# CONSTRUCTION NOTES:

A. GENERAL:
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE VIRGINIA STATEWIDE UNIFORM BUILDING CODE, THE 2015 INTERNATIONAL BUILDING CODE AND THE STANDARDS AND SPECIFICATIONS OF THE CITY OF WINCHESTER, VIRGINIA.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY "MISS UTILITY" AT PHONE NO. 811 AT LEAST TWO (2) WORKING DAYS BUT NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES.
3. THE CONTRACTOR SHALL BE LICENSED IN THE COMMONWEALTH OF VIRGINIA IN ACCORDANCE WITH CHAPTER 11 OF TITLE 54.1 OF THE CODE OF VIRGINIA. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN WORKMAN'S COMPENSATION INSURANCE AND CONTRACTORS GENERAL LIABILITY COVERAGE. A CERTIFICATE OF INSURANCE SHALL BE SUBMITTED TO THE OWNER.
4. ALL WORK SHALL BE PERFORMED IN AN EXPEDITIOUS AND WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL GENERALLY ACCEPTED TRADE PRACTICES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN A CLEAN AND ORDERLY SITE THROUGHOUT THE CONSTRUCTION.
5. THESE STRUCTURAL DRAWINGS SHALL BE READ IN CONCERT WITH ALL OTHER CONTRACT DOCUMENTS AND SPECIFICATIONS.
6. EVERY EFFORT HAS BEEN MADE TO VERIFY THE DIMENSIONS AND ENSURE THE ACCURACY OF THESE PLANS. HOWEVER, THE CONTRACTOR SHALL VERIFY DIMENSIONS PRIOR TO THE CONSTRUCTION PROCESS AND IF ANY DISCREPANCIES DO EXIST, THEN THE PROJECT ENGINEER SHALL BE NOTIFIED BEFORE THE NECESSARY ADJUSTMENTS ARE MADE.
7. DO NOT SCALE DRAWINGS; THE DIMENSIONS INDICATED ON THE PRINTS SHALL CONTROL.
8. THE TYPICAL DETAILS ARE PROVIDED ON THESE DRAWINGS TO DESCRIBE THE STANDARD CONSTRUCTION REQUIREMENTS TO BE APPLIED FOR THIS PROJECT. THE DETAILS MAY BE ADJUSTED, AS REQUIRED, TO ACCOUNT FOR VARYING CONDITIONS IN THE FIELD. SIGNIFICANT ADJUSTMENTS SHALL BE PRESENTED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OR FABRICATION. ALL TYPICAL DETAILS SHALL BE REVIEWED BY THE CONTRACTOR AND APPROPRIATE SUBCONTRACTORS PRIOR TO ANY DETAILING, FABRICATION, AND INSTALLATION. ANY CONFLICTS OR CLARIFICATIONS SHALL BE RESOLVED BEFORE BEGINNING WORK.
9. SHOP DRAWINGS OF ALL PRE-ENGINEERED STRUCTURAL COMPONENTS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ANY FABRICATION OR INSTALLATION.
10. ADEQUATE TEMPORARY SUPPORT STRUCTURES, SUCH AS SHEETING, SHORING, AND BRACING, SHALL BE INSTALLED DURING CONSTRUCTION UNTIL THE WIND RESISTING SYSTEMS ARE IN PLACE AND THE SUPPORTING DIAPHRAGMS ARE IN PLACE AND HAVE ATTAINED 75% STRENGTH. SHORING AND BRACING SHALL RESIST FORCES SUCH AS WIND AND UNBALANCED LOADING DUE TO CONSTRUCTION. BEARING SYSTEMS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE COMMONWEALTH OF VIRGINIA. IMPOSED CONSTRUCTION LOADS IN EXCESS OF THE STATED DESIGN LOADS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PLACING OF SUCH LOADS.
11. COORDINATE SIZE AND INSTALLATION OF ALL OPENINGS, SLEEVES, INSERTS, TIES, EQUIPMENT PADS, EQUIPMENT SUPPORTS, ETC. WITH APPROPRIATE TRADES AND CONTRACT DRAWINGS PRIOR TO INSTALLATION OR FABRICATION.
12. BOTH SIDES OF THE FOUNDATION WALLS SHALL BE BACKFILLED SIMULTANEOUSLY SO AS TO PREVENT OVERTURNING OR LATERAL MOVEMENT OF THE WALLS.
13. THE CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION OF ALL O.S.H.A. STANDARDS, SO THAT THE CONSTRUCTION SITE IS SECURE AND THAT THE SAFETY OF THE PUBLIC AND ALL PARTIES INVOLVED IN THE CONSTRUCTION PROCESS IS PRESERVED.

B. DESIGN CRITERIA:
1. CODES: (USE LATEST EDITIONS U.N.O.)
   a. INTERNATIONAL BUILDING CODE (2009).
   b. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI-318)
   c. AISC MANUAL OF STEEL CONSTRUCTION (AISC-13th EDITION).
   d. BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES. (ACI 530-08/ASCE 5-08/TMS 402-08)
2. LIVE LOADS:

| | |
|---|---|
| ROOF MINIMUM LOAD | 30 PSF |
| FLOOR LOADS (PUBLIC ROOMS) | 100 PSF |
| FLOOR LOADS (PUBLIC CORRIDORS) | 100 PSF |
| STAIR LOADS | 100 PSF |

DEAD LOADS:
ACTUAL MATERIAL WEIGHTS
COLLATERAL LOADS FOR MAIN BUILDING 5 PSF

3. WIND LOAD:

| | |
|---|---|
| ULTIMATE WIND SPEED | 115 MPH |
| IMPORTANCE FACTORS | 1.0 |
| EXPOSURE | B |
| COMPONENTS & CLADDING | 21 PSF |

4. SNOW LOAD:

| | |
|---|---|
| MEAN GROUND SNOW LOAD | 35.0 PSF* |
| FLAT ROOF SNOW LOAD | 30.0 PSF |
| SNOW EXPOSURE FACTOR | 0.7 |
| SNOW IMPORTANCE FACTOR | 1.0 |

*ADJUST FOR SNOW ACCUMULATION, IF APPLICABLE.

5. EARTHQUAKE LOAD:

| | |
|---|---|
| MAPPED SHORT PERIOD SPECTRAL RESPONSE ACCELERATION (Ss) | 0.131 |
| MAPPED 1 SECOND PERIOD SPECTRAL RESPONSE ACCELERATION (S1) | 0.055 |
| SHORT PERIOD SPECTRAL RESPONSE ACCELERATION (SDS) | 0.140 |
| 1 SECOND PERIOD SPECTRAL RESPONSE ACCELERATION (SD1) | 0.087 |
| SOIL SITE CLASS | D |
| SEISMIC HAZARD EXPOSURE GROUP | II |
| SEISMIC PERFORMANCE CATEGORY | B |

C. CONCRETE:
1. CONCRETE USED FOR THIS PROJECT SHALL MEET OR EXCEED THE FOLLOWING COMPRESSIVE STRENGTH AT 28 DAYS:

| | |
|---|---|
| FOUNDATION FOOTINGS & WALLS | 3000 PSI NORMAL WT. |
| SLABS-ON-GRADE (EXTERIOR) | 3500 PSI NORMAL WT. |
| SLABS-ON-GRADE (INTERIOR) | 3000 PSI NORMAL WT. |
| MASONRY GROUT | 2000 PSI NORMAL WT. |
| BOND BEAM GROUT | 3000 PSI NORMAL WT. |

2. ALL CONCRETE SUBJECT TO FREEZE/THAW CYCLES SHALL BE AIR ENTRAINED.
3. FOOTINGS MAY BE PLACED DIRECTLY AGAINST THE SOIL WITH ADEQUATE FORMING.
4. THE SLAB SHALL BE POURED IN A STRIP PATTERN, WHERE CONSTRUCTION JOINTS SHALL COINCIDE WITH THE CONTROL JOINTS. A DIAMOND PATTERN CONTROL JOINT SHALL BE PROVIDED AT ALL ISOLATED COLUMN LOCATIONS, AS INDICATED ON THESE PLANS. THE CORNERS OF THE DIAMOND SHALL COINCIDE WITH THE CONTROL JOINTS.
5. ALL CONTROL JOINTS MAY BE SAW-CUT OR CONSTRUCTED WITH A METAL CONTROL-JOINT FORM. CONTROL JOINTS SHALL BE SEALED WITH A SUITABLE JOINT SEALANT.
6. SAW-CUT OR TOOLED CONTROL JOINTS (C.J. ON PLANS) SHALL BE AS DETAILED. SAW-CUTS SHALL BE MADE AS SOON AS PRACTICAL WITHOUT DAMAGING THE FINISHED CONCRETE FLOOR SURFACE (12 HOURS MAX.).
7. SLAB CONSTRUCTION JOINTS SHALL BE LOCATED, AS REQUIRED FOR CONSTRUCTION, AT THE CONTROL JOINT (C.J.) LOCATIONS AS INDICATED ON PLANS.
8. PROVIDE ISOLATION JOINTS AT ALL COLUMNS WITH 1/2" PREFORMED JOINT FILLER AS INDICATED BY TYPICAL DETAILS.
9. CONSTRUCTION JOINTS IN THE SLABS SHALL HAVE THE REINFORCING CONTINUE THROUGH THE JOINT U.N.O. ON DETAILS. CONSTRUCTION JOINTS SHALL BE LOCATED BY THE CONTRACTOR, TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE, AND SHALL BE APPROVED BY THE ENGINEER.
10. EXPOSED CONCRETE EDGES SHALL BE BUILT SQUARE AND RUBBED TO A MINIMUM RADIUS CHAMFER, UNLESS SPECIFIC CHAMFERS ARE CALLED FOR IN DETAILS.
11. CONCRETE FORMWORK SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF VIRGINIA.
12. SEE ARCHITECTURAL, BUILDING, MECHANICAL AND PLUMBING DRAWINGS FOR LOCATIONS OF OPENINGS AND SLEEVES. DO NOT CUT REINFORCEMENT.
13. DEPRESS AND STEP FLOOR SLABS, AS INDICATED. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND DEPTH OF THE DEPRESSED AREAS, IF APPLICABLE.

D. REINFORCEMENT:
1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS IN ACCORDANCE WITH ASTM A615 SPECIFICATIONS, GRADE 60.
2. WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A185. THE WELDED WIRE FABRIC SHALL HAVE A MINIMUM STEEL YIELD STRENGTH OF 65,000 PSI. ($F_y$ = 65,000 psi)
3. MAINTAIN MINIMUM CONCRETE COVERAGE FOR REINFORCING AS SPECIFIED IN ACI-318.
4. ALL CONTINUOUS REINFORCING IN FOOTINGS SHALL BE LAP-SPLICED 2'-0". ALL OTHER SPLICES SHALL BE CLASS B TENSION, U.N.O.
5. ALL PEDESTALS OR HOLES IN THE CONCRETE SLAB SHALL HAVE, ADDITIONALLY, (2) #4 x (OPENING DIM. + 2 FT.) ALONG EACH SIDE OF OPENING AND (2) #3 x 2'-0" DIAGONALLY AT EACH PEDESTAL CORNER.
6. DETAILING, FABRICATION, AND INSTALLATION OF REINFORCING BARS SHALL COMPLY WITH THE "DESIGN HANDBOOK OF THE CRSI" AND THE MANUAL OF STANDARD PRACTICE OF THE ACI.
7. PROVIDE DOWELS TO MATCH REINFORCEMENT IN ALL WALLS, PIERS, COLUMNS, AND FOUNDATIONS.

E. STRUCTURAL STEEL:
1. THE STRUCTURAL STEEL MATERIAL SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE SUPPLIED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL, THIS DESIGN, AND PROJECT SPECIFICATIONS.
2. ALL STRUCTURAL STEEL SHALL BE ASTM, A992-50 GRADE 50 STEEL, U.N.O. A36 FOR SHAPES AND PLATES, AND A500, GRADE B FOR TUBES, A53, TYPE E FOR PIPES.
3. FRAMING BOLTS SHALL CONFORM TO ASTM A325N, 3/4" DIA. MIN. U.N.O.
4. ANCHOR BOLTS SHALL CONFORM TO ASTM A307. SEE COLUMN DETAILS FOR LOCATION,TYPE, & SIZE.
5. WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY D1.1-1, E-70xx ELECTRODES. FILLER METAL SHALL HAVE A MINIMUM YIELD STRENGTH OF 57 KSI.
6. PROVIDE 1/2" SPACE BETWEEN ENDS OF CONTINUOUS ANGLES, SUPPORTING DECKING OR MASONRY.
7. THE CENTERLINES OF ALL COLUMNS AND BEAMS SHALL BE LOCATED ON THE CENTROID OF THE STRUCTURAL MEMBERS AND THE FOOTING ELEMENTS, UNLESS OTHERWISE SHOWN.
8. ALL CONNECTIONS SHALL BE STANDARD SHEAR CONNECTIONS, UNLESS NOTED OTHERWISE. WHERE CONNECTIONS OR REACTIONS ARE NOT SPECIFIED, THE FABRICATOR SHALL PROVIDE CONNECTIONS TO SUPPORT ONE-HALF OF THE ALLOWABLE UNIFORM LOAD SHOWN IN THE AISC MANUAL, 13th EDITION TABLES OF ALLOWABLE UNIFORM LOADS, PART 2 FOR THE GIVEN BEAM, SPAN AND GRADE OF STEEL SPECIFIED.
9. THE MINIMUM NUMBER OF BOLTS PER CONNECTION SHALL BE AS FOLLOWS: W8 AND W10-2 BOLTS, W12 AND W14-3 BOLTS, W16 AND W18-4 BOLTS, W21-5 BOLTS, AND W24-6 BOLTS.
10. WHERE SLOTTED CONNECTION HOLES ARE USED, THE FABRICATOR SHALL ADJUST THE BOLT VALUES ACCORDINGLY.
11. THE FOLLOWING CONDITIONS SHALL BE CHECKED WHEN DESIGNING BEAM CONNECTIONS: BOLT SHEAR, BOLT BEARING ON CONNECTING MATERIAL, BLOCK WEB SHEAR ON THE NET AREA OF THE CONNECTING ANGLES OR PLATES AND LOCAL BENDING STRESSES.

F. MASONRY:
1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE STANDARDS AND SPECIFICATIONS OF THE MASONRY STANDARDS JOINT COMMITTEE.
2. CONCRETE MASONRY UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI @ 28 DAYS.
3. THE MINIMUM CONCRETE PRISM STRENGTH SHALL BE 1900 PSI. ($F'm$=1900 PSI)
4. THE BLOCK MORTAR SHALL BE TYPE "M" MORTAR FOR ALL MASONRY MATERIALS BELOW GRADE AND ALL OTHER MORTAR SHALL BE TYPE "S" IN ACCORDANCE WITH ASTM C270.
5. THE CMU SHALL BE REINFORCED WITH STEEL REINFORCING BARS THAT COMPLY WITH ASTM A615 GRADE 60 STEEL. TYPICALLY, THE HORIZONTAL JOINT REINFORCEMENT OF THE CMU SHALL CONSIST OF TRUSS TYPE WELDED WIRE, 9 GAUGE, PLACED IN EVERY OTHER COURSE. MORTAR JOINTS SHALL BE UNIFORM 3/8" THICK JOINTS AS REQUIRED FOR COURSING.
6. FULLY GROUT AND REINFORCE, AS SPECIFIED, ALL POINTS OF BEARING IN THE CMU WALLS. ALL GROUT SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2000 PSI AT 28 DAYS.
7. ALL MASONRY BOND BEAMS SHALL BE GROUTED SOLID WITH 3000 PSI CONCRETE GROUT.
8. ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID.
9. SOLID MASONRY PIERS, IDENTIFIED AS SMP ON PLAN, SHALL BE GROUTED SOLID FULL HEIGHT OF WALL TO FOUNDATION.

G. WOOD:
1. THE CONTRACTOR SHALL PROVIDE ALL WOOD NAILS, BOLTS, SCREWS, FRAMING ANCHORS, CONSTRUCTION ADHESIVES, ETC., AS NEEDED, TO PERFORM THE ROUGH AND FINISH CARPENTRY FOR THIS PROJECT.
2. ALL INTERIOR FRAMING DIMENSIONS ARE FROM FACE TO FACE OF THE ACTUAL FRAMING LUMBER.
3. ALL FRAME WALLS SHALL BE CONSTRUCTED WITH 2"x6" NOMINAL WOOD STUDS, AS INDICATED ON THE PLANS, WITH A DOUBLE TOP PLATE AND SINGLE BOTTOM PLATE. THE SPACING OF THE WOOD STUD MEMBERS SHALL BE AS SPECIFIED ON THE PLANS. ALL WOOD MATERIALS WHICH ARE IN CONTACT WITH CONCRETE, MASONRY, STEEL, EARTH, ETC. SHALL BE A WOOD PRESERVATIVE, PRESSURE TREATED MATERIAL. THE TREATMENT SHALL BE AWPA TREATMENT C, USING A WATERBORNE PRESERVATIVE WITH 0.25 PERCENT TYPICAL RETAINAGE OR A 0.40 PERCENT RETAINAGE FOR MATERIAL IN CONTACT WITH WATER.
4. UNLESS NOTED OTHERWISE, ALL WOOD STUD FRAMING MEMBERS SHALL BE SPRUCE-PINE-FIR, #2 GRADE (S-P-F #2) MATERIAL, OR EQUAL, AND SHALL BE FASTENED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2009), OR AS SPECIFIED ON THESE DRAWINGS. SOLID WOOD BLOCKING SHALL BE INSTALLED WHERE REQUIRED BY FOR THE STRUCTURAL BRACING, FIRESTOPPING AND DRAFTSTOPPING. UNLESS NOTED OTHERWISE, ALL STRUCTURAL FRAMING MEMBERS, SUCH AS JOISTS, RAFTERS, TRUSS MEMBERS, ETC. SHALL BE SPRUCE-PINE-FIR #2 GRADE (S.P.F. #2) MATERIAL, OR EQUAL.
5. ALL MICRO-LAM, PARALLAM, PRE-MANUFACTURED TRUSSES, AND WOOD-I STRUCTURAL ELEMENTS SHALL BE HANDLED, STORED, CUT, AND INSTALLED IN ACCORDANCE WITH THE STANDARDS AND AND SPECIFICATIONS OF THE MANUFACTURER.
6. ALL EXTERIOR WALLS AND THE ROOF DIAPHRAGMS SHALL BE SHEATHED WITH 15/32" APA RATED SHEATHING, 24/16, EXPOSURE 1 SHEATHING, UNLESS NOTED OTHERWISE.
7. BUILDING PAPER SHALL BE NO 15 ASPHALT FELT OR SPUN BONDED POLYETHYLENE. THE AIR INFILTRATION BARRIER SHALL BE TYVEK, OR EQUAL.

H. UTILITY SYSTEMS
1. THE PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS ARE PROVIDED ON THE MECHANICAL PLANS AS PREPARED BY COMFORT DESIGN, INC., ENTITLED HANDLEY LIBRARY, AND DATED JANUARY 27, 2019.
2. ALL CEILING SYSTEMS AND FINISHES WHICH MUST BE REMOVED FOR INSTALLATION AND RENOVATION OF THE MECHANICAL SYSTEMS MUST BE REPLACED TO MATCH THE EXISTING CONDITIONS.
3. ALL HVAC UNITS WHICH ARE TO BE SUSPENDED FROM ROOF OR FLOOR FRAMING SYSTEMS SHALL BE INSTALLED WITH LATERAL BRACING CAPABLE OF RESISTING A LATERAL LOAD OF 200 LBS. APPLIED IN ANY DIRECTION.

# ABBREVIATIONS:

| | |
|---|---|
| AB | ANCHOR BOLT |
| ADJ | ADJACENT |
| ADDL | ADDITIONAL |
| ALT | ALTERNATE |
| ARCH | ARCHITECTURE |
| B | BOTTOM |
| BLT | BOLT |
| BM | BEAM |
| BRG | BEARING |
| CJ | CONTROL JOINT |
| CLR | CLEAR |
| CMU | CONCRETE MASONRY UNIT |
| COL | COLUMN |
| CONN | CONNECTION |
| CONT | CONTINUOUS |
| CSJ | CONSTRUCTION JOINT |
| CTR. | CENTER |
| D | DEEP or DEPTH |
| DIAG | DIAGONAL |
| DIA or Ø | DIAMETER |
| DIM | DIMENSION |
| DN | DOWN |
| DWG | DRAWING |
| DWLS | DOWELS |
| EA | EACH |
| EF | EACH FACE |
| EL | ELEVATION |
| ELEC | ELECTRICAL |
| E-O-S | EDGE OF SLAB |
| EQ | EQUAL |
| EW | EACH WAY |
| EXP JT | EXPANSION JOINT |
| EXT | EXTERIOR |
| FF | FAR FACE |
| F. FLR. | FINISHED FLOOR |
| FLR | FLOOR |
| FOM | FACE OF MASONRY |
| FRMG | FRAMING |
| FTG | FOOTING |
| GA | GAGE |
| GALV | GALVANIZED |
| HORIZ | HORIZONTAL |
| HP | HIGH POINT |
| IF | INSIDE FACE |
| INSUL | INSULATION |
| INT | INTERIOR |
| ISOL JT | ISOLATION JOINT |
| JT | JOINT |
| K | KIPS |
| L | LINTEL |
| LLH | LONG LEG HORIZONTAL |
| LLV | LONG LEG VERTICAL |
| LP | LOW POINT |
| LW | LONG WAY |
| MANUF | MANUFACTURER |
| MATL | MATERIAL |
| MAX | MAXIMUM |
| MECH | MECHANICAL |
| MIN | MINIMUM |
| N.I.C. | NOT IN CONTRACT |
| N.T.S. | NOT TO SCALE |
| O.C. | ON CENTERS |
| OF | OUTSIDE FACE |
| OPNG | OPENING |
| OPP | OPPOSITE |
| ORIENT | ORIENTATION |
| PC | PRECAST |
| PL | PLATE |
| PLBG | PLUMBING |
| PR. | PROPOSED |
| REINF | REINFORCING(MENT) |
| REQD | REQUIRED |
| REQMTS | REQUIREMENTS |
| RW | RETAINING WALL |
| SCHED | SCHEDULE |
| SECT | SECTION |
| SIM | SIMILAR |
| SMP | SOLID MASONRY PIER |
| S-O-G | SLAB-ON-GRADE |
| STIFF | STIFFENER |
| SW | SHORT WAY |
| T | TOP |
| T.B.R. | TO BE REMOVED |
| T.O.F. | TOP OF FOOTING |
| T.O.S. | TOP OF SLAB |
| T.O.STL. | TOP OF STEEL |
| T.O.W. | TOP OF WALL |
| TYP | TYPICAL |
| U.N.O. | UNLESS NOTED OTHERWISE |
| VB | VAPOR BARRIER |
| VERT | VERTICAL |
| (V.I.F.) | VERIFY IN FIELD |
| W/ | WITH |
| WF | WIDE FLANGE |
| W/O | WITHOUT |
| WP | WATERPROOFING |
| WS | WATERSTOP |
| WWF | WELDED WIRE FABRIC |

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# RENOVATION PROJECT

## List Of Drawings


SHT. S1/S4: GENERAL NOTES & CONSTRUCTION SPECIFICATIONS
SHT. S2/S4: ROOF FRAMING PLAN
SHT. S3/S4: ROOF REPAIR PLAN
SHT. S4/S4: PARTIAL FLOOR LAYOUT REPAIR PLANS & ROOF FRAMING DETAILS


## SYMBOLS

| | | | |
|---|---|---|---|
| X/X | SECTION MARK | FMC | FULL MOMENT CONNECTION |
| X/X | DETAIL MARK | (+/- X'-X") | ELEVATION DIFFERENCE |
| X/X | ELEVATION | (XX'-XX") | DESIGNATED JOIST BEARING TOP OF STEEL ELEVATION ABOVE DATUM |
| XX.XX' | TOP OF FTG. ELEVATION | | CENTERLINE |
| | SLAB DEPRESSION | # | NUMBER |
| F1 | FOOTING TYPE | | ELEVATION |
| | | 16" | STEP IN FOOTING (16" STEP) |

| NO. | DATE | REVISIONS DESCRIPTION | BY |
|---|---|---|---|
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TITLE: GENERAL NOTES AND CONSTRUCTION SPECIFICAITONS

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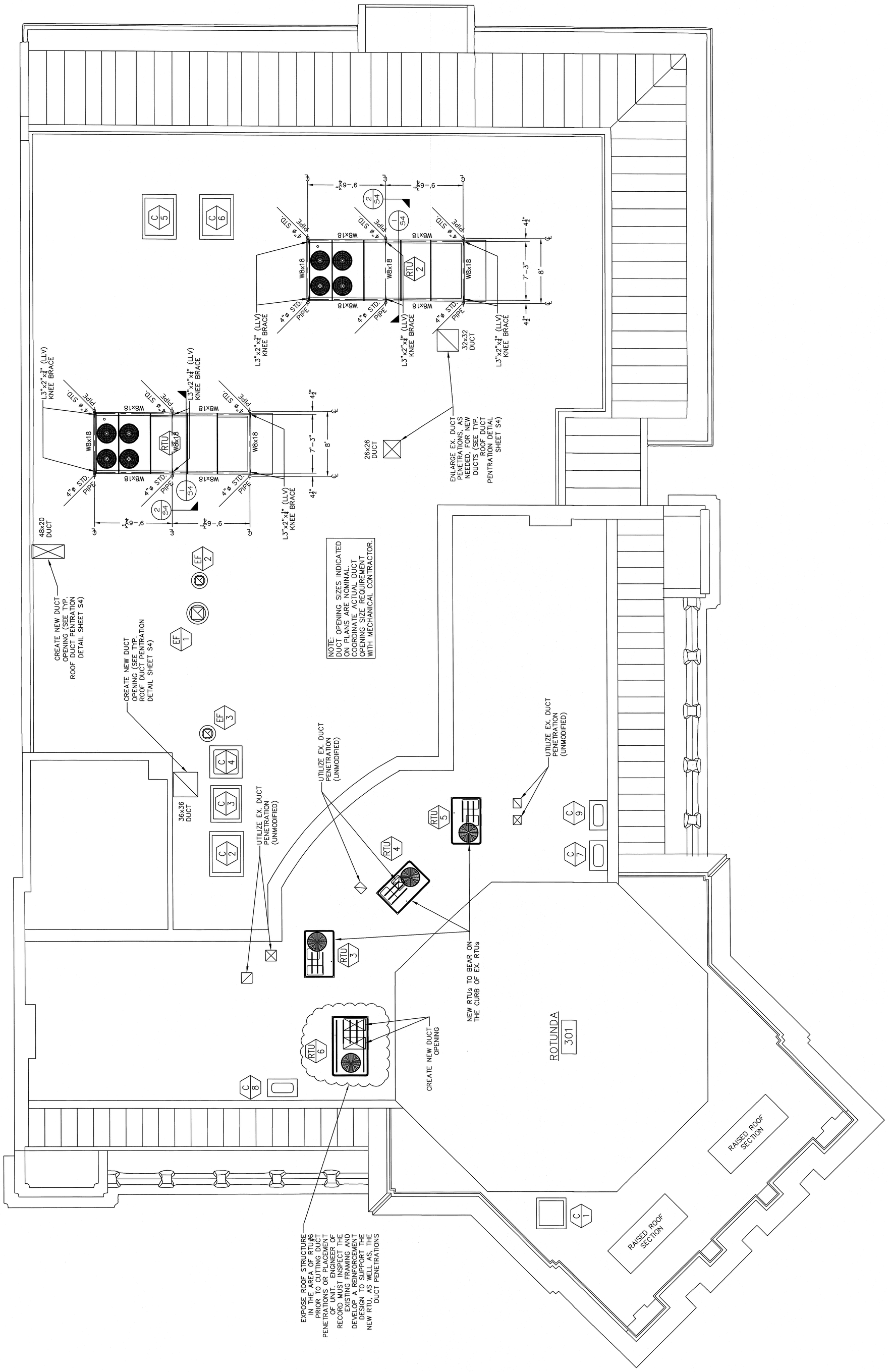
COMMONWEALTH OF VIRGINIA
JASON S. MARSHALL
Lic. No. 047220
03-27-2019
PROFESSIONAL ENGINEER

| | |
|---|---|
| DRAWN BY: P-L | JOB NO.: 1806035 |
| DATE: 03-27-2019 | |
| SCALE: AS NOTED | |
| SHEET: S1/S4 | |




ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"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TITLE: ROOF FRAMING PLAN

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COMMONWEALTH OF VIRGINIA
JASON S. MARSHALL
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03-27-19
PROFESSIONAL ENGINEER

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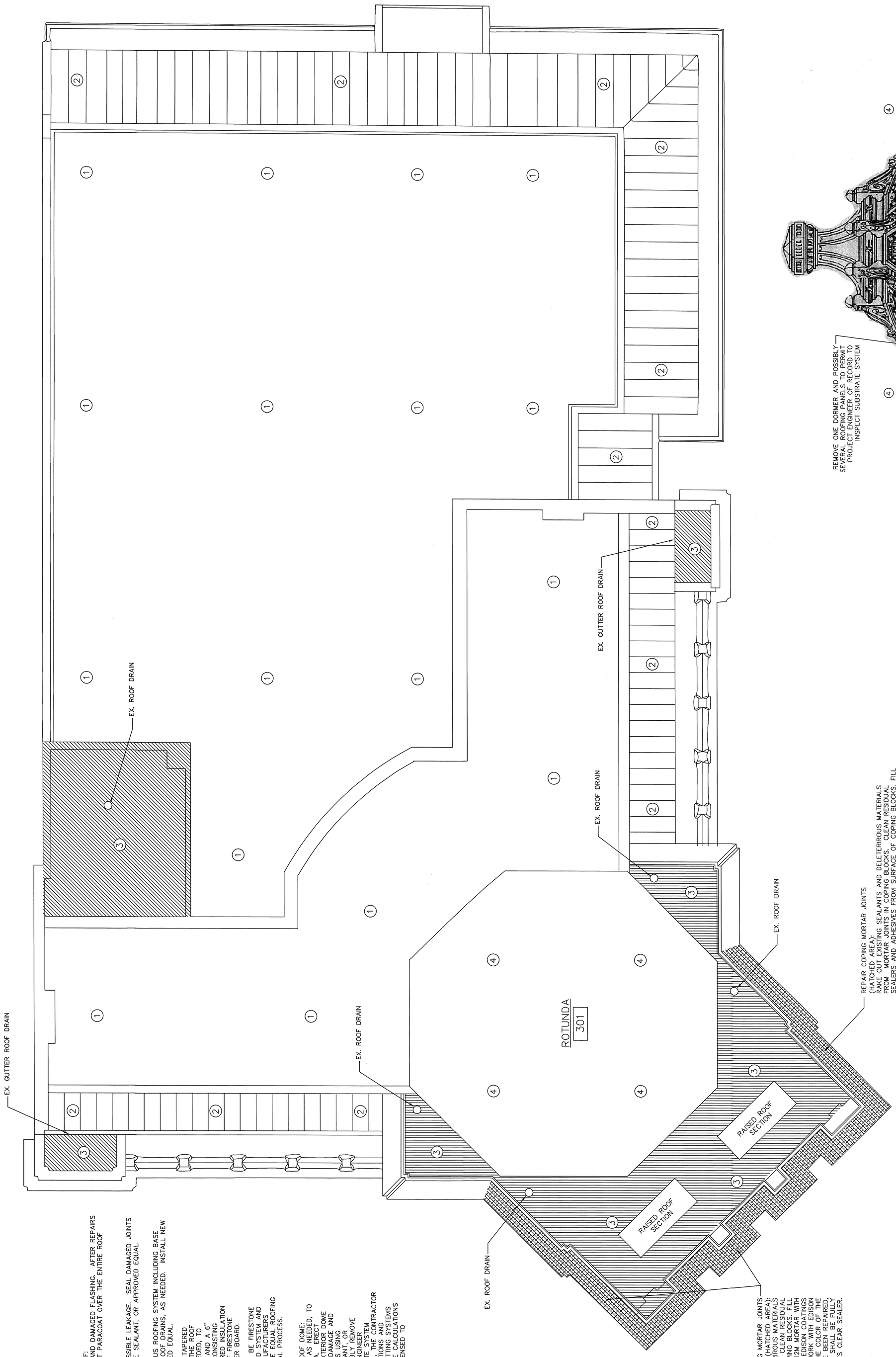
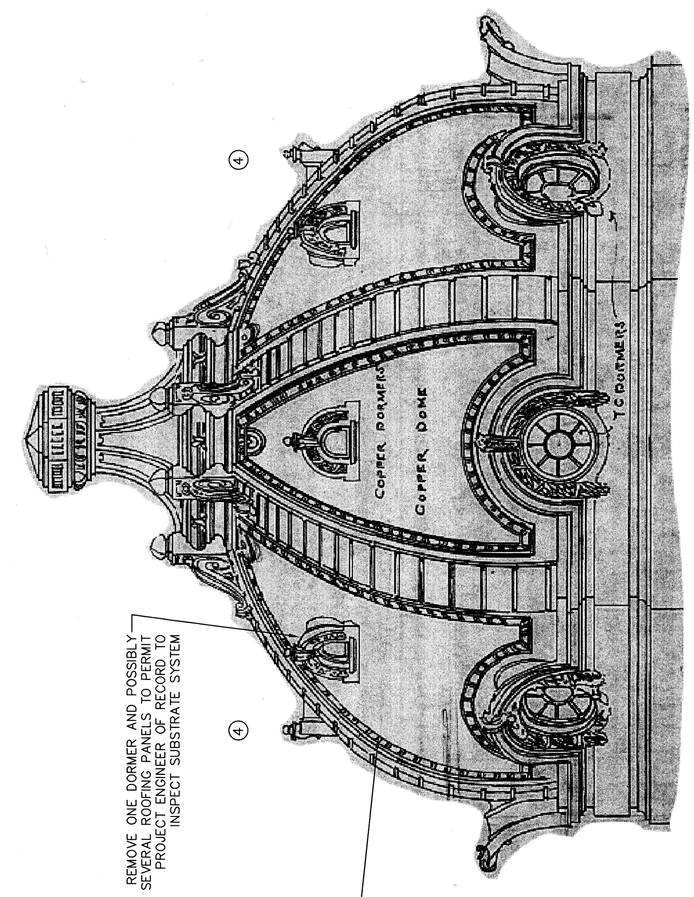
JOB NO.: 1806035
DATE: 03-27-2019
SCALE: AS NOTED
SHEET: S2/S4




ROOF REPAIR PLAN
SCALE: 3/16" = 1'-0"




ADD ALTERNATE #1:
ROTUNDA ROOF ELEVATION VIEW
SCALE: N.T.S.

1. REPAIR EXISTING BUILT-UP MODIFIED BITUMINOUS ROOF:
   REPAIR OPEN LAPS, BLISTERS, LOCALIZED DAMAGE, AND DAMAGED FLASHING. AFTER REPAIRS HAVE BEEN COMPLETED, APPLY ONE COAT OF SIPLAST PARACOAT OVER THE ENTIRE ROOF SURFACE INCLUDING MEMBRANE AND BASE FLASHING.

2. REPAIR EXISTING COPPER STANDING SEAM ROOF:
   INSPECT ALL JOINTS FOR DAMAGE AND AREAS OF POSSIBLE LEAKAGE. SEAL DAMAGED JOINTS USING MASTER SEAL NP1 ELASTOMERIC POLYURETHANE SEALANT, OR APPROVED EQUAL.

3. REPLACE EXISTING ROOF (HATCHED AREAS):
   FULLY REMOVE EXISTING BUILT-UP MODIFIED BITUMINOUS ROOFING SYSTEM INCLUDING BASE FLASHING. INSPECT, REPAIR, OR REPLACE EXISTING ROOF DRAINS, AS NEEDED. INSTALL NEW FIRESTONE 80 MIL TPO ROOFING SYSTEM, OR APPROVED EQUAL.

   -PROVIDE A BASE INSULATION LAYER CONSISTING OF TAPERED FIRESTONE ISO 95+GL MECHANICALLY FASTENED TO THE ROOF STRUCTURE. INSULATION MUST BE TAPERED, AS NEEDED, TO ACHIEVE A ¼" PER FOOT PITCH TO THE ROOF DRAIN AND A 6" MINIMUM THICKNESS. INSTALL A 2" COVER BOARD CONSISTING OF FIRESTONE ISOGUARD HD ADHERED TO THE TAPERED INSULATION LAYER. INSTALL A MEMBRANE LAYER CONSISTING OF FIRESTONE 80 MIL TPO ROOFING SYSTEM ADHERED TO THE COVER BOARD.

   -ALL FLASHING, ADHESIVES, AND ACCESSORIES SHALL BE FIRESTONE PRODUCTS RECOMMENDED FOR THE ABOVE-DESCRIBED SYSTEM AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS. ALTERNATIVE EQUAL ROOFING SYSTEMS MAY BE CONSIDERED DURING THE SUBMITTAL PROCESS.

4. ADD ALTERNATE #1
   INSPECTION AND REPAIR OF THE ROTUNDA COPPER ROOF DOME:
   INSTALL DEBRIS NETTING WITHIN THE ROTUNDA DOME, AS NEEDED, TO PROTECT THE GLASS DOME INSIDE THE ROTUNDA AREA. ERECT SCAFFOLDING, AS NEEDED, TO SAFELY ACCESS THE EXTERIOR DOME COPPER ROOFING SYSTEM. INSPECT ALL JOINTS FOR DAMAGE AND AREAS OF POSSIBLE LEAKAGE. SEAL DAMAGED JOINTS USING MASTER SEAL NP1 ELASTOMERIC POLYURETHANE SEALANT, OR APPROVED EQUAL. REMOVE ONE DORMER AND POSSIBLY REMOVE SEVERAL ROOFING PANELS TO ALLOW THE PROJECT ENGINEER OF RECORD TO INSPECT A PORTION OF THE SUBSTRATE SYSTEM SUPPORTING THE COPPER ROOF. PLEASE BE ADVISED, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE ENGINEERING CALCULATIONS AND DESIGN PLANS FOR THE SCAFFOLDING AND DEBRIS NETTING SYSTEMS FOR SUBMITTAL TO THE ENGINEER OF RECORD. THESE CALCULATIONS AND PLANS MUST BE PREPARED BY AN ENGINEER LICENSED TO PRACTICE IN THE COMMONWEALTH OF VIRGINIA.

CONSTRUCTION PHASING NOTE:
PHASING OF THE ROOF REPAIRS AND REPLACEMENTS SHALL BE DETERMINED BY THE CONTRACTOR. ROOF REPAIRS AND REPLACEMENTS SHALL BE COORDINATED WITH PHASING OF HVAC REPAIRS AND REPLACEMENT TO PREVENT REDUNDANT WORK.


PAINTER-LEWIS, P.L.C.
817 CEDAR CREEK GRADE SUITE #120
WINCHESTER, VIRGINIA 22601
TELEPHONE: (540) 662-5792
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EMAIL: office@painterlewis.com
CONSULTING ENGINEERS


COMMONWEALTH OF VIRGINIA
JASON S. MARSHALL
Lic. No. 047220
03-27-2019
PROFESSIONAL ENGINEER

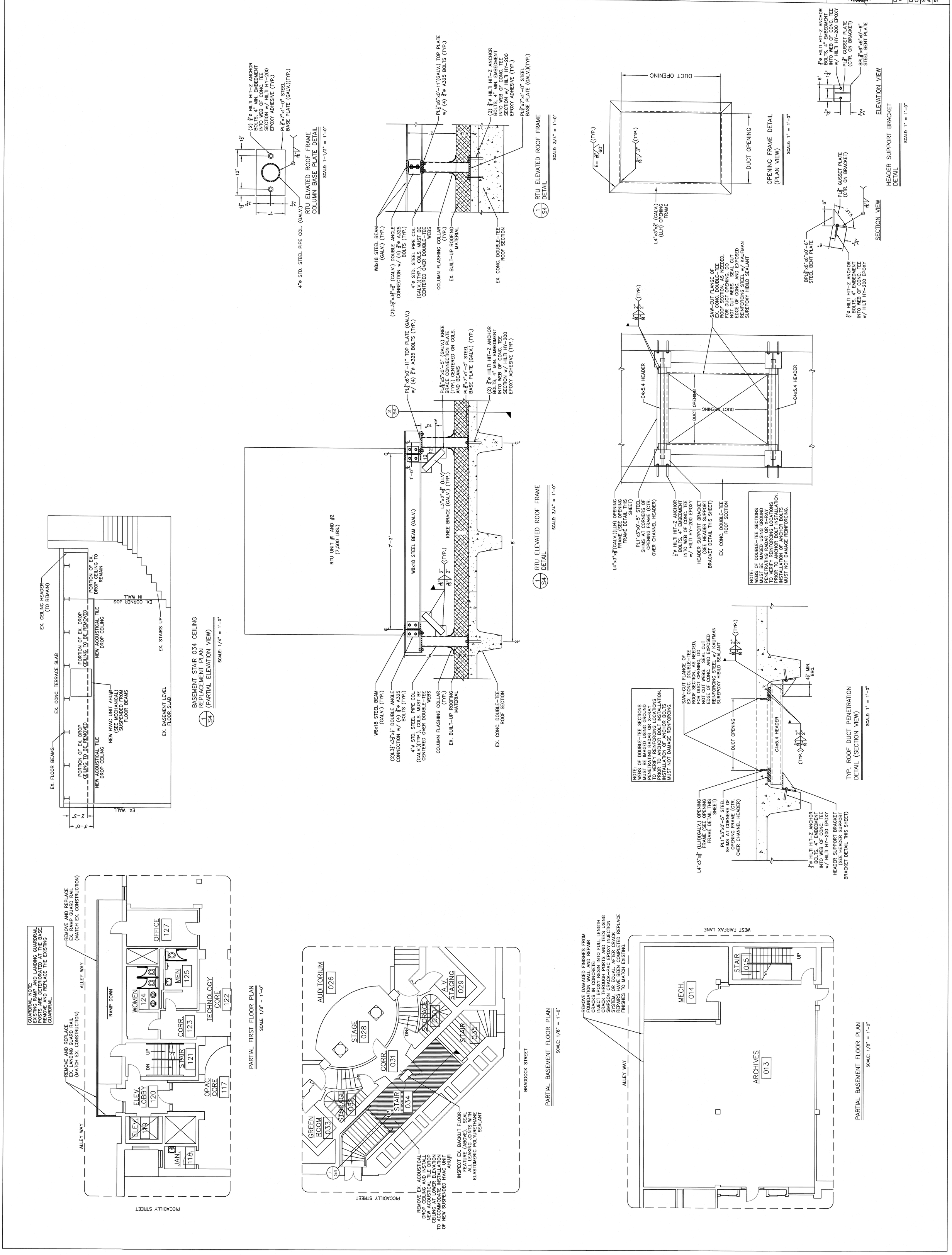
| | |
|---|---|
| DRAWN BY: P-L | JOB NO.: 1806035 |
| DATE: 03-27-2019 | |
| SCALE: AS NOTED | |
| SHEET: S3/S4 | |

COMFORT DESIGN, INC.
620 PENNSYLVANIA AVE.
WINCHESTER, VA 22601
(540) 665-2846

PROJECT:
HANDLEY LIBRARY
100 WEST PICADILLY STREET
WINCHESTER, VIRGINIA 22601

TITLE:
ROOF REPAIR/REPLACEMENT PLAN

| REVISIONS | | | |
|---|---|---|---|
| NO. | DATE | DESCRIPTION | BY |
| | | | |


RTU ELEVATED ROOF FRAME COLUMN BASE PLATE DETAIL
SCALE: 1-1/2" = 1'-0"
RTU ELEVATED ROOF FRAME DETAIL
SCALE: 3/4" = 1'-0"
OPENING FRAME DETAIL (PLAN VIEW)
SCALE: 1" = 1'-0"
HEADER SUPPORT BRACKET DETAIL
SCALE: 1" = 1'-0"
SECTION VIEW
ELEVATION VIEW
BASEMENT STAIR 034 CEILING REPLACEMENT PLAN (PARTIAL ELEVATION VIEW)
SCALE: 1/4" = 1'-0"
TYP. ROOF DUCT PENETRATION DETAIL (SECTION VIEW)
SCALE: 1" = 1'-0"
PARTIAL FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"
PARTIAL BASEMENT FLOOR PLAN
SCALE: 1/8" = 1'-0"
PICCADILLY STREET
BRADDOCK STREET
WEST FAIRFAX LANE
ALLEY WAY
GUARDRAIL NOTE:
EXISTING RAMP AND LANDING GUARDRAIL POSTS ARE DETERIORATED AT THE BASE. REMOVE AND REPLACE THE EXISTING GUARDRAIL.
NOTE:
WEBS OF DOUBLE-TEE SECTIONS MUST BE IMAGED USING GROUND PENETRATING RADAR OR X-RAY TO VERIFY REINFORCING LOCATIONS PRIOR TO ANCHOR BOLT INSTALLATION. INSTALLATION OF ANCHOR BOLTS MUST NOT DAMAGE REINFORCING.
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HANDLEY LIBRARY
100 WEST PICADILLY STREET
WINCHESTER, VIRGINIA 22601
PARTIAL FLOOR LAYOUT
REPAIR PLANS
REVISIONS
NO. DATE DESCRIPTION BY
PROJECT:
TITLE:
DRAWN BY: P-L
JOB NO.: 1806035
DATE: 03-27-2019
SCALE: AS NOTED
SHEET: S4/S4