AGENDA
Cleburne County Quorum Court
Thursday, April 9, 2020
6:00 p.m.

Cleburne County Court
922 South 9th Street
Heber Springs, AR 72543

1. **Call to Order, Roll Call:**

2. **Reading, Correction, and Disposition of Minutes:**

3. **Report of Treasurer:**

4. **Report of Committees:**

5. **Unfinished Business:**
   a. None

6. **New Business:**
   a. Proposed Resolution No. 2020-AHPP Grant for the Cleburne County Courthouse-**JP Evans**
   b. Proposed Ordinance No. 2020-COVID-19 Public Health Emergency-**JP Pearson**

7. **Comments from the Public:**

8. **Announcements:**
   a. Next Regular Quorum Court Meeting Thursday, May 14, 2020.

9. **Adjournment:**

CLEBURNE COUNTY QUORUM COURT JOURNAL OF PROCEEDINGS

March 12, 2020

The Cleburne County Quorum Court met in regular session in the County Court Building, 922 South 9th Street, Heber Springs, Arkansas. The meeting was called to order at 6:02 p.m. County Judge Jerry Holmes presided. PRESENT: Pearson, Henegar, Caldwell, Blackburn, Malone, Evans, Gracey, Foust, Grace, Roberts, Owens. ABSENT: None.

READING, CORRECTION, AND DISPOSITION OF MINUTES:

Motion was made by JP Malone to approve the minutes of the February 13, 2020 regular meeting, seconded by JP Grace. Voice vote, motion carried unanimously.

REPORT OF TREASURER:

Motion was made by JP Grace to accept the Treasurer's report, seconded by JP Henegar. Voice vote, motion carried unanimously.

REPORT OF COMMITTEES:

Jail Administrator, Tony McHan, reported the jail is currently at 38 in-house, transferred 13 ADC last week, 4 are on waiting list to be moved. Currently paying for 11 females in White County. JP Foust asked if the Jail Committee could meet. JP Evans advised he would get the meeting scheduled. Judge Holmes advised the committee would keep the same members.

UNFINISHED BUSINESS:

JP Pearson withdrew the Proposed Ordinance 2020-Bill of Rights.

NEW BUSINESS:

Proposed Resolution 2020-Bill of Rights.

JP Pearson introduced a Resolution: **"A RESOLUTION AFFIRMING CLEBURNE COUNTY'S EFFORT TO "GUARD AGAINST ANY ENCROACHMENT ON" INDIVIDUAL LIBERTY RIGHTS ENUMERATED IN THE U.S. BILL OF RIGHTS AND THE ARKANSAS DECLARATION OF RIGHTS, INCLUDING BUT NOT LIMITED TO THE RIGHT TO "KEEP AND BEAR ARMS" ."**

JP Pearson made a motion to adopt the Resolution, seconded by JP Grace. Discussion followed. Roll call was taken. Ayes: Blackburn, Caldwell, Evans, Foust, Grace, Gracey, Henegar, Malone, Owens, Pearson, Roberts. Nay's: None. **Passed and adopted as Resolution 2020-002.**

Proposed Resolution 2020-Historic Preservation Restoration Grant Program.

JP Grace introduced a Resolution: **"A RESOLUTION ACKNOWLEDGING THAT THE CLEBURNE COUNTY HISTORICAL SOCIETY HAS THE AUTHORITY TO ADD AN ELEVATOR TO THE OLD POST OFFICE BUILDING IF THEY ARE AWARDED THE HISTORIC PRESERVATION GRANT ."**

JP Grace made a motion to adopt the Resolution, seconded by JP Roberts. Brief discussion was held. Roll call was taken. Ayes: Blackburn, Caldwell, Evans, Foust, Grace, Gracey, Henegar, Malone, Owens, Pearson, Roberts. Nay's: None. **Passed and adopted as Resolution 2020-003.**

Proposed Ordinance No.2020-2019 Budget Clean-up.

JP Malone introduced an Ordinance: **BE IT ENACTED BY THE QUORUM COURT OF THE COUNTY OF CLEBURNE, STATE OF ARKANSAS; AN ORDINANCE TO BE ENTITLED: "AN APPROPRIATION ORDINANCE AMENDING ORDINANCE NO. 2018-026, WHICH ADOPTED THE BUDGET FOR CALENDAR YEAR 2019 AND/OR OTHER PURPOSES."**

JP Malone made a motion to adopt this Ordinance by reference with a copy available in the County Clerk's Office, seconded by JP Roberts. Discussion was held. Ayes: Blackburn, Caldwell, Evans, Foust, Grace, Gracey, Henegar, Malone, Owens, Pearson, Roberts. Nays: None. **Passed and adopted as Ordinance 2020-008.**

Proposed Ordinance No. 2020-Transferring Additional Funds from County General to the Capital Projects Fund

JP Henegar introduced an Ordinance: **BE IT ENACTED BY THE QUORUM COURT OF THE COUNTY OF CLEBURNE, STATE OF ARKANSAS; AN ORDINANCE TO BE ENTITLED: "AN APPROPRIATION ORDINANCE TRANSFERRING ADDITIONAL FUNDS FROM COUNTY GENERAL TO THE CAPITAL PROJECTS FUND."**

JP Henegar made a motion to adopt the Ordinance, seconded by JP Roberts. Discussion was held. Ayes: Blackburn, Caldwell, Evans, Foust, Grace, Gracey, Henegar, Malone, Owens, Pearson, Roberts. Nays: None. **Passed and adopted as Ordinance 2020-009.**

JP Evans reported Sheriff Brown inquired about a $6,000.00 Part-Time line item that was not included in the 2020 Sheriff Budget. JP Evans advised he would do some research to see if anything needed to be brought before the Court.

COMMENTS FROM THE PUBLIC:

- Public member inquired as to a plan concerning the COVID-19 virus. Various responses were given as to the inquiry.

ANNOUNCEMENTS:

- The April regular Quorum Court meeting will be held Thursday, April 9, 2020.
- JP Caldwell announced the Bobby Mooney Memorial Fund Raiser Challenge will run from May 25, 2020 to November 26, 2020.
- Judge Holmes announced the Senior Citizen Annual Fish Fry has been postponed to June 5, 2020.

ADJOURNMENT:

JP Caldwell made motion to adjourn, seconded by JP Grace. Meeting adjourned at 6:51 p.m.

ATTESTED:

_____

Rachelle Evans, Cleburne County Clerk

This _____day of _____, 2020 Book _____Page(s)_____

PROPOSED RESOLUTION NO. 2020-AHPP GRANT FOR THE CLEBURNE COUNTY COURTHOUSE

A RESOLUTION FOR THE PURPOSE OF SHOWING CLEBURNE COUNTY'S COMMITMENT TO THE AHPP GRANT FOR THE DEMOLITION AND INSTALLATION OF A NEW HVAC SYSTEM FOR THE CLEBURNE COUNTY COURTHOUSE.

WHEREAS, the Quorum Court of Cleburne County has determined that the current HVAC system at the Cleburne County Courthouse located at 301 West Main Street in Heber Springs is in ill repair and is in need of being replaced; and,

WHEREAS, the Cleburne County Quorum Court is committed to getting this project completed; and,

WHEREAS, the Cleburne County Quorum Court is willing to match $250,000 of grant funds if awarded by AHPP-FY21 County Courthouse Restoration Grant.

THEREFORE, BE IT RESOLVED:

The County Judge of Cleburne County is hereby authorized to let the Arkansas Historic Preservation Program (AHPP) know that Cleburne County intends and will match $250,000 if awarded by AHPP-FY21 County Courthouse Restoration Grant for executing the proposed project described herein and that the County Judge or Treasurer of Cleburne County is further authorized to administer the funds for the same project if awarded upon proper appropriation by the Quorum Court.

PASSED AND ADOPTED this 9th day of April 2020.

ATTEST: **APPROVED**:

Rachelle Evans, Cleburne County Clerk

Jerry Holmes, Cleburne County Judge

Recorded: Book _____ Page(s) _____

BE IT ORDAINED BY THE QUORUM COURT OF THE COUNTY OF CLEBURNE, STATE OF ARKANSAS; AN ORDINANCE TO BE ENTITLED: "AN EMERGENCY ORDINANCE TO ADDRESS LEAVE POLICIES IN TIMES OF A PUBLIC-HEALTH EMERGENCY DECLARED BY THE GOVERNOR OF THE STATE OF ARKANSAS".

WHEREAS, Governor Asa Hutchinson has declared a public-health emergency due to the COVID-19 virus entering Arkansas, and

WHEREAS, quarantine is one of the recommended management tools by the CDC to prevent the spread of COVID-19, and

WHEREAS, the quarantine period recommended by the CDC is fourteen days from the date of exposure, and

WHEREAS, it is in the best interest of the County, it's employees, and the public, that persons who have been exposed to COVID-19 or who have been diagnosed with COVID-19 be able to remain in quarantine for the full fourteen-day period, and

WHEREAS, the County is attempting to ensure employees are able to remain in quarantine for the full fourteen-day period, or are able to remain in quarantine after having a confirmed case of COVID-19, without suffering undue hardship which may be created by limited availability of leave.

NOW, THEREFORE IT IS HEREBY ORDAINED AND ADOPTED:

1) During the state of public health emergency declared by the Governor due to COVID-19, the following rules will be in place:

2) Employees who are placed on a quarantine period of fourteen days or less, either by their physician, Arkansas Department of Health, or by their elected official, shall be paid for the quarantine period, up to fourteen days. This paid time shall not be taken out of any leave bank of the employee. For physician-imposed or Arkansas Department of Health quarantine, the employee must provide documentation from that office sufficient to satisfy the supervisor of said employee.

   a. The elected official may use their discretion to identify an employee subject to quarantine based on identified risk factors as explained by the CDC, or based on fact specific information related to travel locations, or high-risk transmission settings, or personal contact with a presumptive case of COVID-19.

3) Employees who are diagnosed with COVID-19 shall not return to work for up to fourteen days from initial diagnosis. A medical release shall be required from the physician or physician's office, or Arkansas Department of Health, who originally diagnosed the employee. An employee who has been diagnosed with COVID-19 shall be paid for up to fourteen days, from the date of diagnosis, or until they are released to return to work. This paid time shall not be taken out of any leave bank of the employee.

4) Employees who do not qualify for sections 2, 3, or 4 of this Ordinance, but who have a school-aged child, who has experienced a school closing or mandatory quarantine, may choose to stay home with their child without being subject to discipline for attendance.

   a. Employees who choose to stay home under this option are required to use any accrued paid time off, including sick leave, vacation leave, comp time, and personal time off.

   b. Once paid time off has been exhausted, the employee may accrue a deficit balance to the extent necessary to accommodate the school closing.

5) Employees who choose to take time off during this declared public-health emergency for any reason other than those listed above, are still subject to the regular leave provisions as outlined in the Cleburne County Personnel Policy.

EMERGENCY CLAUSE

There is significant risk to public health and safety posed by the spread of COVID-19. The Cleburne County Quorum Court has determined that this Ordinance is necessary to help prevent the spread of the illness within the County and to members of the general public who may visit county offices. Therefore, an emergency is hereby declared to exist, and this Ordinance, being necessary for the preservation of public health, safety and welfare, shall be effective from and after its date of passage.

PASSED AND ADOPTED this 9th day of April 2020.

ATTEST: **APPROVED:**

Rachelle Evans, Cleburne County Clerk

Jerry Holmes, Cleburne County Judge

Recorded: Book _____ Page(s) _____

Judge Holmes requested that I prepare some information on the Proposed Resolution for the Courthouse HVAC system. If you have any questions, please call the Judge's Office prior to the Quorum Court meeting.

Explanation:
The HVAC system in the Courthouse on Main Street is in ill repair and has been for some time. Some parts of it are over 50 years old. The current system is unable to provide adequate cooling during the summer and will give out all together at times. Those that maintain the system feel that something needs to be done as soon as possible as we are reaching the stage of not being able to acquire parts.

We are bringing this Resolution to the table as an option for the Court to consider. The Courthouse is on the Historical Registry, so it qualifies for an Arkansas Historic Preservation Program Grant. I submitted for this grant back in January. The cost of the demolition of the current system (it must be removed to make room for the new system) and the new HVAC system once reviewed by the architect, engineers, and heat and air professionals- estimated at $625,056.98. After bids go out it could be less. I received a phone call on March 26th that the Arkansas Historical Preservation Program would not consider the grant unless the County was willing to match funding due to the cost of the project. (Normally we phase projects out to keep the cost down but due to the nature of this project that is not attainable. If you remove the old HVAC system, it is mandatory to have the new HVAC system.) After speaking in length to several people at the AHPP and White River Planning the best way to approach this is to get a Resolution from the Quorum Court to give to AHPP for when they meet to discuss the grant application we submitted. I must have the Resolution by April 27th no later. The Resolution is for $250,000 matching funds as this is the most that AHPP would be willing to give due to the number of requests they received and their budget. We have no guarantee that they will award us the grant but if the County is not willing to match funds, they will not consider it. If we can get $250,000 from AHPP and the County would be willing to do $250,0000 there is an additional $96,676.89 that I have left over from a previous grant that I can request for this grant. There is also another USDA grant we can apply for that we should qualify to get for $50,000. This would get us to the amount needed for this project.

AHPP-FY21 County Courthouse Grant $250,000
Cleburne County Match $250,000
AHPP carry over $96,676.89
USDA Grant $50,000
Total: $646,676.89

There is another option (Option #2) to get a new HVAC system. However, it would require us being taken off the Historical Registry due to it not keeping to the Arkansas Historic Preservation Program guidelines. The Courthouse being on the Historical Registry enables the County to apply for grants every year through the Arkansas Historic Preservation Project. Judge Holmes requested I compile a list of grants the County has received to date from the Arkansas Historic Preservation Program for the Courthouse. He also asked me to compile a list of upcoming projects that are or will be needed in the future that the Arkansas Historic Preservation Program

could possibly help us fund. Every year that we have requested funds, we have received them. That does not mean we will every year, but this affords the County an opportunity to save money while maintaining the Courthouse.

We requested that the current heat and air provider we use to maintain the HVAC system at the Courthouse get us some information on the option of just doing split units for all the offices (Option #2). He looked into it for us and after speaking with the Daikin engineer it is a possibility. However, due to the line-set run restrictions the only way to do this system would be to have 25 to 30 units attached to the exterior sides of the Courthouse. I have attached his letter to this email for you to review.

Attachment 1- Reasoning behind the HVAC Systems that were chosen for the Courthouse and why (Bernhard/TME Engineering)
Attachment 2-How this system differs from the system at the Court Building at 922 S 9th Street
Attachment 3-Detailed Project Budget
Attachment 4- Information on the current system and the proposed new system in detail.
Attachment 5-Grant award total and Upcoming projects
Attachment 6-Letter from Affordable Heat & Air on the options

Sincerely,

Rebekah Knew

Attachment 1

Reasoning behind the HVAC Systems that were chosen for the Courthouse and why they (Bernhard/ TME Engineering) think it is best to have two systems:

We split the HVAC System serving the Courtroom and the remainder of the Courthouse into two system types (VRF and Split System Heat Pump) for the reasons listed below. As our narrative stated, the VRF System would be sized to serve all spaces (except for the Courtroom) and the Split System Heat Pump would be sized to serve just the Courtroom. A VRF (Variable Refrigerant Flow) System is a very efficient system that is capable of providing simultaneous heating and cooling to various parts of a building through a network of refrigerant piping, which is ideal for buildings with multiple HVAC Zones. On the other hand, a split system heat pump is idea for a single zone when either heating or cooling is required.

1. ***Two Different Occupancy Schedules***
    a. ***The schedule of the Courthouse is far different than that of the Courtroom. Since the Courthouse is occupied 40+ hours a week and the Courtroom is occupied (on average) less than 10 hours a week, it made sense for us to not size the VRF System for the entire building (including the Courtroom) as it would hardly ever operate at a condition in which it would be required to be sized for.***
2. ***Lower Initial Cost***
    a. ***By serving the Courtroom by a split system heat pump (in lieu of the VRF System), the overall cost / ton (capacity) is less. Due to the limited use of the Courthouse, it didn't make sense to have the County spend more on an HVAC System that's usage is very low. To be clear, the split system heat pump will not impact occupant comfort. It is a system that is not as efficient, during partial load, as the VRF System due to its' inability to turn down. The EER (Energy Efficiency Ratio) for our proposed split system heat pump is a 12.3 and the VRF System is a 11.7, so they are both pretty similar. The main difference is the fact that the VRF System has staged compressors that can more accurately match the load of the building.***
3. ***Lower Lifecycle Cost & System Life***
    a. ***By splitting the system types based on the fact there two different occupied schedules for this building, it allows the systems to be more accurately sized for the load in which they serve. Henceforth, the mechanical components (namely the compressors) will have a much longer life simply due to the fact that the VRF system's compressors will not stage up and down nearly as often due to their inherent size in relation to the load in which they serve. Oversizing a system can be detrimental to the life of an HVAC system because we would essentially be requiring***

a large machine to operate in a partially loaded (or cycling on/off) state for more hours in a year.

Attachment 2

We have had concerns that this system might be like what the Court Building currently has. Here is a short synopsis on how they are different:

COURT BUILDING HVAC	PROPOSED COURTHOUSE HVAC
BOILERS AND CHILLERS ONE SYSTEM VERY SOPHSTICATED	No boilers or chillers Two systems System One: Is similar to what have at the Judge's Office on a larger scale. It has a heat pump. 12 ton system with 8 heads (Court room)
NO ONE IN THE COUNTY CAN WORK ON IT SO WE HAD TO GET A MAINTANCE CONTRACT	System Two: It is a VRF System which is Variable Refrigerant Flow System. It is a 25 Ton system that has a high efficient rating. It would allow one office to heat while another cooled. It has a lower turndown capacity that allows the fan coils to run longer and provides the dehumidification required for a proper storage environment for the historical records stored in the building. There would be 23 to 25 heads that go in all the different offices. Heads are the units that are floor mounted. We would try to place them where the current fan coil units are. They will not be as large though. This system is a lot less complicated and it is one that anyone can work on that is Daikin system Certified. The heat and air company we currently use is Daikin Certified. Most heat and air companies are Daikin certified but if not they can get Certified relatively easy by attending a class in Little Rock. This should eliminate the need for an

expensive maintenance contract. However, maintenance contracts on any heat and air unit are always recommended.

Attachment 3

Detailed Project Budget

Construction Cost: $566,985.73

A/E Cost: $58,071.25

Total: $625,056.98

STATEMENT OF PROBABLE CONSTRUCTION COST

Cleburne County Courthouse - (HVAC System Only)

Stocks-Mann Architects, PLC Project #1806B

January 29, 2020

Division	Cost	
General Conditions	$29,238.00	
Seal Attic Vents	$0.00	(by County)
Cupola Insuation (foil faced insulation batts)	$0.00	(by County)
New Gyp. Bd. furr outs for new HVAC system piping	$0.00	(by County)
Asbestos Abatment, 4-pipe insulation (HVAC)**		
Ceiling panel replacement (3,000 Sq. ft.)	$0.00	(by County)
HVAC System (Option #2, per B/TME report)		
Demo existing system	$76,800.00	
New Equipment	$174,844.00	
New System Installation	$225,156.00	
Electrical for new units	$10,500.00	
Allowances		
Landscaping (where damaged)	$0.00	(by County)
SUBTOTAL	$487,300.00	
Sales Tax, Labor Burden, Sub-Liability @ 5%	$24,365.00	
Subtotal	$511,665.00	
Contractor Fee @ 5%	$25,583.25	
Subtotal	$537,248.25	
Bond & Builder Risk @1%	$5,372.48	
Contigency @ 5% *	$24,365.00	
CONSTRUCTION TOTAL	**$566,985.73**	

* Construction Contingency allows for unknown construction variables that cannot be fully estimated.

** The abatement would need to be performed by Cleburen County under a separate contract, estimated cost **$12,000.00** (this is not included in the construction total noted)

Stocks Mann
Architects, PLC
401 W. CAPITOL, SUITE 402
LITTLE ROCK, AR 72201

January 30, 2020

Judge Jerry Holmes
Cleburne County
300 West Main
Heber Springs, AR 72543

Re: Fee Proposal for the Cleburne County Courthouse HVAC System

Judge Jerry Holmes,

Thank you for the opportunity to present this proposal for the assessment study for the Cleburne County Courthouse.

Project Definition:

This fee proposal is for the preparation of drawings / specifications and construction administration of the proposed mechanical system as recommended in the December 2018 Assessment Report for the Cleburne County Courthouse, located at 301 West Main in Heber Springs, Arkansas. Note: This fee proposal is based as a complete project and is not to be phased.

This fee proposal will be broken down on the new HVAC system into two fee categories. One for the HVAC system and the second for work related to new HVAC system that is currently scheduled to be performed by the county's own forces; relating to: ceiling tile replacement, piping furr-outs, roof framing insulation, sealing of existing attic vents and landscaping around the new equipment, architectural work related to these items will be invoice as a separate fee by Stocks Mann Architects, The material related to the county work would need to be procured by Cleburne County.

PROFESSIONAL SERVICES FEE ARRANGEMENT: We anticipate that our total fee from Design through construction Administration will be based of the attached schedule for professional services used by the State of Arkansas.

Category #1
"Statement of Probable Construction Cost": **$566,985.73 x 8.75%* = $49,611.25.** This fee is for "Basic Services" includes architectural specification and administrative services, and MEP engineering cost. The final fee amount will be based on the actual Cost of Construction, as submitted by the successful bidder.
(Note*: Normal fees according to the schedule are indicated for a project this size to be 7.75%, however since no existing drawings exist and additional examination of the building is required to fully, the state allows up to a 2% increase in fees). In this instance, would increase the fee 1% to the 8.75% noted.

Category #2
Stocks Mann will need to prepare documentation to indicate work to be performed by the county's own forces. The attached "Statement of Probable Construction Cost" does not indicate cost associated with work to be performed by the county and therefore the fees in Category #1 does not include architectural fees for the preparation of drawings related to the county's work. We would therefore propose an hourly fee not to exceed **$4,960.00**

The fees are based on the information and scope available at this time to produce the services for the facility described. Should the scope of work change or the actual construction budget cost is revised to a higher amount by Cleburne County, professional fees would need to be revised.

Payment for services shall be made as follows:

1. Payment is due within thirty (30) days from the date of the invoice. Amounts unpaid thirty-one (31) days after the invoice date shall bear interest at the legal rate prevailing from time to time in Little Rock.
2. All in house expenses for printing, and miscellaneous costs are included in the Fee Arrangement for Basic Services.
3. Reimbursable expenses as listed below will be billed at direct cost, estimated cost are noted below:
   - Printing and reproduction costs (over and above in-house use).
   - Postage
   - Courier services charges.
   - Long distance telecommunications pertaining to the Project. Any required state, county or city review fees.
   - Mileage will be based on $0.575 / mile.

PROJECTED FEES

• Category #1	$49,611.25
• Category #2	$4,960.00
• Reimbursable Fees (Est):	$3,500.00
Total Projected Fees and Reimbursable Expenses:	**$58,071.25**

ADDITIONAL SERVICES:

Additional Services beyond those described under Scope of Basic Services above, may be added to this agreement by your request. Additional services include but are not limited to: changes in scope. Additional services will be invoiced to you based on actual hours expended, times our standard hourly rates and our consultants' standard hourly rates. Stocks Mann will not proceed with any Additional Services without written authorization to do so from the client. Rates are available upon request should these additional services be requested.

If this proposal meets with your approval, please sign and return to our office. We look forward to working with you on this project.

Judge Jerry Holmes	*Date*	*R. Mark Mann*	*Date*
Cleburne County		*Stocks Mann Architects. PLC*	

R. Mark Mann 1-30-20

2-210 ASBESTOS CONSULTANT FEES

Asbestos inspection, design, air monitoring and project management services are considered a specialized consulting services and fees for these types of services shall be negotiated on an hourly not-to-exceed rate, a daily or abatement shift rate or a lump sum commensurate with the scope of the project. The Section shall approve fees for this type of service. Agencies shall submit a draft of the scope of work and the proposed fee arrangement to the Section prior to finalization of negotiations.

2-211 DESIGN SERVICES FEE SCHEDULE

(A) The following fee schedule for basic services as defined in § 2-201 is based upon a percentage of the total (final) construction cost including all adjustments (increases and decrease) by change order or negotiations and as modified by the footnotes at the bottom of this schedule. For projects less than $50,000 or more than $50,000,000, fees may be negotiated subject to ABA approval.

CONSTRUCTION COST	BASIC FEE
Less than $50,000	As Negotiated
$50,001 to $75,000	9.25%
$75,001 to $100,000	9.00%
$100,001 to $200,000	8.75%
$200,001 to $300,000	8.50%
$300,001 to $400,000	8.25%
$400,001 to $500,000	8.00%
$500,001 to $600,000	7.75%
$600,001 to $700,000	7.50%
$700,001 to $800,000	7.25%
$800,001 to $900,000	7.00%
$900,001 to $1,000,000	6.75%
$1,000,001 to $20,000,000	6.50%
$20,000,001 to$ 22,500,000	6.25%
$22,500,001 to $25,000,000	6.00%
$25,000,001 to $27,500,000	5.75%
$27,500,001 to $30,000,000	5.50%
$30,000,001 to $32,500,000	5.25%
$32,500,001 to $35,000,000	5.00%
$35,000,001 to $37,500,000	4.75%
$37,500,001 to $40,000,000	4.50%
$40,000,001 to $42,500,000	4.25%
$42,500,001 to $50,000,000	4.00%
Over $50,000,000	As Negotiated

(B) Prior to applying any of the modifiers listed below, Agencies shall submit a request to the Section for authorization to negotiate a contract containing these modifiers. The request shall include a description of the services to be added or deleted and the range the Agency intends to negotiate to.

(1) For simple projects such as warehouses, parking lots, parking decks, agricultural facilities or similar, deduct a minimum of 1% from the fees indicated.

(2) For projects involving the site adaptation of an existing design such as a standard bath house, employee residence, or similar, deduct a minimum of 2% from the fees indicated.

(3) For complex projects such as hospitals, medical or research facilities, laboratories containing extensive amounts of scientific equipment, add a maximum of 1.5% to the fees indicated.

(4) For projects involving the renovation of existing structures where accurate as-built information does not exist, add a maximum of 2% to the fees indicated to allow the design professional to survey the facility and develop accurate plans of existing conditions.

(5) For civil engineering projects where more intense observation is required to ensure proper execution of the project such as installation of underground utilities, pouring of massive or structural concrete structures, add a maximum of 4% to the fees indicated. Agencies are encouraged to negotiate these additional fees on an hourly rate not to exceed the 4% maximum. These services shall be listed on the professional services under "compensation" as a separate line item entitled "Additional Project Observation".

2-300 PROFESSIONAL SERVICES CONTRACT DEVELOPMENT **[INTENTIONALLY LEFT BLANK]**

2-301 PROJECT SPECIFIC TYPE CONTRACTS

(A) Agencies are required to use a project specific contract for each capital improvement project where the estimated construction cost exceeds $1,000,000 including contingency cost. These contracts shall not be amended to add additional projects or to increase the scope of the work to add or alter additional buildings, or to make additional improvement to site work or utilities beyond the original defined scope in the solicitation for design service.

(B) Project specific contracts shall be initially written for a term not to exceed the current biennium period in which the contract is written. These types of contracts may be amended to increase or decrease the fees at any time during the contract period and may be amended to extend the time annual until the project is completed. However, the contract may not be amended to extend the time beyond maximum limits for professional services contracts as established by laws and the DFA/OSP rules.

(C) Fees for professional services under this type of contract should be based on a percentage of the construction cost as established in § 2-211. Additional services beyond the basic fee may be added as appropriate and as defined in § 2-200.

2-302 PROFESSIONAL SERVICES MULTIPLE PROJECT TYPE CONTRACTS

(A) In some instances, Agencies may elect to enter into a standard professional services contract with an architect, engineer, or consultant for multiple minor projects not exceeding $1,000,000 or minor projects which are time critical during the contract period. Do not use the phrases "Indefinite Delivery or Open End when referring to these contracts. The use of these phrases implies that these contracts will not end. State contracts must have a finite term and cost. All contracts and the selection of the design professional shall be only as approved by the Section , and must follow all MSC regulations, regarding plan review submissions for tracking projects to ensure funding. All reports, studies, budget cost

Attachment 4

Mechanical System Upgrade

This is a summary of the Mechanical System upgrade of the existing Cleburne County Courthouse and property.

1. Existing HVAC Systems To Be Demolished

The building is currently served by a four pipe Fan Coil System. Each fan coil has a chilled water coil, heating water coil, blower, cleanable metal filter, and unit mounted thermostat. The Chilled Water System consists of one air cooled chiller, expansion tank, chilled water pump, and chilled water piping to each fan coil. The Heating Water System consists of one natural gas boiler, heating water pumps, expansion tank, and heating water piping to each fan coil. A more detailed description is provided below.

Chilled Water System:

The 35-ton air cooled chiller is located on the Southwest side of the building. The chiller was manufactured by Carrier Corporation in 1994. The chiller is 24 years old and is towards the end of its useful life.

The 60-gallon chilled water expansion tank is mounted on a metal rack in the basement Mechanical Room. The tank was manufactured by Richmond Engineering Company in 1974. The tank is 48 years old and has exceeded its useful life.

The chilled water pump that serves the chiller and fan coils is located in the basement Mechanical Room. The pump has a 3-hp motor with an 8.6" impeller. The pump impeller is approximately 43 years old and is in poor condition due to its age.

The chilled water piping that serves the existing building is routed through the Mechanical Room and up to the 1st floor plenum space where it branches out to each of the fan coils. The piping is approximately 50 years old and is in poor condition due to its age. The piping running to each fan coil is clogged and the insulation has degraded. The piping is routed to the fan coils through sheet metal chases constructed next to each unit.

Heating Water System:

The Heating Water System is served by a natural gas heating water boiler located in the basement Mechanical Room. The boiler was manufactured by Patterson Kelly, has a capacity of 1,000 MBH, and was installed in 2007. The boiler is 11 years old and is approximately half way through its recommended life.

The 60-gallon heating water expansion tank is mounted on a metal rack in the basement Mechanical Room. The tank was manufactured by Richmond Engineering Company in 1974. The tank is in poor condition due to it age.

The heating water pump that serves the heating water boiler and fan coils is located in the basement Mechanical Room. The pump has a 3-hp motor with an 8.6" impeller. The pump impeller is approximately 43 years old and is in poor condition due to its age.

The heating water piping that serves the existing building is routed through the Mechanical Room and up to the 1st floor plenum space where it branches out to each of the fan coils. The

piping is approximately 50 years old and is in poor condition due to its age. The piping running to each fan coil is clogged and the insulation has degraded. The piping is routed to the fan coils through sheet metal chases constructed next to each unit.

Fan Coil Units:

The fan coils that serve each space throughout the building are floor mounted cabinet type units. The fan coil units have one coil for chilled water and another coil for heating water. The fan coils have unit mounted electronic thermostats that are used to control each zone. The fan coils also have washable metal filters located below the fan. The majority of the fan coils have been replaced in the last 15 years with some being more than 30 years old. All the fan coil units have either reached the end of their useful life or are towards the end of their recommended useful life.

The condensate piping is routed from each fan coil to the outdoors below slab or to the sanitary sewer located in the basement Mechanical Room. This piping is approximately 30 years old and is constructed out of PVC pipe. This piping is good condition and should last another 20 years. This condensate piping will be reused as much as possible by the new system chosen.

The HVAC System is unable to provide adequate cooling during the summer months and is beyond repair due to the age of the system and the distribution piping. The system didn't appear to be chemically treated, which is a critical component to safeguarding the condition of all hydronic equipment. Without chemical treatment, hydronic components will degrade and build up scale causing the inside pipe diameter to decrease over time. This can result in an overall reduction in system capacity, increased pumping energy, and a reduced lifespan of all hydronic components affected by the lack of treatment. The condition of the system has caused humidity issues throughout the building that will not only impact the thermal environment for the occupants and the interior finishes, but also the historical records stored within the building. The entire four pipe HVAC System is recommended to be replaced given the cascading effects related to the condition of the Hydronic System. The proposed replacement systems are outlined below along with the required upgrades to the electrical service to serve the new systems.

2. New System - Variable Refrigerant Flow System

The proposed system, consists of a Variable Refrigerant Flow (VRF) System for majority of the building and a Heat Pump System for the courtroom. The VRF and Heat Pump Systems will use refrigerant to heat and/or cool the building. This system would give each office individual thermal zone, allowing one office to cool while another could be in heating. While increasing the thermal comfort for the occupants, the system would also have a lower turndown capability than the current air-cooled chiller. This will allow the fan coils to run longer and provide the dehumidification required for a proper storage environment of the historical records stored in the building. The systems together will not only be more cost effective than the existing system, but they will also be more efficient.

The new systems would consist of 35 floor mounted fan coil units. The fan coil units would be sized to meet the load of each space and connected into refrigerant branch boxes that would be located within the first-floor plenum. All the refrigerant pipe would need to be routed down to the Mechanical Room utilizing the existing piping chase and out to the concrete pad where the current

chiller is located. The chiller would be replaced by a combination of VRF condensing units piped together to make a total system capacity of 25 tons, and a heat pump condensing unit sized for 12 tons to serve the courtroom.

The outdoor condensing units are to be mounted on one skid by the manufacture to match the existing air-cooled chiller's electrical requirements and reduce the electrical work required.

The Building utilizes natural ventilation through the use of operable windows in each of the spaces.

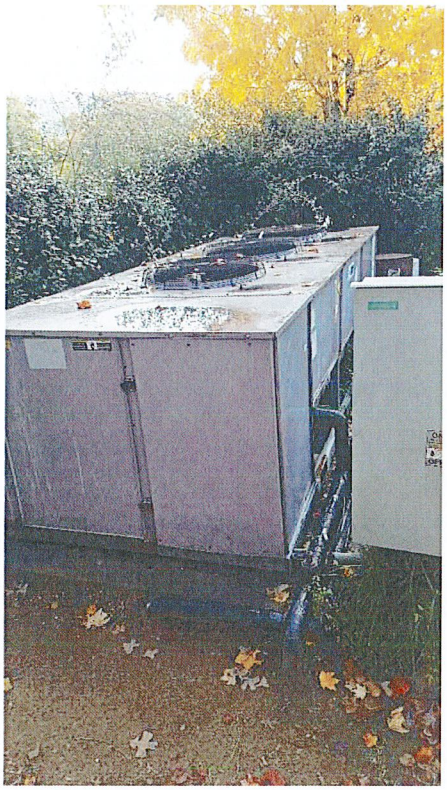


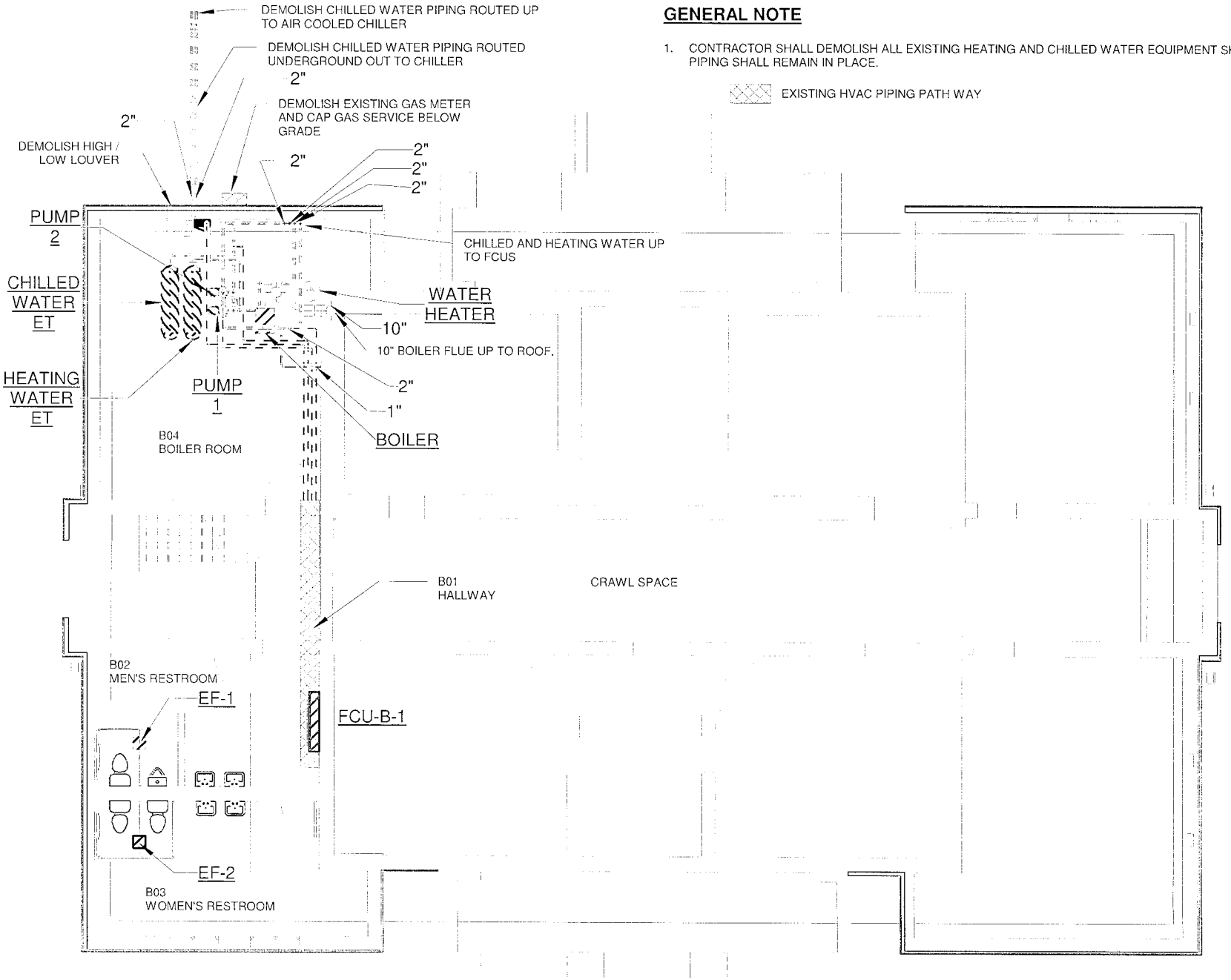
Figure 1: Existing Air-Cooled Chiller.

Figure 7: Existing Mechanical Room.

GENERAL NOTE

1. CONTRACTOR SHALL DEMOLISH ALL EXISTING HEATING AND CHILLED WATER EQUIPMENT SHOWN. CONDENSATE PIPING SHALL REMAIN IN PLACE.

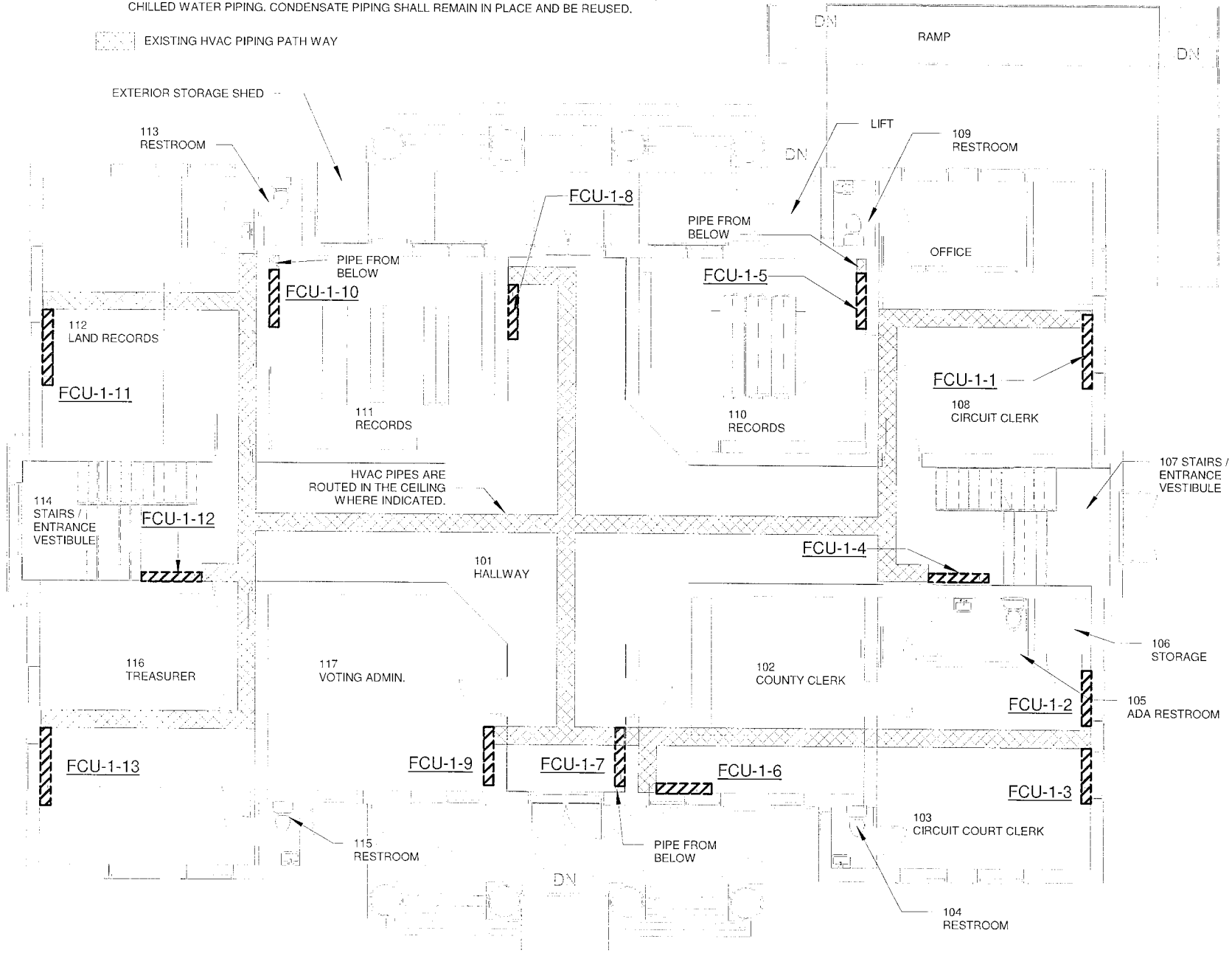
EXISTING HVAC PIPING PATH WAY



1 BASEMENT FLOOR - MECHANICAL DEMOLITION FLOOR PLAN
NTS

GENERAL NOTE

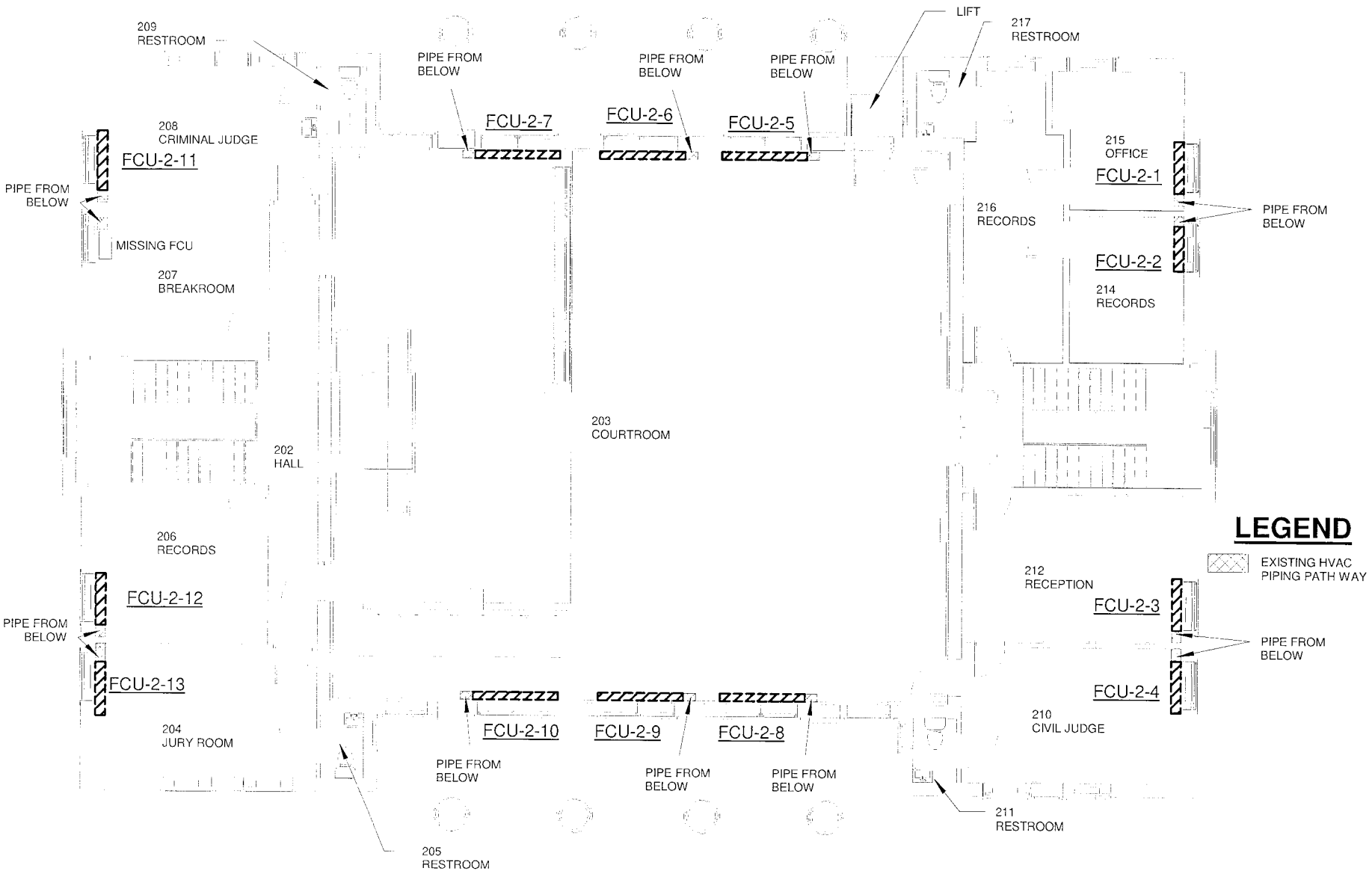
1. CONTRACTOR SHALL DEMOLISH ALL EXISTING FAN COILS ALONG WITH ASSOCIATED HEATING AND CHILLED WATER PIPING. CONDENSATE PIPING SHALL REMAIN IN PLACE AND BE REUSED.



1 FIRST FLOOR - MECHANICAL DEMOLITION FLOOR PLAN
NTS

GENERAL NOTE

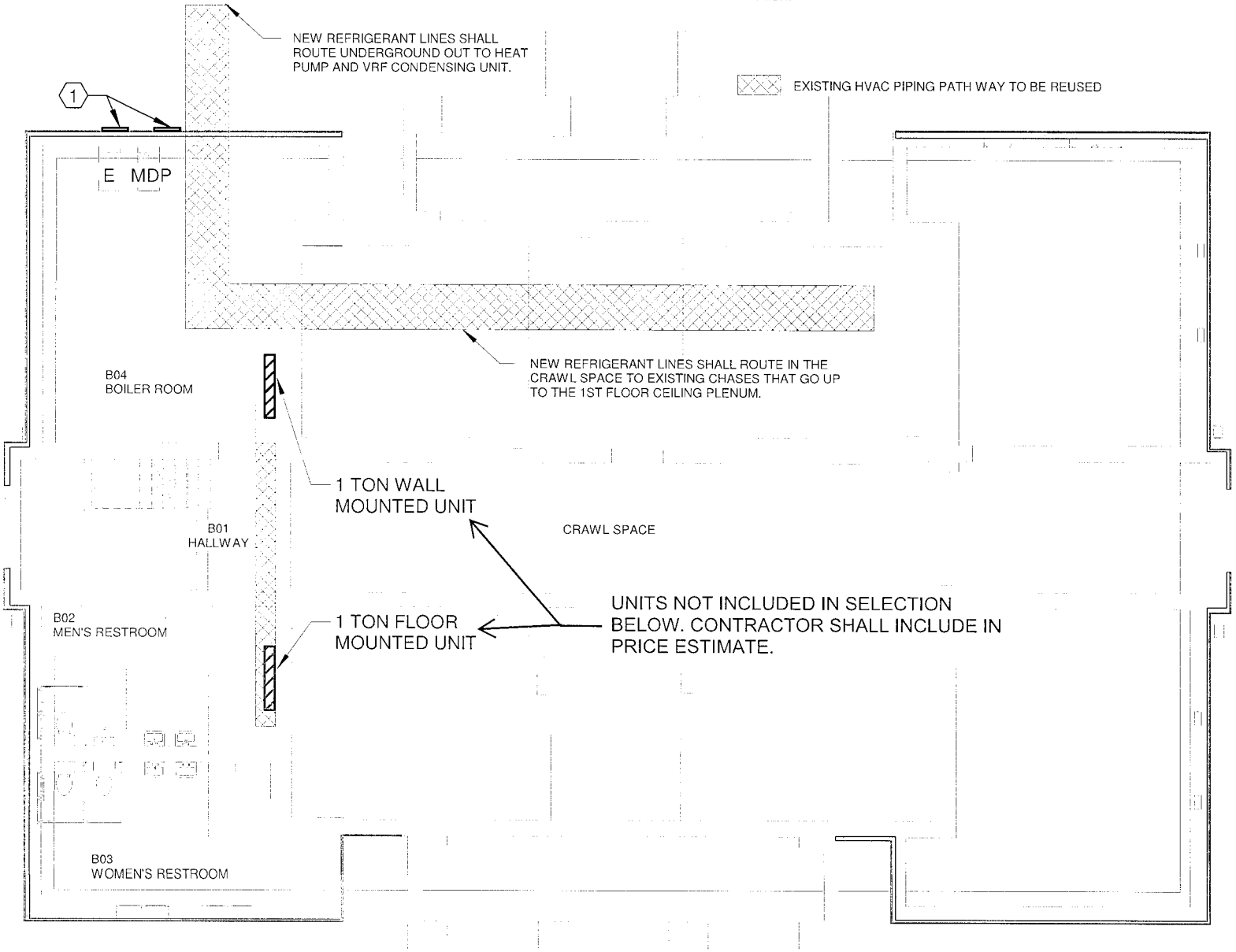
1. CONTRACTOR SHALL DEMOLISH ALL EXISTING FAN COILS ALONG WITH ASSOCIATED HEATING AND CHILLED WATER PIPING. CONDENSATE PIPING SHALL REMIAN IN PLACE AND BE REUSED.



1 SECOND FLOOR - MECHANICA DEMOLITION FLOOR PLAN
NTS

KEYED NOTES

1. INFILL EXISTING WALL OPENING FOR DEMOLISHED LOUVERS WITH 18 GAUGE SHEET METAL WITH A 2" RIGID INSULATION BOARD ON THE BACK. SEAL EXTERIOR WALL AND PAINT SHEET EMTAL TO MATCH EXTERIOR FINISH.



1 BASEMENT FLOOR - MEP NEW FLOOR PLAN
NTS

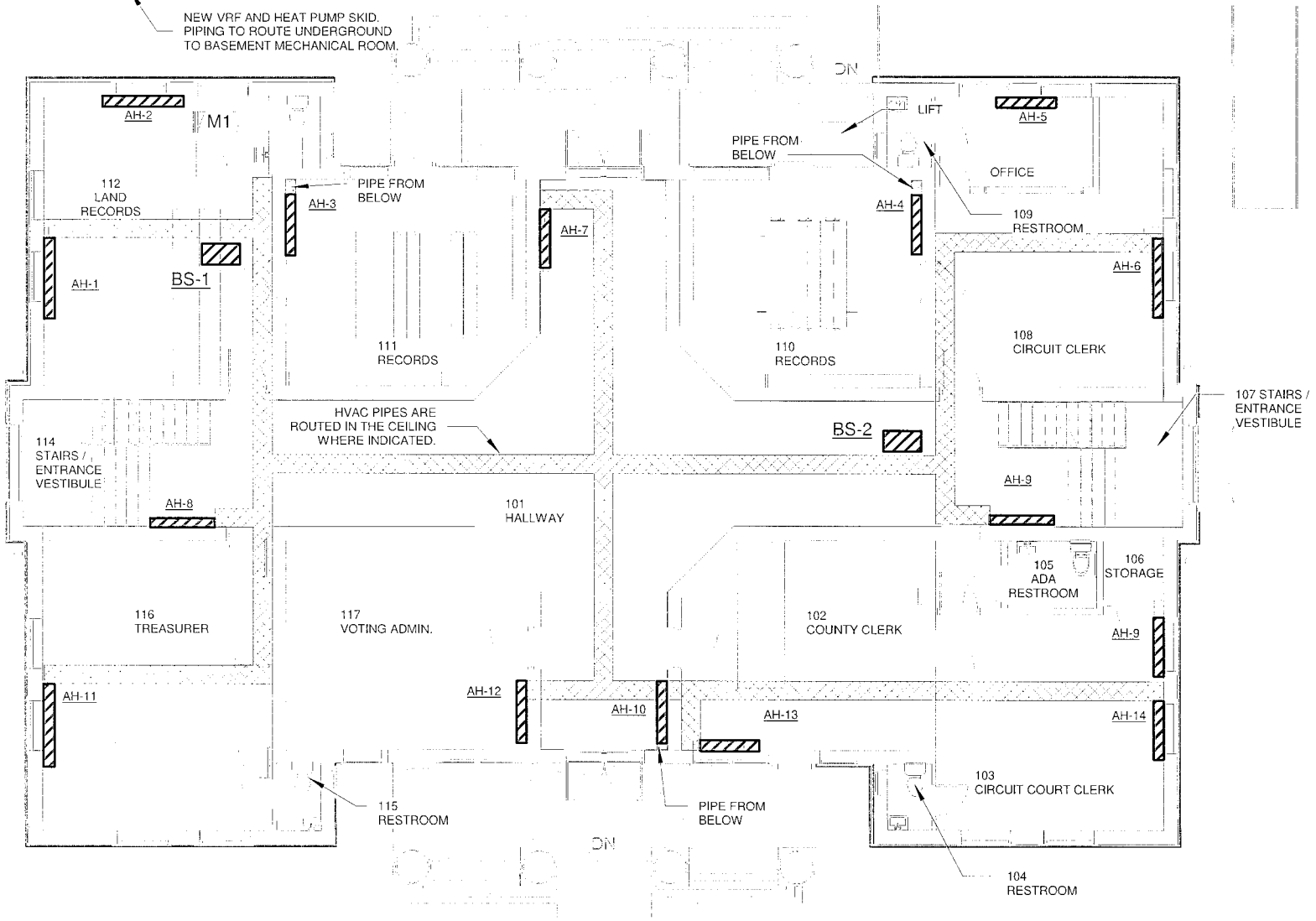
GENERAL NOTES

1. EXISTING CONDENSATE PIPING SHALL BE REUSED. NEW CONDENSATE PIPING FROM VRF FAN COILS SHALL CONNECT TO THE EXISTING CONDENSATE DRAIN LINES.

EXISTING HVAC PIPING PATHWAY TO BE REUSED.

HR-1 AND HP-3 COMBINED

NEW VRF AND HEAT PUMP SKID. PIPING TO ROUTE UNDERGROUND TO BASEMENT MECHANICAL ROOM.

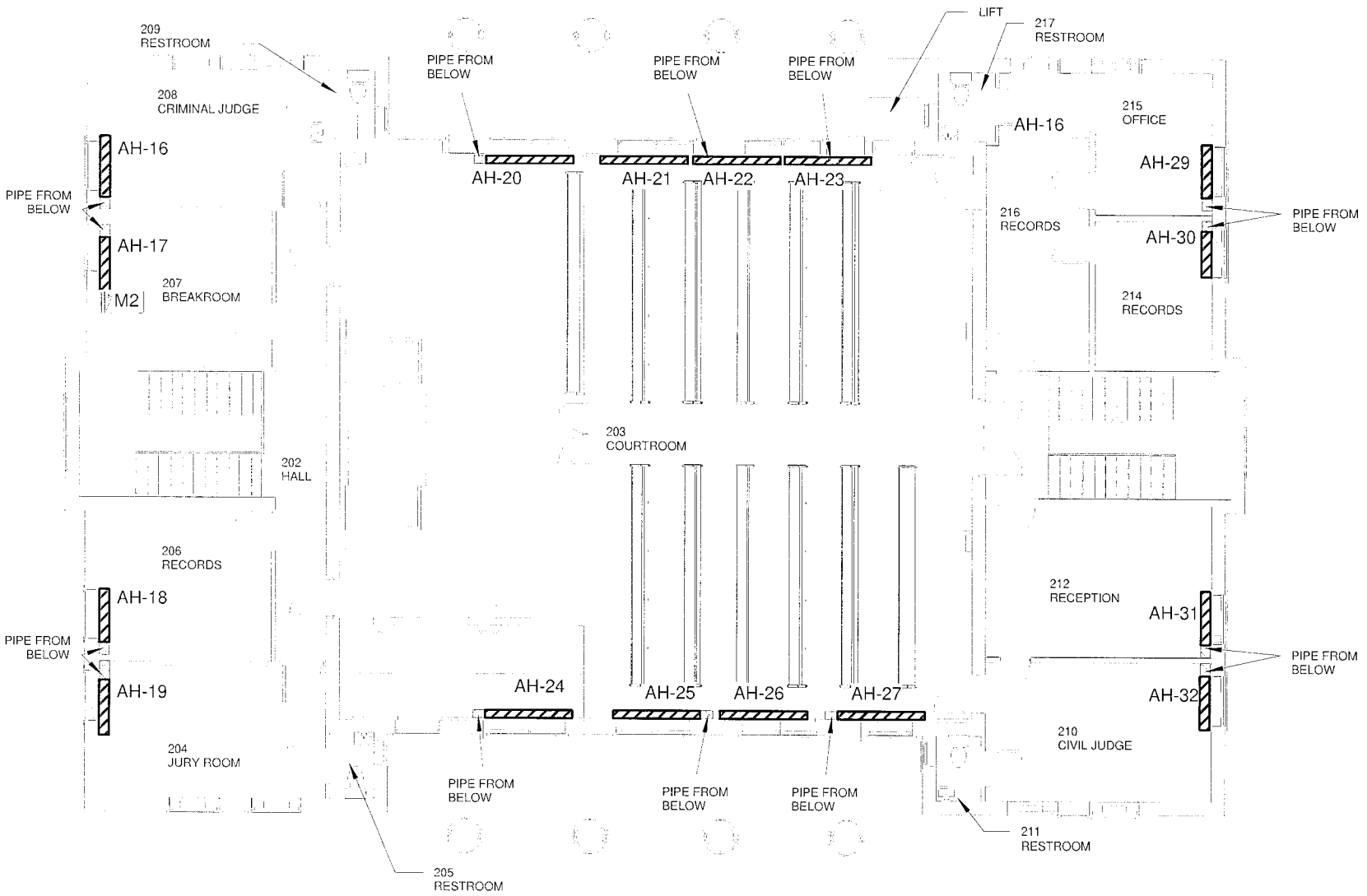


1 FIRST FLOOR - MEP NEW FLOOR PLAN
NTS

GENERAL NOTES

1. ALL REFRIGERANT PIPING SHALL COME FROM BELOW. PIPING SHALL ROUTE THROUGH 1ST FLOOR PLENUM UP TO FLOOR MOUNTED FAN COIL ON 2ND FLOOR.
2. EXISTING CONDENSATE PIPING SHALL BE REUSED. NEW CONDENSATE PIPING FROM VRF FAN COILS SHALL CONNECT TO THE EXISTING CONDENSATE DRAIN LINES.

EXISTING HVAC PIPING PATHWAY TO BE REUSED.



1 SECOND FLOOR - MEP NEW FLOOR PLAN
NTS

VRV Selection

Project Report

Report details

Produced on: 11/21/2018

Application version: 2018.11.16.3

Project details

Project name: Cleburne County Courthouse

Solution name: Unnamed solution (1)

Client Name:

Customer reference:

Quotation reference:

Selection parameters of the indoor units can be found in the Engineering Data Books
Selection parameters of the outdoor units can be found in the Engineering Data Books
Only the data published in the data book are correct. This program uses close approximations of these data.

Material list

Model	Quantity	Description
RXYQ144TATJU	1	VRV-IV TA (208-230V)
REYQ144TATJU	2	VRV-IV TA (208-230V)
BS10Q54TVJ	2	Branch selector unit
FXLQ24MVJU9	11	FXLQ - Floor Standing Unit
FXLQ18MVJU9	14	FXLQ - Floor Standing Unit
FXLQ12MVJU9	7	FXLQ - Floor Standing Unit
KHRP26M72TU9	1	Refnet branch piping kit
KHRP26A33T9	4	Refnet branch piping kit
KHRP26A22T9	7	Refnet branch piping kit
KHRP25M73TU9	1	Refnet branch piping kit
DCM601A71	1	intelligent Touch Manager (iTM)
BRC1E73	32	new Navigation Remote Controller
BHFP26P100U	1	Condensing Unit Multi Connection Piping kit - VRVIV HR
KHFP26A100C	1	Branch Selector Closed Pipe Kit
Piping 3/8"	120.0ft	
Piping 1/2"	60.0ft	
Piping 5/8"	61.0ft	
Piping 7/8"	59.0ft	
Piping 1 1/8"	60.0ft	

Indoor unit details

Table of abbreviations

Abbreviation	Description
Name	Logical name of the device
FCU	Device model name
Tmp C	Indoor conditions in cooling
Rq TC	Required total cooling capacity
Rv TC	Revised total cooling capacity (asked from outdoor)
Max TC	Available total cooling capacity
Rq SC	Required sensible cooling capacity
Tevap	Evaporating temperature of indoor unit coil
Tdis C	Indoor unit discharge air temperature in cooling
Max SC	Available sensible cooling capacity
Tmp H	Indoor temperature in heating
Rq HC	Required heating capacity
Max HC	Available heating capacity
Tdis H	Indoor unit discharge air temperature in heating
Sound	Sound pressure level low and high
PS	Power supply (voltage and phases)
MCA	Minimum Circuit Amps
MOP	Maximum Overcurrent Protection
WxHxD	WidthxHeightxDepth
Weight	Weight of the device
Min coil	Minimum coil volume
Max coil	Maximum coil volume
Air Flow Rate	Air Flow Rate

HP-3 (Court Room) - RXYQ144TATJU

Capacity data at conditions and connection ratio (133) as entered

Name	FCU	Cooling						Heating		
		Tmp C °F (DBT/WBT)	Rq TC BTU/h	Max TC BTU/h	Rq SC BTU/h	Tevap °F	Max SC BTU/h	Tmp H °F	Rq HC BTU/h	Max HC BTU/h
AH-20	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-21	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-22	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-23	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-24	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-25	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-26	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-27	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
			152,000						n/a	

Name	Room	Sound	PS	MCA	MOP	WxHxD	Weight
		dBA		A		inch	lbs
AH-20	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-21	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-22	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-23	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-24	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-25	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-26	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-27	Court Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 152,000BTU/h for cooling. However, the outdoor unit selection uses reduced load values for cooling of 130,720BTU/h (=86%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 25.0ft below the indoor units.

HR-1 (1st Floor) - REYQ288TATJU = REYQ144TATJU + REYQ144TATJU

Capacity data at conditions and connection ratio (142) as entered

Name	FCU	Cooling						Heating		
		Tmp C °F (DBT/WBT)	Rq TC BTU/h	Max TC BTU/h	Rq SC BTU/h	Tevap °F	Max SC BTU/h	Tmp H °F	Rq HC BTU/h	Max HC BTU/h
AH-1	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-2	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-3	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-7	FXLQ12MVJU9	75.0/62.0	9,500	9,900	n/a	42.8	7,526	70.0	n/a	13,510
AH-8	FXLQ12MVJU9	75.0/62.0	9,500	9,900	n/a	42.8	7,526	70.0	n/a	13,510

Name	FCU	Cooling						Heating		
		Tmp C °F (DBT/WBT)	Rq TC BTU/h	Max TC BTU/h	Rq SC BTU/h	Tevap °F	Max SC BTU/h	Tmp H °F	Rq HC BTU/h	Max HC BTU/h
AH-11	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-12	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-16	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-17	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-18	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-19	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-4	FXLQ24MVJU9	75.0/62.0	19,000	19,767	n/a	42.8	14,359	70.0	n/a	27,019
AH-5	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-6	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-9	FXLQ12MVJU9	75.0/62.0	9,000	9,900	n/a	42.8	7,526	70.0	n/a	13,510
AH-15	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-14	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-13	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-10	FXLQ12MVJU9	75.0/62.0	9,000	9,900	n/a	42.8	7,526	70.0	n/a	13,510
AH-28	FXLQ12MVJU9	75.0/62.0	9,000	9,900	n/a	42.8	7,526	70.0	n/a	13,510
AH-29	FXLQ12MVJU9	75.0/62.0	9,000	9,900	n/a	42.8	7,526	70.0	n/a	13,510
AH-30	FXLQ12MVJU9	75.0/62.0	9,000	9,900	n/a	42.8	7,526	70.0	n/a	13,510
AH-31	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
AH-32	FXLQ18MVJU9	75.0/62.0	14,500	14,833	n/a	42.8	10,909	70.0	n/a	20,019
			324,000						n/a	

Name	Room	Sound	PS	MCA	MOP	WxHxD	Weight
		dBA		A		inch	lbs
AH-1	Circuit Clerk	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-2	Circuit Clerk	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-3	Record Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-7	Corridor	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-8	Corridor	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-11	County Judge	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-12	Conference Room	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-16	Jury Room	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-17	Jury Room	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-18	Witness Room	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-19	Witness Room	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-4	Record Room	35 - 41	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-5	County Clerk	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-6	County Clerk	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-9	Corridor	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-15	County Court	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-14	County Court	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4

Name	Room	Sound	PS	MCA	MOP	WxHxD	Weight
		dBA		A		inch	lbs
AH-13	County Judge	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-10	Corridor	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-28	Grand Jury	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-29	Grand Jury	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-30	Grand Jury	32 - 36	208-230V 1ph	0.5	15A	44.9 x 23.6 x 8.7	66.1
AH-31	Prosecuting Atty	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4
AH-32	Prosecuting Atty	34 - 40	208-230V 1ph	0.6	15A	55.9 x 23.6 x 8.7	79.4

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 324,000BTU/h for cooling. However, the outdoor unit selection uses reduced load values for cooling of 275,400BTU/h (=85%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed at the same level as the indoor units.

Outdoor unit details

Table of abbreviations

Abbreviation	Description
Name	Logical name of the device
Model	Device model name
▲	Optimized selection: Larger outdoor model selected than standard proposed model
CR	Connection ratio
Tmp C	Outdoor conditions in cooling
WFR per module	Water flow per outdoor unit module
CC	Available cooling capacity
Rq CC	Required cooling capacity
PIC	Power input in cooling mode
InC	Water inlet temperature in cooling mode
OutC	Water outlet temperature in cooling mode
Tmp H	Outdoor conditions in heating (dry bulb temp. / RH)
HC	Available heating capacity (integrated heating capacity)
Rq HC	Required heating capacity
PIH	Power input in heating mode
InH	Water inlet temperature in heating mode
OutH	Water outlet temperature in heating mode
Piping	Largest distance from indoor unit to outdoor unit
Bse Refr	Standard factory refrigerant charge (16.4ft actual piping length) excluding extra refrigerant charge. For calculation of extra refrigerant charge refer to the databook
Ex Refr	Extra refrigerant charge
PS	Power supply (voltage and phases)
MCA	Minimum Circuit Amps
MOP	Maximum Overcurrent Protection
RunAmps	Running Amps
St curr	Starting current
WxHxD	WidthxHeightxDepth
Weight	Weight of the device
EER	EER value at nominal condition
IEER	IEER value at nominal condition
COP47	COP value at nominal condition and at ambient temperature of 47°F
COP17	COP value at nominal condition and at ambient temperature of 17°F

Outdoor details

Name	Model	CR	Cooling			Heating			Piping
			Tmp C	CC	Rq CC	Tmp H	HC	Rq HC	
		%	°F	BTU/h	BTU/h	°F (DBT/WBT)	BTU/h	BTU/h	ft
HP-3 (Court Room)	RXYQ144TATJU	133.3	95.0	140,700	130,720	10.0/9.4	99,947	0	133.1
HR-1 (1st Floor)	REYQ288TATJU ▲	141.7	95.0	278,382	275,400	10.0/9.4	226,626	0	170.0

Name	Model	PS	MCA	MOP	RunAmps	St curr	WxHxD	Weight
			A	A	A	A	inch	lbs
HP-3 (Court Room)	RXYQ144TATJU	208V - 230V 3ph	55.1	60.0	33.4	0.0	48.9 x 66.7 x 30.2	694.5
HR-1 (1st Floor)	REYQ288TATJU	208V - 230V 3ph						
	- REYQ144TATJU		55.0	70.0	38.8	0.0	48.9 x 66.7 x 30.2	780.4
	- REYQ144TATJU		55.0	70.0	38.8	0.0	48.9 x 66.7 x 30.2	780.4
BS-1 (East Side)	BS10Q54TVJ	208-230V 1ph	1.0	15.0	0.0	0.0	32.3 x 11.7 x 18.9	101.4
BS-2 (West Side)	BS10Q54TVJ	208-230V 1ph	1.0	15.0	0.0	0.0	32.3 x 11.7 x 18.9	101.4

Name	AHRI Std 1230 Ducted					AHRI Std 1230 Non-Ducted				
	EER	IEER	COP47	COP17	SCHE	EER	IEER	COP47	COP17	SCHE
HP-3 (Court Room)	11.5	22.6	3.34	2.2		12.3	24.8	3.67	2.33	
HR-1 (1st Floor)	10.9	17.9	3.2	2.15	21.8	11.7	21.1	3.51	2.41	23.3

LOT21 - information

Name	Model	$\eta_{s,h}$ heating	$\eta_{s,c}$ cooling	SCOP	SEER
		%	%		
HP-3 (Court Room)	RXYQ144TATJU	0.0	0.0	0.00	0.00
HR-1 (1st Floor)	REYQ288TATJU	0.0	0.0	0.00	0.00

For more information go to: https://energylabel.daikin.eu/.

Refrigerant information

Name	Model	Refrigerant type	GWP	Base charge lbs	Extra charge lbs	TCO2 equivalent
HP-3 (Court Room)	RXYQ144TATJU	R410A	2087.5	18.1	21.7	37.7
HR-1 (1st Floor)	REYQ288TATJU	R410A	2087.5	51.6	unknown	48.8

The system(s) contain fluorinated greenhouse gases.

TCO2 equivalent is calculated only considering the base refrigerant charge. Depending on the field pipe length extra refrigerant needs to be added which will increase the TCO2 equivalent.

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

HP-3 (Court Room) - RXYQ144TATJU

Model	Quantity	Description
RXYQ144TATJU	1	VRV-IV TA (208-230V)
FXLQ24MVJU9	8	FXLQ - Floor Standing Unit
KHRP26M72TU9	1	Refnet branch piping kit
KHRP26A33T9	4	Refnet branch piping kit
KHRP26A22T9	2	Refnet branch piping kit
BRC1E73	8	new Navigation Remote Controller
Piping 3/8"	120.0ft	
Piping 1/2"	60.0ft	
Piping 5/8"	61.0ft	
Piping 7/8"	59.0ft	
Piping 1 1/8"	60.0ft	

Refrigerant information

Refrigerant type	GWP	Base charge lbs	Extra charge lbs	TCO2 equivalent
R410A	2087.5	18.1	21.7*)	37.7

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = 8.8185 (A) + 3.3069 (B) + [60.0 ft (ø1/2 ") × 0.2646 + 120.0 ft (ø3/8 ") × 0.1301] × 0.3048 = 21.7lbs

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Piping limitations

Description	Value
Maximum total length	3,280.8ft
Maximum longest actual length	541.3ft
Maximum longest equivalent length	623.4ft
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	131.2ft
Maximum length first branch to indoor unit	295.3ft

Maximum length of indoor units to nearest branch	131.2ft
Maximum length difference between longest and shortest distance to indoor units	131.2ft
Maximum height difference, outdoor unit below indoor units	295.3ft
Minimum connection ratio, outdoor unit below indoor units	80.0%
Maximum height difference, outdoor unit above indoor units	295.3ft
Minimum connection ratio, outdoor unit above indoor units	80.0%
Maximum height difference in technical cooling, outdoor unit below indoor units	295.3ft
Maximum height difference in technical cooling, outdoor unit above indoor units	295.3ft
Maximum height difference between indoor units	98.4ft
Connection ratio range	50.0-200.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/4" (gas)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	295.3ft
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Pipe capacities

Maximum Connection Index	Diameters
53.9	3/8"x5/8"
71.9	3/8"x3/4"
110.9	3/8"x7/8"
161.9	1/2"x1 1/8"
229.9	5/8"x1 1/8"
299.9	3/4"x1 3/8"
> 299.9	3/4"x1 5/8"
Main pipe size up	5/8"x1 1/4"

Remarks

Warning:

The connection ratio exceeds the limit of 130%.

HR-1 (1st Floor) - REYQ288TATJU = REYQ144TATJU + REYQ144TATJU

Model	Quantity	Description
REYQ144TATJU	2	VRV-IV TA (208-230V)
BS10Q54TVJ	2	Branch selector unit
FXLQ18MVJU9	14	FXLQ - Floor Standing Unit
FXLQ24MVJU9	3	FXLQ - Floor Standing Unit
FXLQ12MVJU9	7	FXLQ - Floor Standing Unit
KHRP25M73TU9	1	Refnet branch piping kit
KHRP26A22T9	5	Refnet branch piping kit
BHFP26P100U	1	Condensing Unit Multi Connection Piping kit - VRVIV HR
BRC1E73	24	new Navigation Remote Controller
KHFP26A100C	1	Branch Selector Closed Pipe Kit

Refrigerant information

Refrigerant type	GWP	Base charge lbs	Extra charge lbs	TCO2 equivalent
R410A	2087.5	51.6	unknown	48.8

The system(s) contain fluorinated greenhouse gases.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Piping limitations

Description	Value
Maximum total length	3,280.8ft
Maximum longest actual length	541.3ft
Maximum longest equivalent length	623.4ft
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	-
Maximum length first branch to indoor unit	295.3ft
Maximum length of indoor units to nearest branch	-
Maximum length difference between longest and shortest distance to indoor units	-
Maximum height difference, outdoor unit below indoor units	295.3ft
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	295.3ft
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	295.3ft
Maximum height difference in technical cooling, outdoor unit above indoor units	295.3ft
Maximum height difference between indoor units	98.4ft
Connection ratio range	50.0-200.0%
Refrigerant pipe diameters	7/8" (liquid) x 1 3/8" (gas) x 1 1/8" (discharge)

Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	295.3ft
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Pipe capacities

Maximum Connection Index	Diameters
53.9	3/8"x5/8"x1/2"
71.9	3/8"x3/4"x5/8"
110.9	3/8"x7/8"x3/4"
161.9	1/2"x1 1/8"x3/4"
229.9	5/8"x1 1/8"x1 1/8"
299.9	3/4"x1 3/8"x1 1/8"
> 299.9	3/4"x1 5/8"x1 1/8"
Main pipe size up	7/8"x1 3/8"x1 1/8"

Remarks

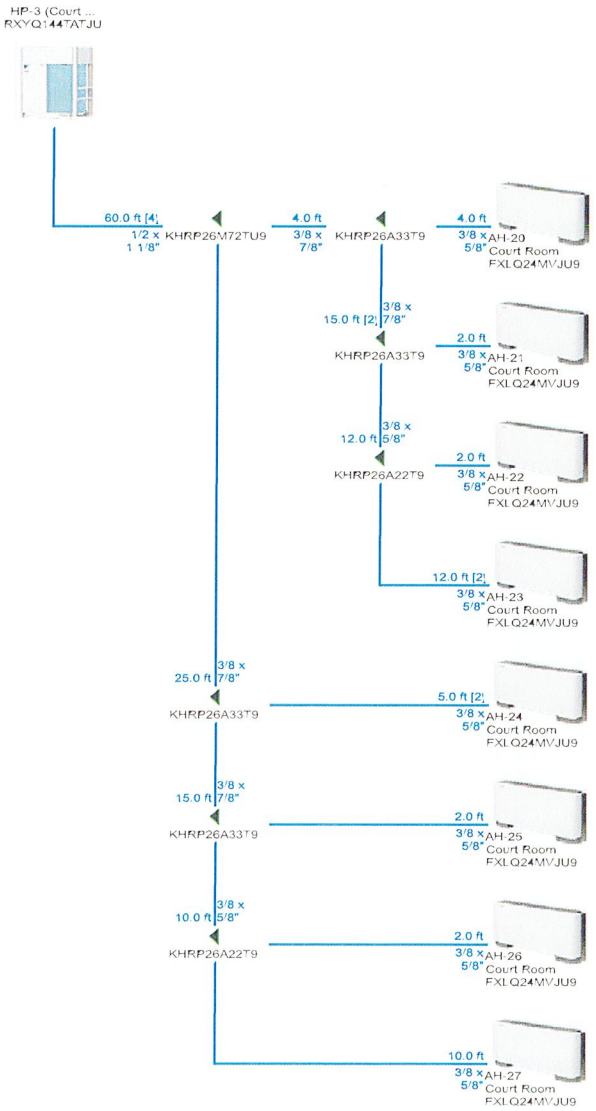
Sufficient distance should be respected between the modules according to the service & operation space rules as mentioned in the databook.

Warning:

The connection ratio exceeds the limit of 130%.

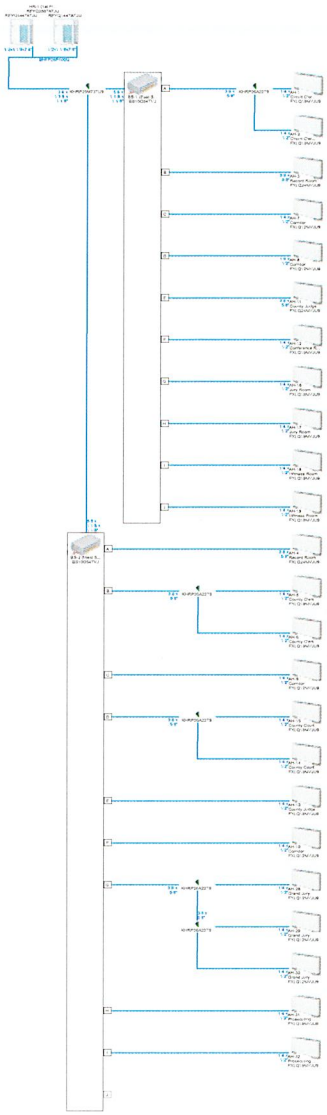
Piping diagrams

Piping HP-3 (Court Room)



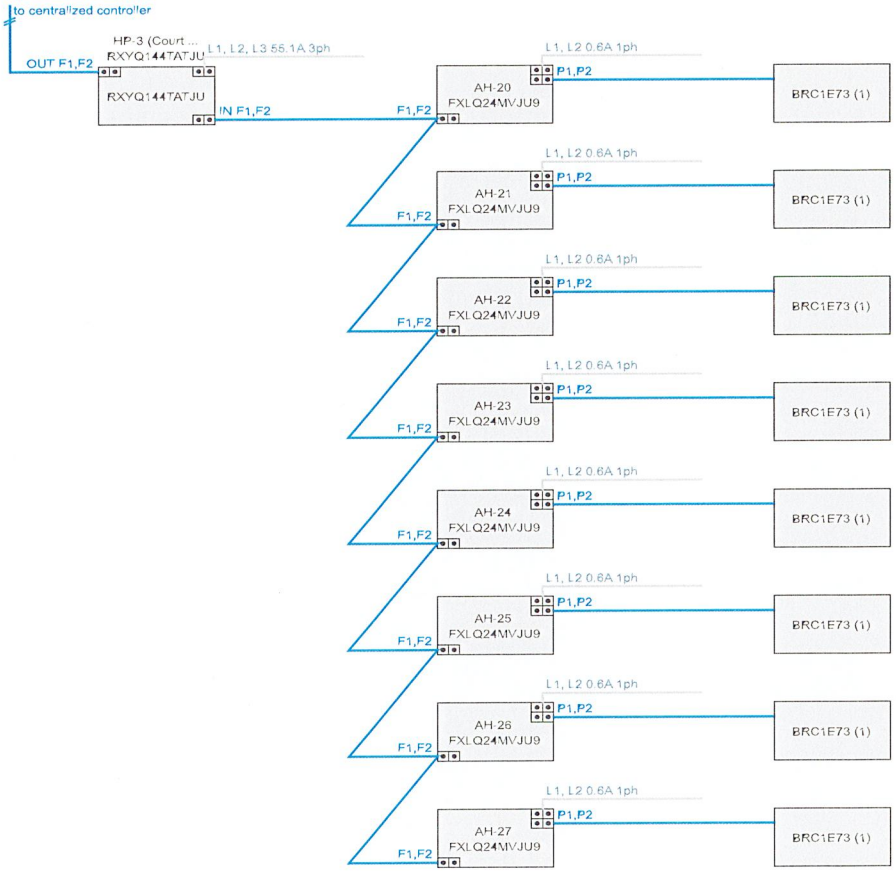
DAIKIN

Piping HR-1 (1st Floor)



Wiring diagrams

Wiring HP-3 (Court Room)

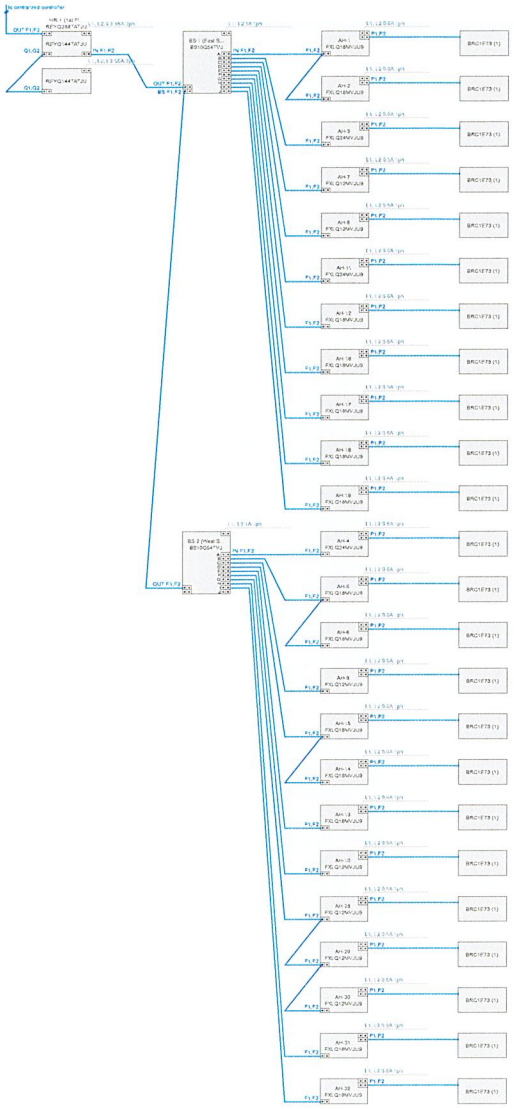


Remarks

F1F2 = AWG 18-2 is required - however always refer to local code for further information.

P1P2 = AWG 18-2 is required - however always refer to local code for further information.

Wiring HR-1 (1st Floor)



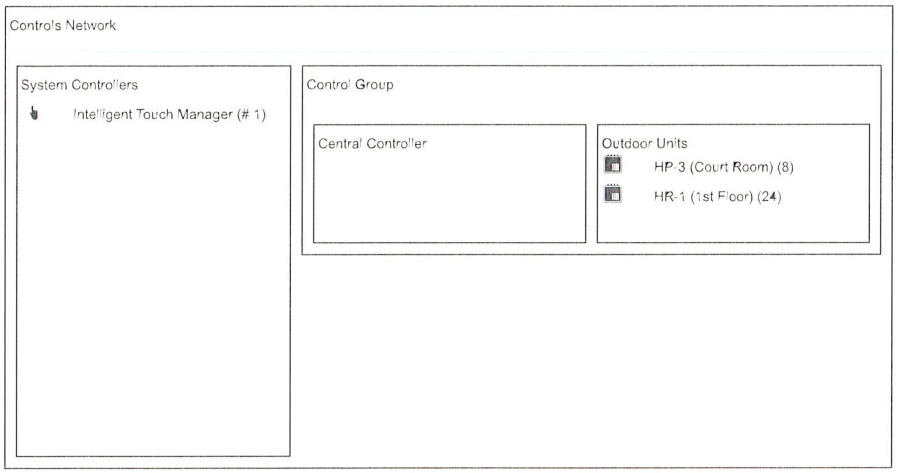
Remarks

F1F2 = AWG 18-2 is required - however always refer to local code for further information.

P1P2 = AWG 18-2 is required - however always refer to local code for further information.

Centralized controllers

Concept



Controller wiring diagrams

Control Group

Applicant	scalYe	ProjectDescription	City	County	NDistr	EDistr	NDistr	tTypeAb	HistName	mountRequest	mountAwarded
Cleburne County	2000	Clean and tuck exterior.	Heber Springs	Cleburne	018	066	001	CH	Cleburne County Courthouse		$25,000.00
Cleburne County	1995	ADA Restroom	Heber Springs	Cleburne	018	066	001	CH	Cleburne County Courthouse		$14,000.00
Cleburne County	2007	Wheelchair lift.	Heber Springs	Cleburne	018	066	001	CH	Cleburne County Courthouse	$84,500.00	$84,500.00
Cleburne County	2010	Roof	Heber Springs	Cleburne	018	066	001	CH	Cleburne County Courthouse	$124,500.00	$124,500.00
Cleburne County	2018	Building Assessment	Heber Springs	Cleburne	18	66	1	CH	Cleburne County Courthouse	$40,000	$40,000.00
Cleburne County	2019	Electrical Upgarades	Heber Springs	Cleburne	18	66	1	Ch	Cleburene County Courthouse	$103,757	$103,757.00
Total:											$391,757.00

Attachment 5

Building Exterior

Repair Basement Windows
Paint/ Sealing (metal cornice, foundation walls, existing columns, exterior metal reinforcing, reseal around windows and doors)
Miscellaneous tile work
Marble treads
Roofing (Silicone roof coating and shingle rood area with insulation and flashing)
ADA Upgrades

Estimated @ $145,000

Building Interior

Lighting Upgrades
Fire Alarm System
Ceiling panel grids and replacing ceiling tiles

Estimated @ $200,000

Attachment 6

Cleburne County

Rebekah Knew <brenda@cleburnecountyar.com>

Quote

STEVE MCCALLUM, AFFORDABLE AIR <mccallumllc@yahoo.com> Wed, Apr 1, 2020 at 10:31 AM
Reply-To: "STEVE MCCALLUM, AFFORDABLE AIR" <mccallumllc@yahoo.com>
To: Rebekah Knew <rebekah@cleburnecountyar.com>

REBEKAH,

1. WE HAVE SPOKEN WITH ENGINEERING FOR DAIKIN MINI-SPLIT EQUIPMENT. WE WERE TRYING TO GET YOU A PRICE ON USING CONVENTIONAL EQUIPMENT VS THE DAIKIN VRV SYSTEM PROPOSED BY HARRISON ENERGY PARTNERS. THE ONLY WAY CONVENTIONAL EQUIPMENT CAN BE USED IS THAT IF EACH UNIT IS MOUNTED ON THE SIDE OF THE BUILDING, DUE TO LENGTH OF LINE-SET RUN RESTRICTIONS. ALSO THIS CONVENTIONAL EQUIPMENT CAN ONLY BE OPERATED IN HEAT MODE OR A/C MODE, VRV CAN PROVIDE BOTH AT THE SAME TIME TO MATCH NEEDS OF INDIVIDUAL OFFICES OR COURT ROOMS, ETC.

2. THE BEST INTEREST OF THE CUSTOMER (OLD COURT HOUSE) WOULD BE TO GO WITH THE VRV SYSTEM AS QUOTED, IN OUR OPINION AND THE ENGINEERING DEPARTMENT AT DAIKIN. IT IS THE CHEAPEST AND MOST COST EFFICIENT.

3. ALL OF THE EQUIPMENT, BOILER, CHILLER, PIPING, WATER LINES, FAN COIL UNITS, ETC IN THE OLD COURT HOUSE HAS FAR EXCEED ITS USEFUL LIFE. NOT ONLY IS NOT PRACTICAL TO REPLACE THIS EQUIPMENT IT IS BECOMING HARDER AND HARDER TO AQUIRE PARTS FOR THIS AS WELL.

WE APPRECIATE YOUR BUSINESS!
Thank You Very Much!

STEVE McCALLUM
JOSH WESTENHOVER
AFFORDABLE AIR
HOT OR COLD LLC.
501-206-5732
870-577-1634

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