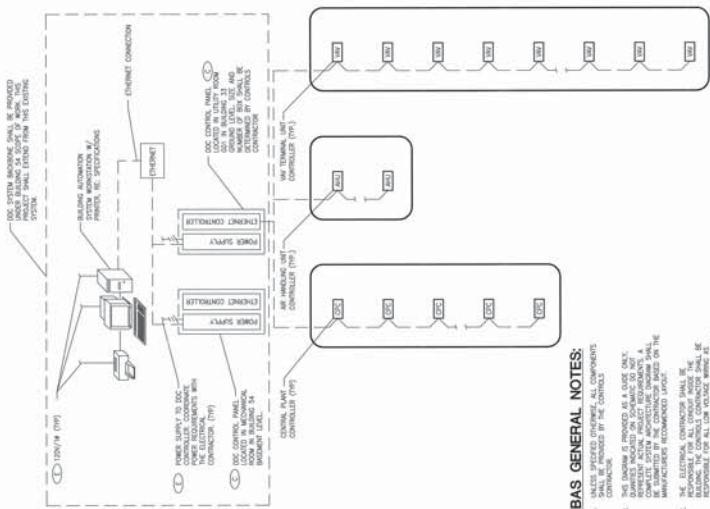


CSHQ

MARK A. JOHNSON, P.A.
C.W. MORRIS PLAZA
205 S. 57TH ST. MCLEAN, VA 20110
(703) 344-4635 FAX (703) 345-1988
<http://www.csqa.com>

C.W. MORRIS PLAZA
205 S. 57TH ST. MCLEAN, VA 20110
(703) 344-4635 FAX (703) 345-1988
<http://www.csqa.com>

STAMP



BAS GENERAL NOTES

- UNITS SPECIFIED OTHERWISE, ALL COMPONENTS
SHALL BE PROVIDED BY THE CONTRACTOR.

THE DRAWINGS PROVIDED ARE A GUIDE ONLY.
DRAWINGS PROVIDED ON THIS DRAWING DO NOT
INCLUDE ALL INFORMATION NECESSARY FOR
COMPLETION OF THE PROJECT. INQUIRIES SHALL
BE SUBMITTED BY THE CONTRACTOR BASED ON THE
MANUFACTURERS RECOMMENDED LAYOUT.

THE RESPONSIBLE FOR ALL CONSTRUCTION
IN THE BUILDING, INCLUDING ALL EXTERIOR
WALLS, ROOFING, ETC., IS THE CONTRACTOR.
IT IS THE CONTRACTOR'S RESPONSIBILITY TO
SEE THAT THE CONTRACTOR'S WORK IS
IN ACCORDANCE WITH THE DRAWINGS AND
SPECIFICATIONS.

BUILDING AUTOMATIC SYSTEM ARCHITECTURE DIAGRAM

SCHEMATIC & POINTS LIST



VAV TERMINAL WITH REHEAT CONTROL
SCHEMATIC & POINTS LIST

| | | | |
|--|--|--|--|
| RECEIVED BY: CSHEA | | DATE: 08/05/11 EXPIRE DATE: 08/11/14 | |
| RECEIVED BY: VAMC BOISE, ID | | DEPARTMENT OF VETERANS AFFAIRS | |
| STAMP | | PROJECT TITLE: VAMC PHASE II: BUILDING 33 RENOVATION | |
| FILE NUMBER: 5.3-10-114-M3.4 COPY FILE NUMBER: 5.3-10-114-TBL/K | | DRAWING TITLE: CONTROLS SCHEMATIC | |
| APPROVED: DRAFT OF FACILITY MANAGEMENT SERVICE | | DRAWING NUMBER: 33 | |
| APPROVED: MEDICAL CENTER DIRECTOR | | DRAWN BY: RME | |
| | | CHECKED BY: RME | |
| | | APPROVED BY: VAMC BOISE, ID-AHO | |
| | | DRAFTED BY: RME | |
| | | DEPT. OF: 66 OR 101 | |

PLUMBING PIPING SYMBOLS

PLUMBING ABBREVIATIONS

PLUMBING SHEET INDEX



PIPING LEGEND



| | |
|---|---|
| PROJECT NAME VAMC PHASE II: BUILDING 33 RENOVATION | DATE 08/05/11 |
| BUILDING NUMBER 33 | PROJECT NO. 531-10-114 |
| GENERAL CONTRACTOR VAMC | GENERAL CONTRACTOR VAMC BOISE, IDAHO |
| ARCHITECT N/A | ARCHITECT N/A |
| CONTRACTOR N/A | CONTRACTOR N/A |
| PERIOD 6/17/11 - 10/1/11 | DEPARTMENT OF VETERANS AFFAIRS |

CSHEA

| | | |
|--|--|--|
| REK M. FREDERICK, P.A. 514 N. WOODLAND AVE. SUITE 200 BOISE, ID 83702 (208) 343-4655 / (800) 343-4655 | CW, INCORPORATED 250 S. 5TH ST., BOISE, ID 83702 (208) 343-4655 / (800) 343-4655 http://www.cwinc.com | CHIANG, HUANG & CO., PLLC 1000 15TH STREET, SUITE 1000 SEATTLE, WA 98101 (206) 467-1100 / (800) 467-1100 |
|--|--|--|

GENERAL NOTES:

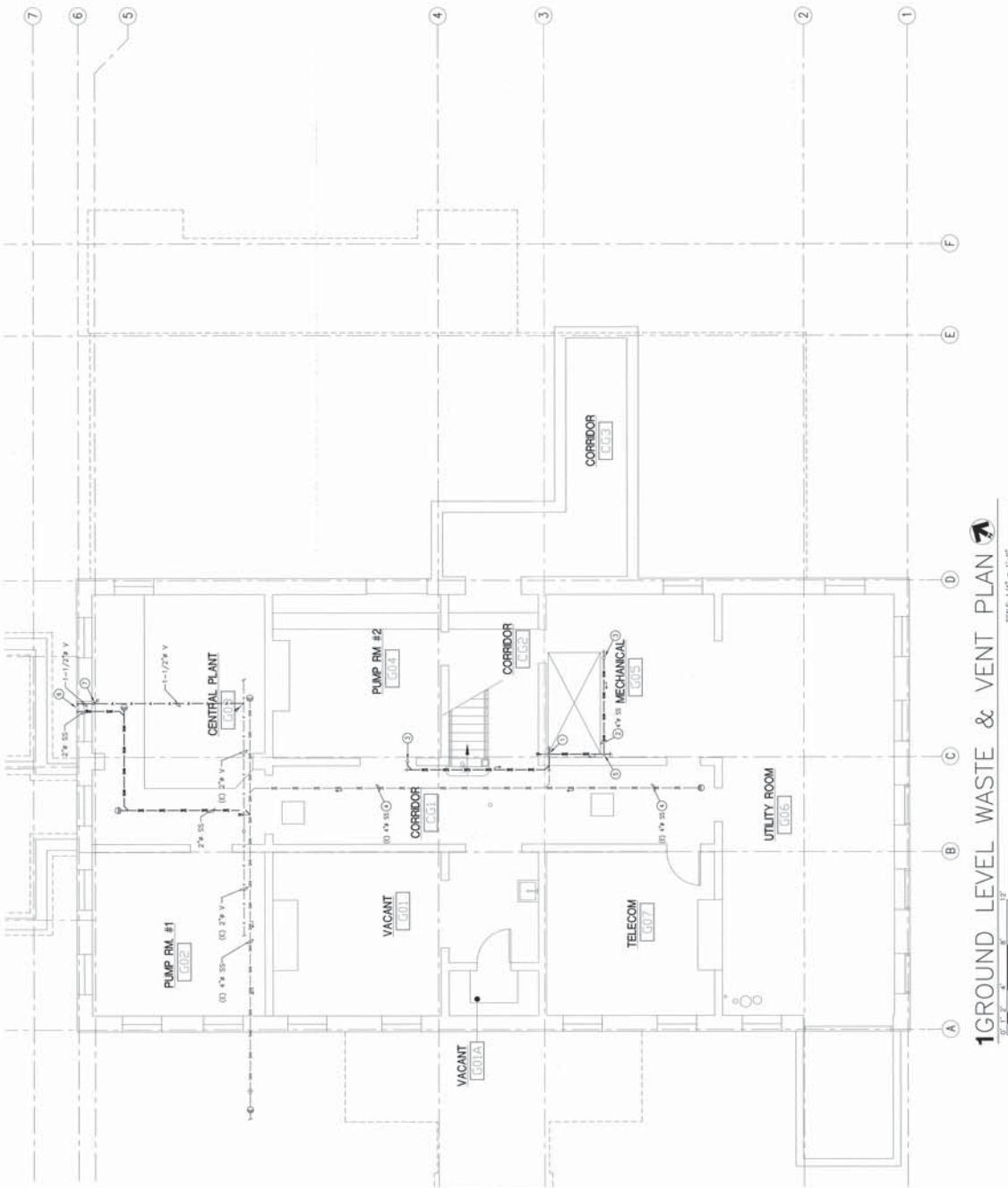
SHEET NOTES:

1. REMOVE THE EXISTING WALL, AND CONNECT TO SUB-SOI PROOFED
STRUCTURE.

2. RETAIN MATE, POUR TIGHT TO CEILING.
3. 55 DOWN FROM THIS FLOOR, ME. P2-1 FOR CONTINUATION.
4. ERECTING 55' PILING INSTALLED UNDER THE UTILITY EXPANSION.
5. PILE, FREE DOWN AGAINST WALL, TO ANCHOR, SHOT, ETC.
HORIZONTALLY, ROOT TO CORNER.

6. 55 AND 17'-0" UP TROUGH FOUNDATION WALL, ME. P2-1 FOR
CONTINUATION.

7. ROOT 17'-0" UP AND TIGHT TO CLEAR STRUCTURE.



1 GROUND LEVEL WASTE & VENT PLAN

114

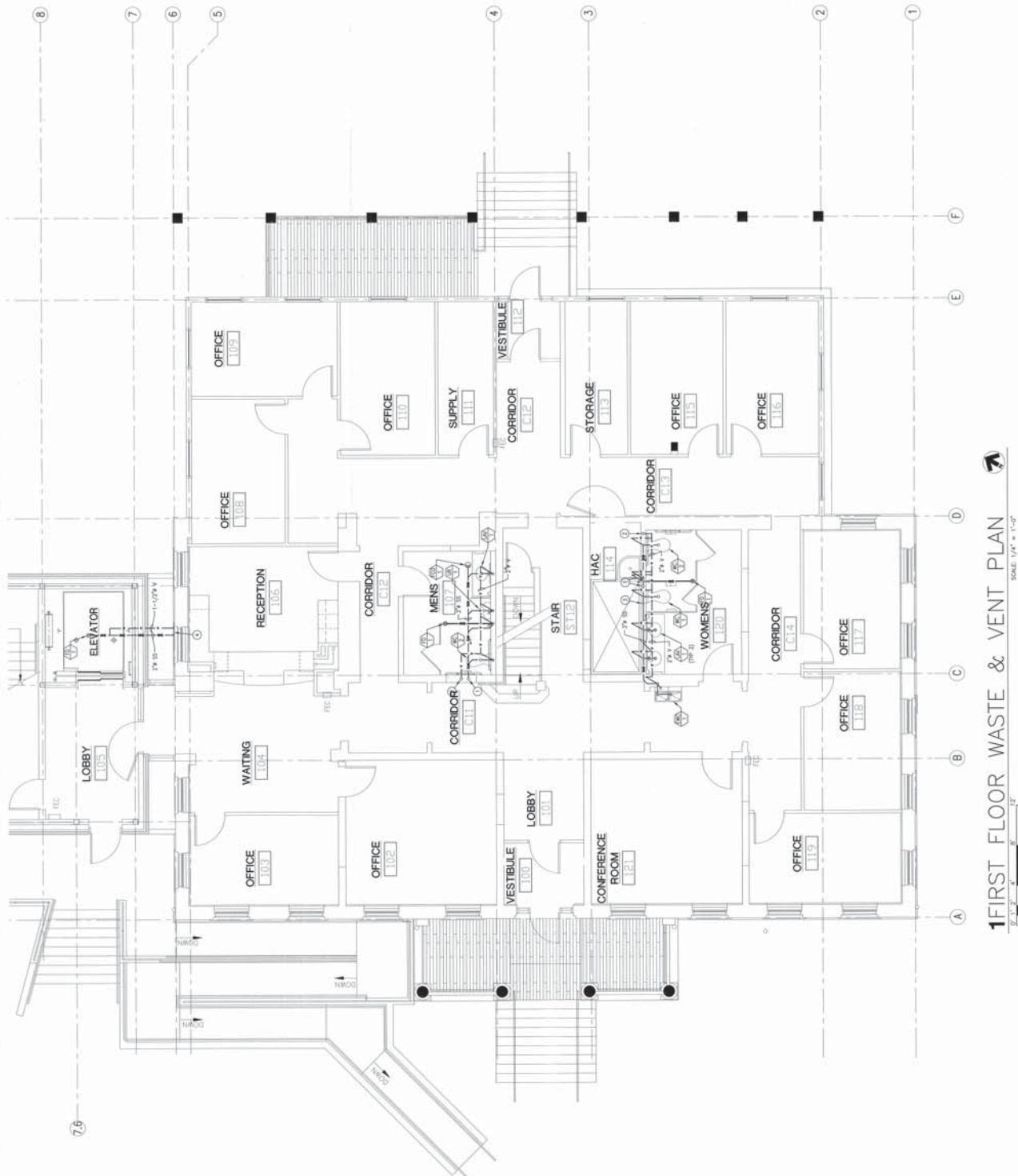


GENERAL NOTES:

- A. LUVIT A/C 25,000 BTU/HOUR COOLING, 8,000 BTU/HOUR HEATING, 1/4" PER FOOT PER FT².
- B. ALL CONDUITS PIPES & ETC. min. 17/8" INCHES MINIMUM DIAMETER.
- C. LOCATION OF ALL CONDUITS, PIPES, ETC. AS WELL AS ALL APPARATUS, EQUIPMENT, AND FIXTURES, AS WELL AS THE LOCATION OF ALL ELECTRICAL OUTLETS, SHALL BE STATED IN WRITING AND PLACED WITHIN THE MECHANICAL CONTRACTOR.
- D. REFER TO THE MECHANICAL PLANS FOR LEADERS AND DUCTWORK LOCATIONS.
- E. PIPE PONTEKINGS SHOULD NOT PASS THROUGH THE MECHANICAL CONTRACTOR.
- F. CONTRACTOR SHALL MAKE THE INSTALLATION OF ALL AIR AND VENT DUCTS AND DUCTWORK CONDUCTIVE, DURABLE, AND WATERPROOF. REFER TO THE MECHANICAL CONTRACTOR FOR DETAILED REQUIREMENTS.
- G. ALL THIN SHELL INSULATED DUCTS, SUCH AS FOR DUCTING, DUCTING, SPACING, MAINTENANCE, AND CLEANING, SHALL BE EASILY AND SAFELY ACCESSIBLE BY THE USE OF NORMAL TOOLS. EXEMPTIONS OF THESE ITEMS INCLUDING, BUT NOT LIMITED TO, DUCTS WHICH ARE LOCATED IN WALLS, CEILINGS, OR FLOORS, PROVIDED THAT THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND RELOCATION OF THESE DUCTS. ALL DUCTS SHALL BE DURABLE, WATERPROOF, AND DUST-PROOF. REFER TO THE MECHANICAL CONTRACTOR FOR DETAILED REQUIREMENTS.
- H. REFER TO DRAWING #3 FOR ALL ELECTRICAL SPLICE'S AND JUNCTION BOXES.
- I. USE OF PLASTIC CONDUIT, CONCRETE, TUBE, OR CEMENT, SPEC. SEE DRAWING NO. 101.

SHEET NOTES:

- 1. * 55' DOWN FROM SECOND FLOOR TO FIRST FLOOR. RE: P21-1 AND P22-1 FOR CONTRACTOR.
- 2. 3' 9" UP TO SECOND FLOOR. RE: P22-1 FOR CONTRACTOR.
- 3. 3' 9" UP TO FLOOR JACKS AND ELECTRIC METER CUPBOARD IN WALL, AND FROM FLOOR JACKS TO FLOOR JACKS AND FROM FLOOR JACKS TO THE WALL CONTRACTOR.
- 4. 3' 9" SS AND 1'-7/8" V THROUGH FRAGMENT WALL. RE: P21-1 / P22-1 FOR CONTRACTOR.



FIRST FLOOR WASTE & VENT PLAN

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

| | | | |
|--|-----------------------------|---|--|
| STAMP | CSHEA | DATE ISSUED: 04/05/11 | EXPIRE DATE: 08/05/11 |
| FOR R. M. SHERMAN, P.A. | 11439 | REF ID: WMC-531-10-11-A-P22 | PROJECT NO.: 531-10-114 |
| 333 EAST 5TH STREET, SUITE 1000 MINNEAPOLIS, MN 55402-3000 PHONE: 612.332.5000 FAX: 612.332.5000 | 11439 | WATER & SEWER WATER & SEWER WATER & SEWER | PRINTED DATE: 04/05/2011 |
| 2615 E. 3RD ST., STE. 1000 MINNEAPOLIS, MN 55401-2000 (612) 344-4405, (612) 344-8588 http://www.cshea.com | | APPROVED: CHIEF PLUMBER APPROVED: MECHANICAL DIRECTOR APPROVED: ELECTRICAL DIRECTOR | APPROVED: MECHANICAL DIRECTOR APPROVED: ELECTRICAL DIRECTOR |
| DATE: 04/05/11 | APPROVED: VANC BOISE, IDAHO | APPROVED: VANC BOISE, IDAHO | APPROVED: VANC BOISE, IDAHO |

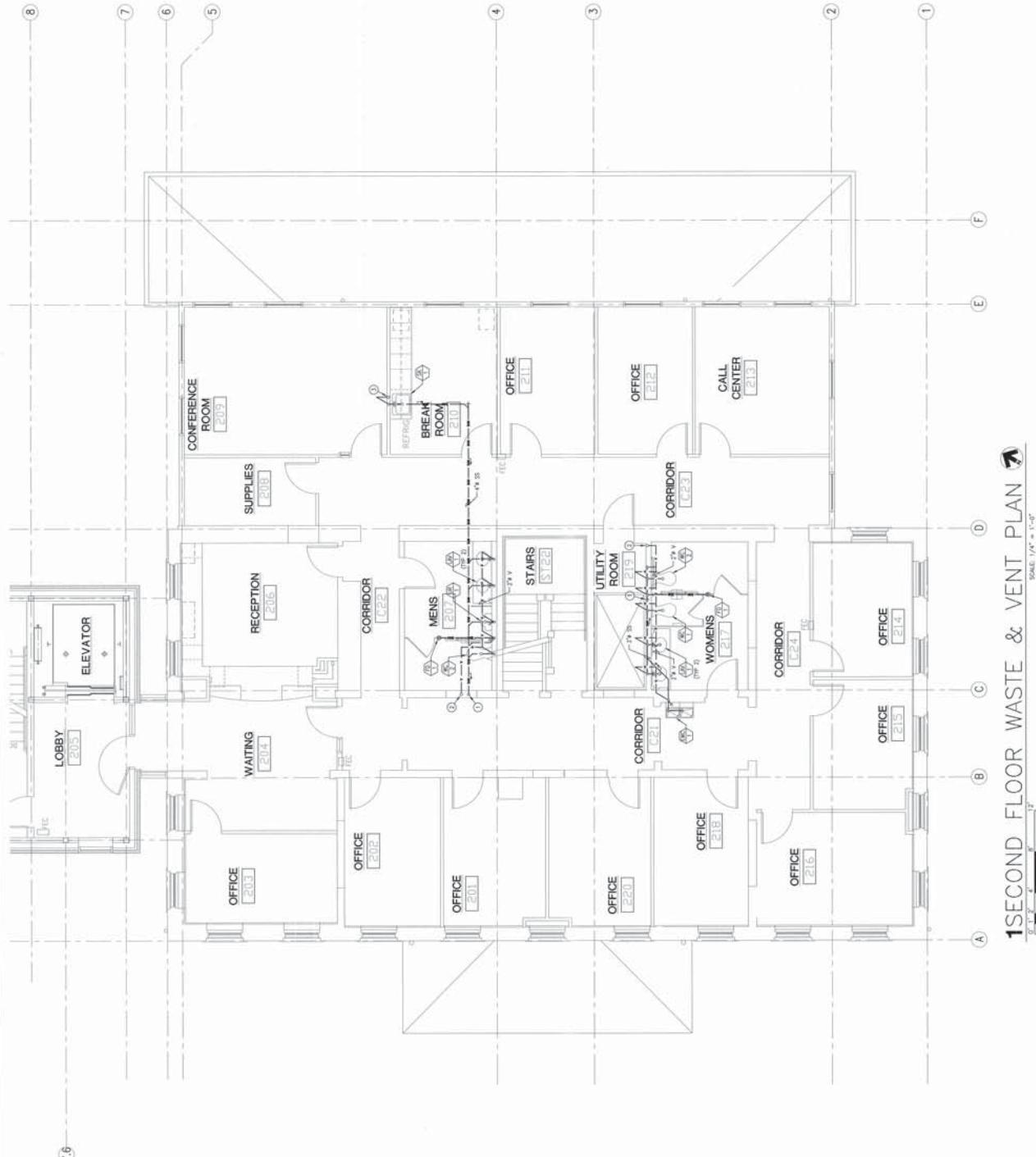
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|--|-----------------------------|--|--|
| STAMP | V | DATE ISSUED: 04/05/11 | EXPIRE DATE: 08/05/11 |
| FOR R. M. SHERMAN, P.A. | 11439 | REF ID: WMC-531-10-11-B-P22 | PROJECT NO.: 531-10-114 |
| 333 EAST 5TH STREET, SUITE 1000 MINNEAPOLIS, MN 55402-3000 PHONE: 612.332.5000 FAX: 612.332.5000 | 11439 | WATER & SEWER WATER & SEWER WATER & SEWER | PRINTED DATE: 04/05/2011 |
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| APPROVED: VANC BOISE, IDAHO | APPROVED: VANC BOISE, IDAHO | APPROVED: VANC BOISE, IDAHO | APPROVED: VANC BOISE, IDAHO |

GENERAL NOTES:

- A. USE ALL 30° VAV AND CONDUITE SPRINGS AT 20.8 mm (1/4" PER FOOT) FOR ALL RELEASABLE DIFFUSERS.
- B. ALL CONDUITE SPRINGS AT 25.4 mm (1/2" INCHES) UNLESS NOTED OTHERWISE.
- C. LOCATIONS OF DUCTS ARE TO BE REFERRED TO THE MECHANICAL CONTRACTOR FOR ALL DUCTS LOCATED ON THE ROOF OR IN THE ATTIC.
- D. REFER TO THE MECHANICAL PLANS FOR STANDOFF AND EJECTION LOCATIONS BEFORE RETAINING ANY PLATES, COORDINATE WITH THE MECHANICAL CONTRACTOR.
- E. SPRAY FOUNTAINS THROUGH INLET GOURDS SHALL BE PRESCRIBED IN ACCORDANCE WITH 2006 IBC SECTION 712.
- F. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PLACEMENT AND SUPPORT OF ALL EXHAUST DUCTS, AIR DUCTS, AND DUCTS LOCATED ON THE ROOF OR IN THE ATTIC.
- G. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PLACEMENT AND SUPPORT OF ALL EXHAUST DUCTS, AIR DUCTS, AND DUCTS LOCATED ON THE ROOF OR IN THE ATTIC.
- H. REFER TO LUMBER 4.1 FOR ALL PLUMBING DETAILS THAT ARE NOT INDICATED.
- I. USE THE FOLLOWING CONVENTIONAL NAME TO CONDUIT ALL PIPE: 2023 FROM ENGLISH METRIC UNITS

❶ SHEET NOTES:

1. 4" V UP TO FIRST FLOOR, IE: P2+1 FOR CONTINUATION.
2. 2" V DOWN FIRST FLOOR TO THIRD FLOOR, IE: P2+1 AND P2+1-1 FOR CONTINUATION.
3. 2" V UP TO THIRD FLOOR, IE: P2+1 FOR CONTINUATION.



1 SECOND FLOOR WASTE & VENT PLAN

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

| | | | |
|---|---|---|---|
| CSHEA <small>CSHEA CONSULTING HAZARD & ENVIRONMENTAL ENGINEERS</small> | 14-30 <small>14-30-10-11-SEC FLR 14-30-10-11-SEC FLR 14-30-10-11-SEC FLR</small> | DOE FILE: WAC-531-10-11-P2.3 <small>531-10-11-SEC FLR 531-10-11-SEC FLR 531-10-11-SEC FLR</small> | DOE FILE: WAC-531-10-11-P2.3 <small>531-10-11-SEC FLR 531-10-11-SEC FLR 531-10-11-SEC FLR</small> |
| <small>DOE FILE: WAC-531-10-11-P2.3</small> <small>531-10-11-SEC FLR 531-10-11-SEC FLR 531-10-11-SEC FLR</small> |

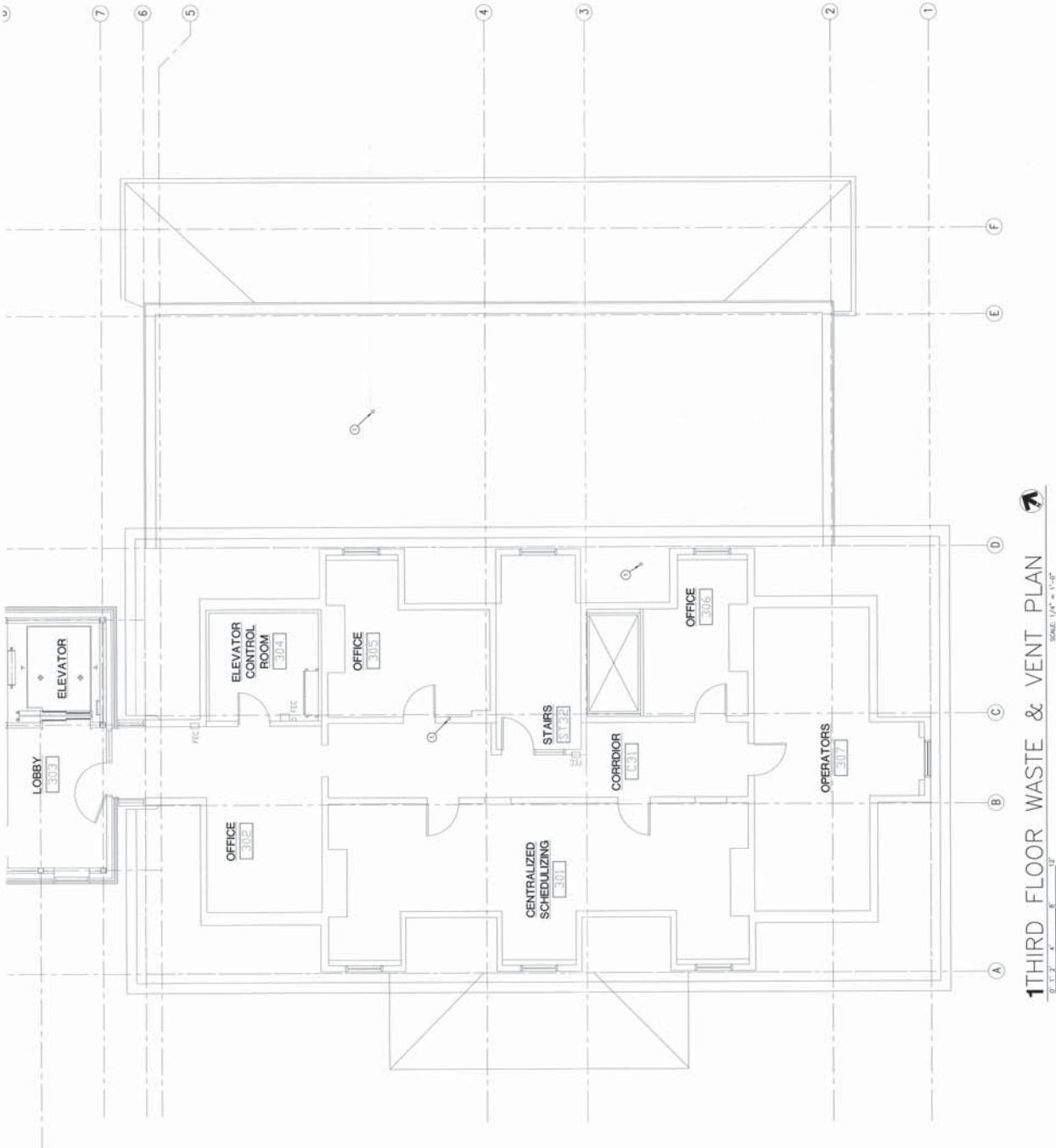
| | |
|--|--|
| VAMC PHASE II: BUILDING 33 <small>RENOVATION</small> | DATE: 08/05/11 <small>PROJECT NO: 531-10-11-4</small> |
| <small>BUILDING NUMBER: 33</small> <small>STRUCTURE NUMBER: 33</small> <small>APPROVED BY: VAMC BLDG. DIR/DAHO</small> | <small>PERMIT NUMBER: 531-10-11-4</small> <small>PERMIT DATE: 08/05/11</small> <small>APPROVED BY: VAMC BLDG. DIR/DAHO</small> |
| <small>SECTION: 71-101</small> | <small>SECTION: 71-101</small> |



GENERAL NOTES:

④ SHEET NOTES:

1. 2% VENT FROM SECOND FLOOR UP TO A 3" VENT THROUGH ROOF, RC: P2-3-1
FIRE CONTRIBUTOR



11THIRD FLOOR WASTE & VENT PLAN

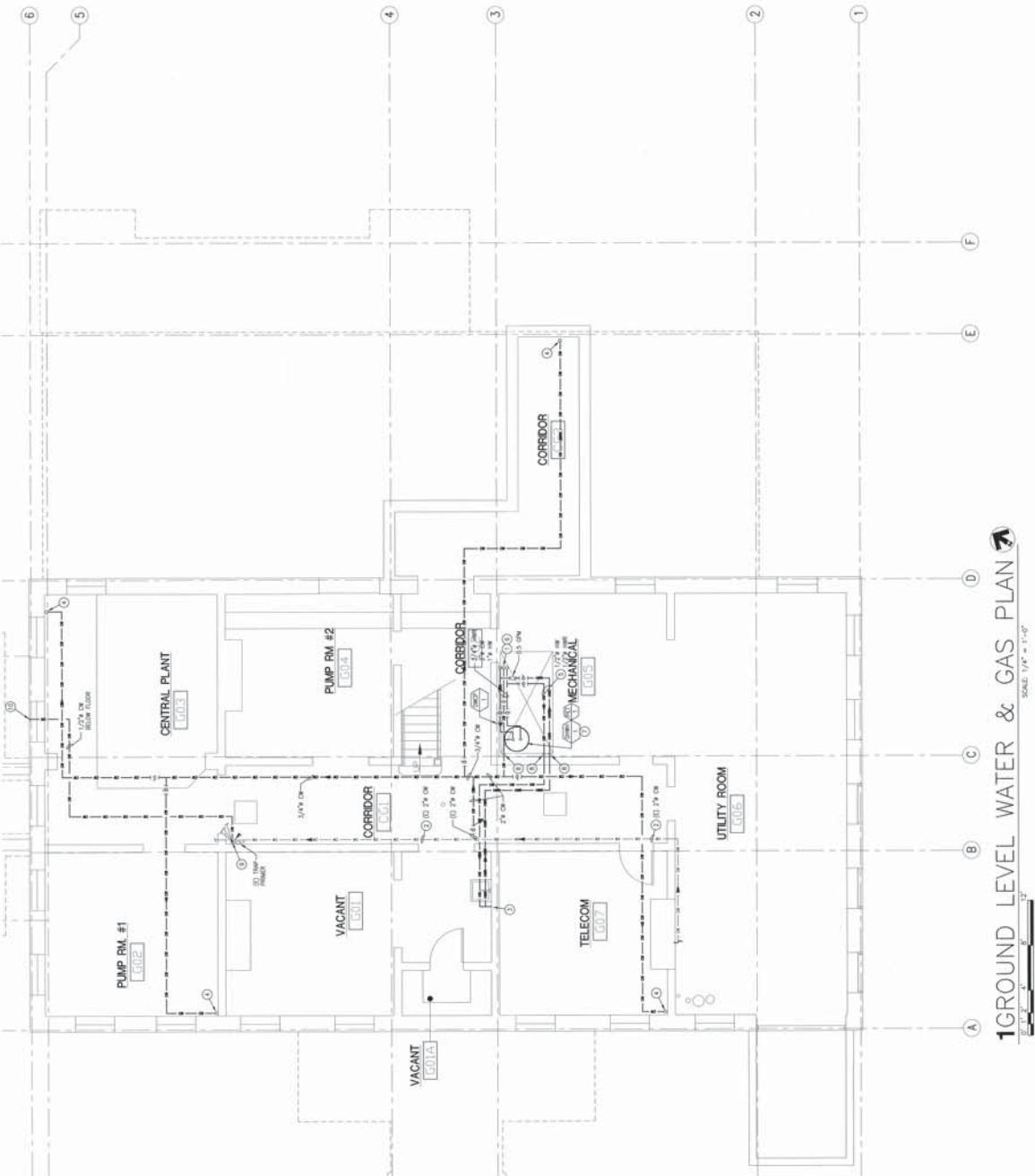
SCALE: 1/4" = 1'-0"



GENERAL NOTES:

SHEET NOTES:

1. SET UP TPI-7 OR TPI-11 TO FIRST DOOR; NO. P42-1 FOR
2. EXISTING OR NEW CONSTRUCTION UNDER THE RELATED EXHIBITION PRODUCT.
 3. CONNECT 1/2" PEX TO EXISTING SINK.
 4. SET UP TPI-7 OR TPI-11 TO FIRST DOOR; NO. P42-1 FOR COMMUNICATION.
 5. INSTALL ALL METER PRIMED TUBE TO ECLIPS.
 6. HE-131 OR P13-17 FOR PIPE EXPANDING THROUGH WALL DETAILS
(TUBE SHAMPS).
 7. HE-131 FOR FAUCET MOUNT WATER FLOWING TUBING.
8. GROUP FAUCET DOWN TO 1/2" PEX AND PEX UNDER SUCHEM IN MECHANICAL
9. SHOWER. P13-17 OR COLD EJECTING SWAN FAUCET SHOWER AND ROPE BELOW
10. ROUTE PEX TO ELIMINATE ANY FLUDE DRAIN TANK CONNECTION HC
11. PEX-100 FOR CIRCULATION.



1 GROUND LEVEL WATER & GAS PLAN



| | | | | | |
|---|--|---|--|------------------------------|--|
| 14_P2.5 | | PROJECT NO. VANIC PHASE II: BUILDING 33 RENOVATION | | DATE 08/05/11 | |
| PROJECT TITLE GROUND LEVEL WATER & GAS PLAN | | PROJECT NUMBER 531-10-114 | | PRODUCT NO. | |
| PRINCIPAL UNIT OF FACILITY MANAGEMENT: BANCOR | | MANAGING PARTNER: J. J. SIEBEL | | SPECIES: | |
| APPROVED: RODOLFO GUTIERREZ | | APPROVED: VANIC BOUSE, IDAHO | | P2.5 7.3 or 10.1 spec. | |



7A 102 38

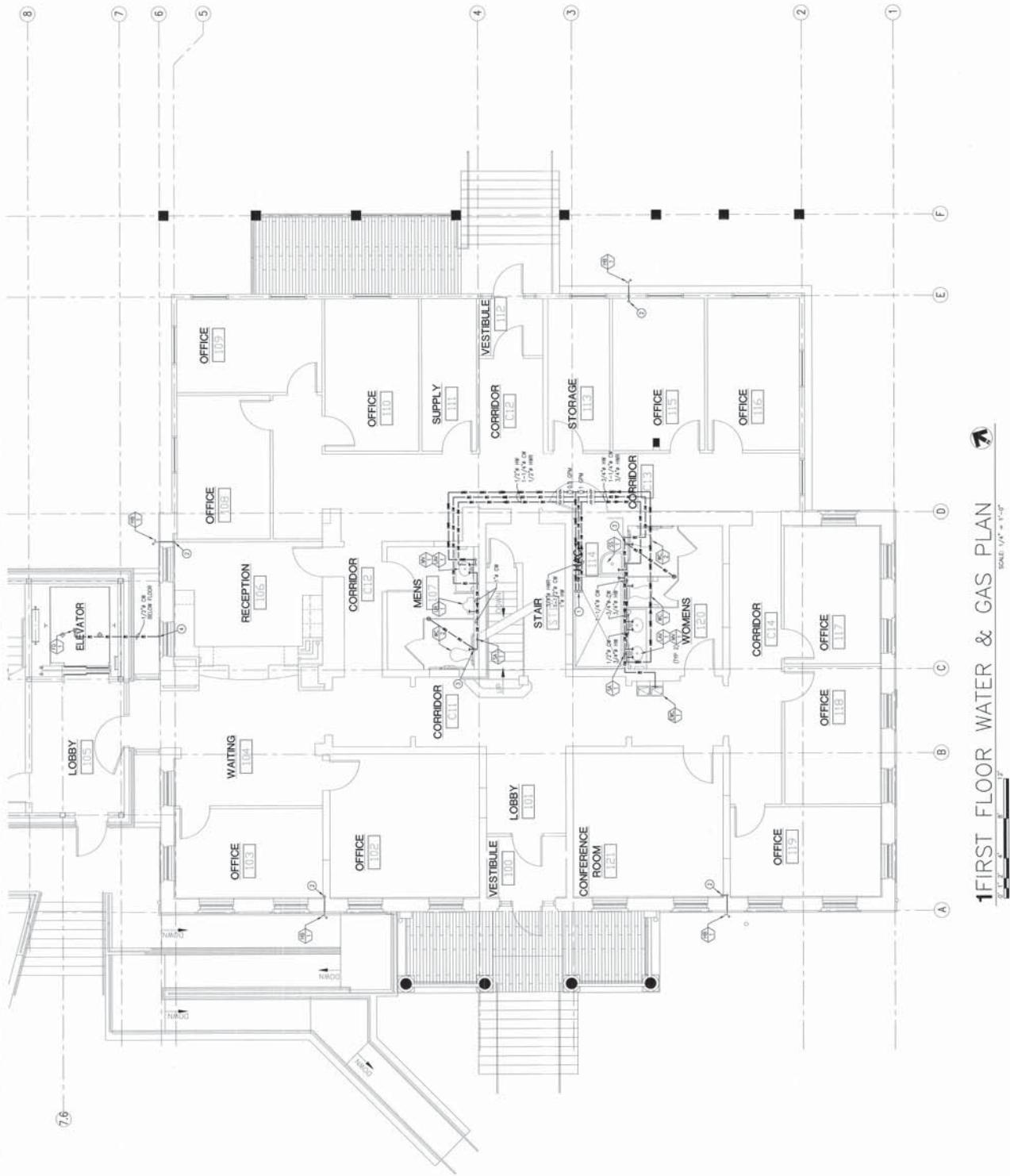
CSHEA

GENERAL NOTES:

- REF TO THE TECHNICAL PLANS FOR EQUIPMENT AND DISTRIBUTION LOCATIONS
FOR THE SYSTEMS, PROVIDED BY THE ORIGINAL CONTRACTOR.
FURNISH ENGINEERS, THROUGH TESTED ASSOCIATES SHALL BE FURNISHED IN
CONNECTION WITH THE DESIGN OF THE SYSTEM, TO THE END THAT THE APPROVAL
OF THE SYSTEMS, PROVIDED BY THE ORIGINAL CONTRACTOR, IS SECURED.
CONTRACTUAL AGREEMENTS, WHICH ARE MADE IN CONNECTION WITH THE
MANUFACTURE AND DELIVERY OF THE SYSTEMS, PROVIDED BY THE ORIGINAL
CONTRACTOR, SHALL NOT BE DEEMED TO INCLUDE THE FURNISHING OF THE
STANDARD EQUIPMENT, WHICH IS PROVIDED BY THE ORIGINAL CONTRACTOR,
EXCEPT AS PROVIDED IN THE CONTRACTUAL AGREEMENTS. THE SYSTEMS PROVIDED
BY THE ORIGINAL CONTRACTOR, SHALL NOT BE DEEMED TO INCLUDE THE
MANUFACTURE, ASSEMBLY, TEST, AND OTHER SERVICES WHICH ARE PROVIDED
BY THE FURNISHERS OF THE EQUIPMENT, WHICH IS PROVIDED BY THE ORIGINAL
CONTRACTOR, EXCEPT AS PROVIDED IN THE CONTRACTUAL AGREEMENTS.
THE SYSTEMS PROVIDED BY THE ORIGINAL CONTRACTOR, SHALL NOT BE DEEMED
TO INCLUDE THE FURNISHING OF THE EQUIPMENT, WHICH IS PROVIDED BY THE
ORIGINAL CONTRACTOR, EXCEPT AS PROVIDED IN THE CONTRACTUAL AGREEMENTS.
THE SYSTEMS PROVIDED BY THE ORIGINAL CONTRACTOR, SHALL NOT BE DEEMED
TO INCLUDE THE FURNISHING OF THE EQUIPMENT, WHICH IS PROVIDED BY THE
ORIGINAL CONTRACTOR, EXCEPT AS PROVIDED IN THE CONTRACTUAL AGREEMENTS.

SHEET NOTES:

- 3/4" IN. H.D. 27' ON. AND 1 1/2" IN. FROM GROUND LEVEL, TENSION TO 100% AND ROTATE TO SECOND FLOOR, RE: P1.2-1 AND P2.2-1 F/P CONSTRUCTION.
 - 1 1/2" IN. H.D. 27' ON. FROM GROUND LEVEL, RE: P1.5-1 FOR CONSTRUCTION.
 - 1 1/2" IN. H.D. 27' ON. FROM WHITE CLOSET TWIN PRIMER DISTER ASSEMBLY WALL TO FLLOOR DRAIN TWIN PRIMER CONNECTION, RE: P1.4 FOR TRAP PRIMER IN FLLOOR WINE BOTTLE.
 - 1 1/2" IN. H.D. 27' ON. TO ELEVATOR PI FLOOR DRAIN TWIN PRIMER CONNECTION, RE: P1.5-1 FOR CONSTRUCTION.



1 FIRST FLOOR WATER & GAS PLAN
SCALE: 1/4" = 1'-0"

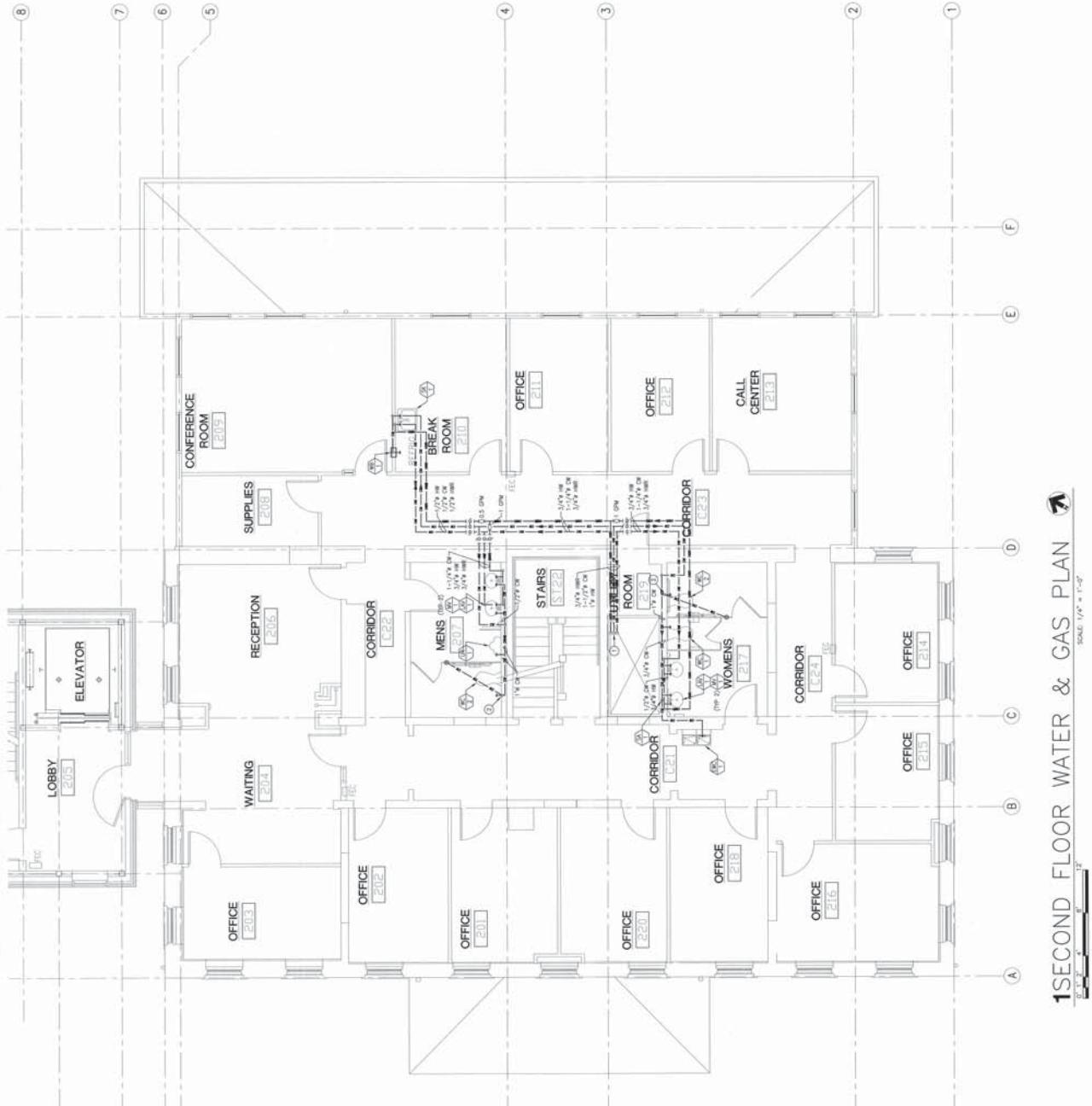
GENERAL NOTES:

SHEET NOTES:

1. 5/8" X 1/2" X 7/8" OR, AND, 1" X 1/2" UP THROW FIRST FLOOR P2A-1 FOR
CONNECTION.

2. ROUTE 1/2" X 7/8" CM FROM WAIER CLOSET TRAP PRIMER (WATERFALL ASSEMBLY DOWN
IN WALL) TO FLOOR DRAIN TRAP PRIMER CONNECTION, RE: P1-5 FOR TRAP
PRIMER AT TRAP VALVE DOWNT.

88



11 SECOND FLOOR WATER & GAS PLAN



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