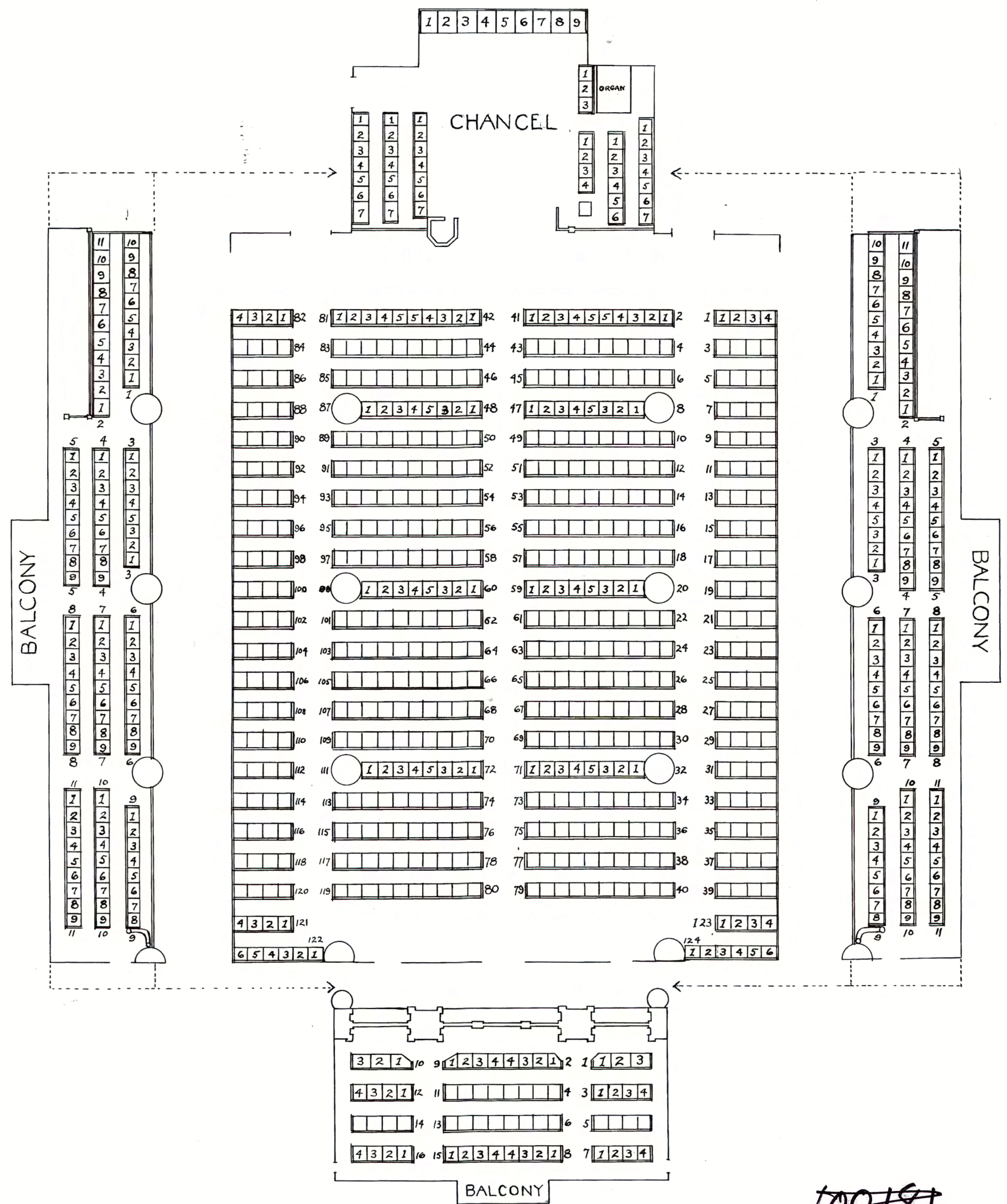


Ex. 17 - Mead Chapel Plans - misc 2



SEATING PLAN OF MEAD MEMORIAL CHAPEL  
MIDDLEBURY, VT.

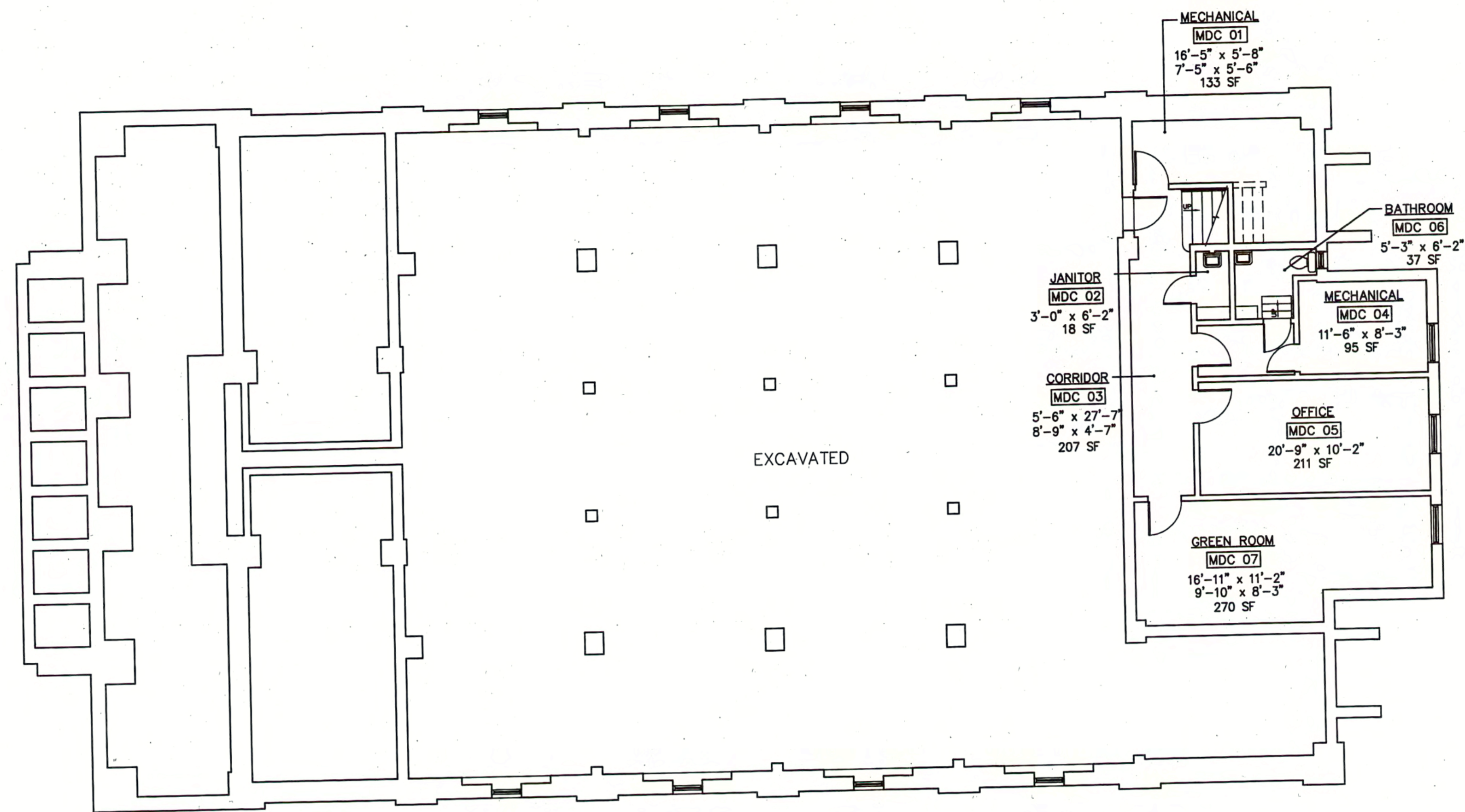
~~100181~~

067916

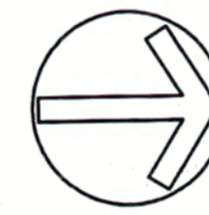


REVISIONS

MIDDLEBURY COLLEGE  
MEAD CHAPEL



**BASEMENT FLOOR PLAN**  
SCALE: 1/8"=1'-0"



SPACE  
ASSESSMENT

TITLE  
BASEMENT FLOOR  
PLAN

DATE 12/16/02

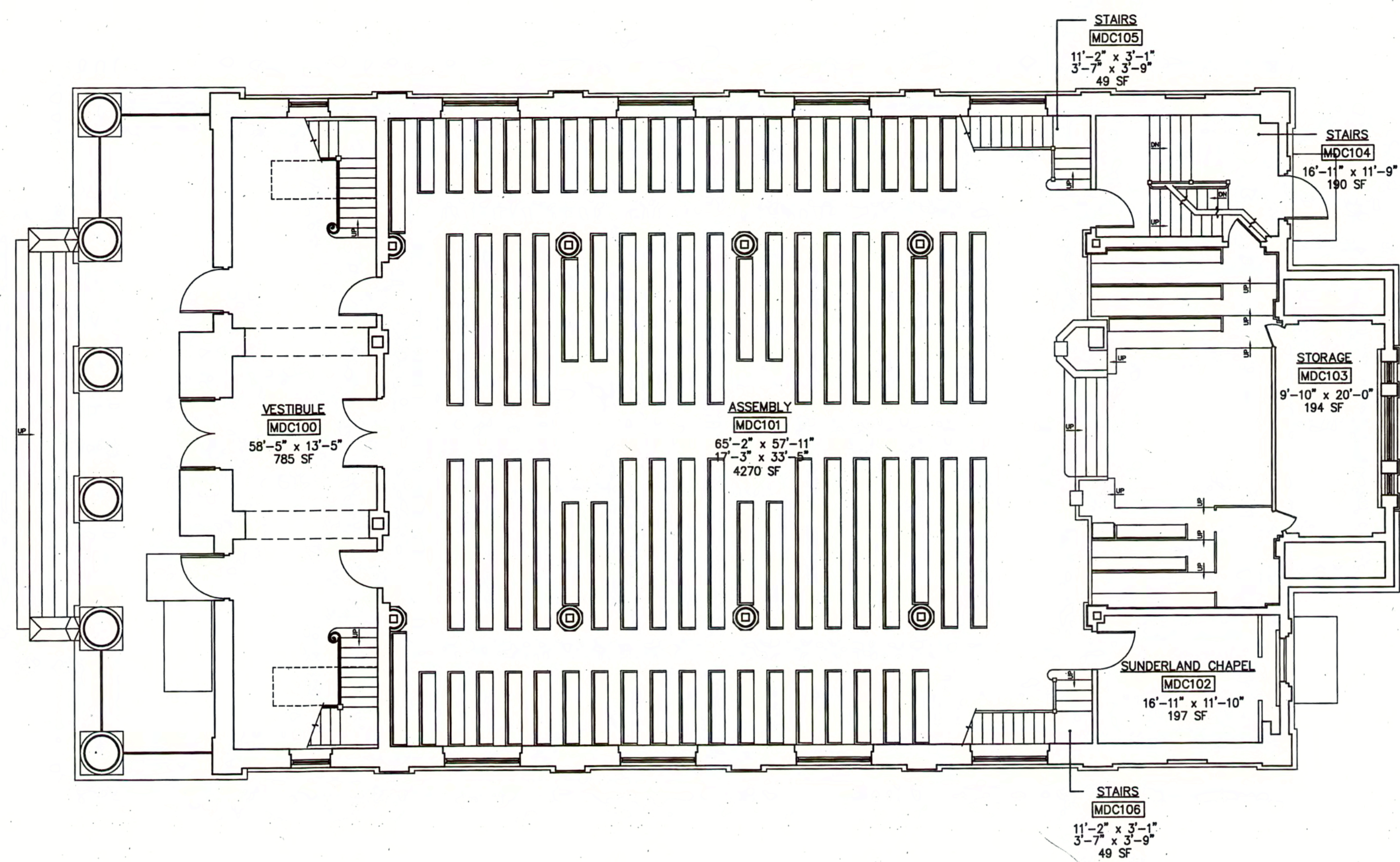
DWG. NO.

SP1



REVISIONS

MIDDLEBURY COLLEGE  
MEAD CHAPEL



**FIRST FLOOR PLAN**  
SCALE: 1/8"=1'-0"



SPACE  
ASSESSMENT

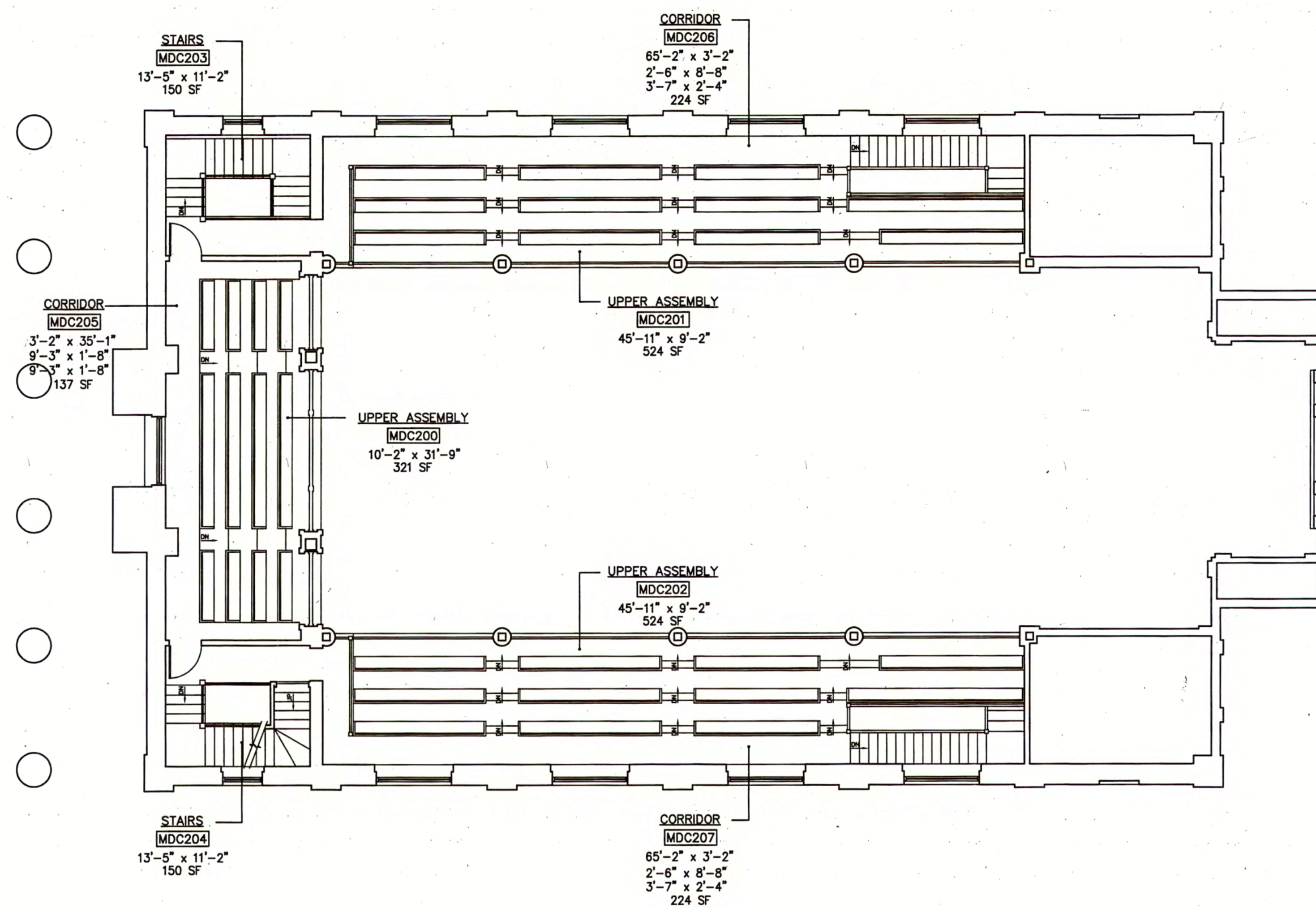
TITLE  
FIRST FLOOR  
PLAN

DATE 12/16/02

DWG. NO.

SP2

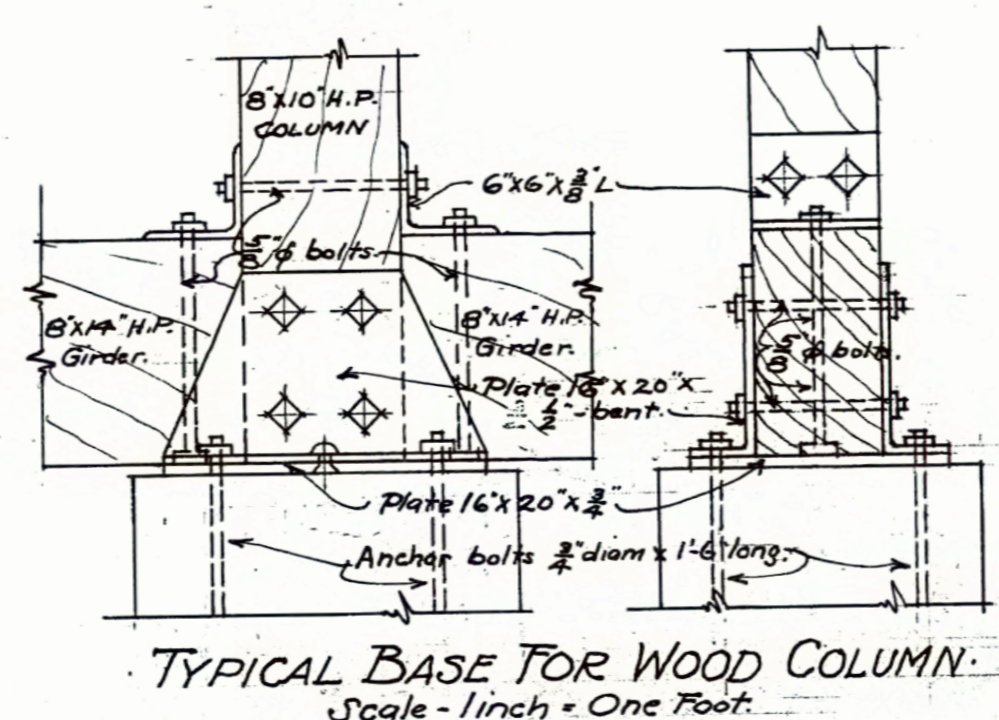
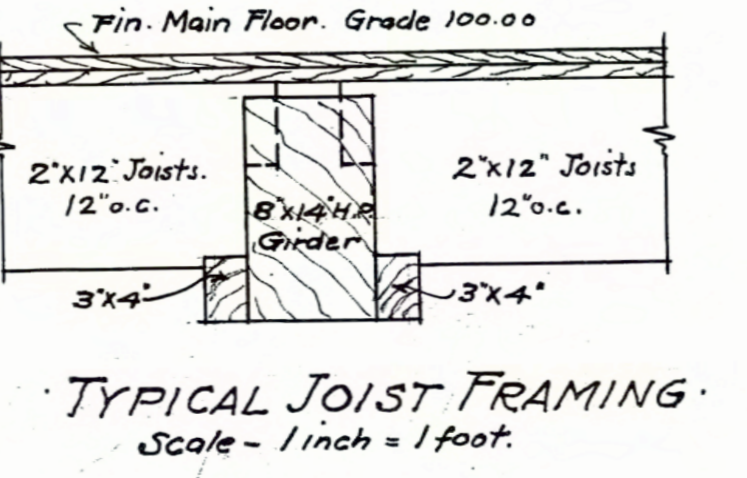
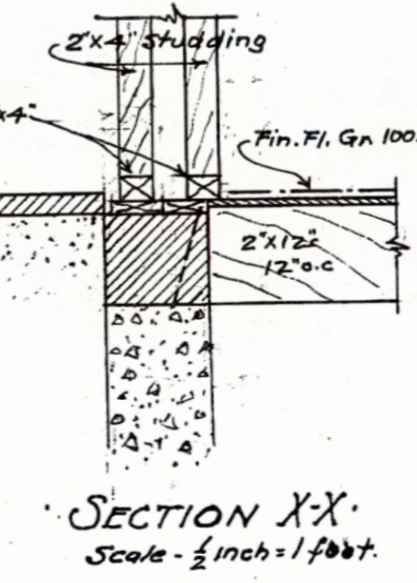
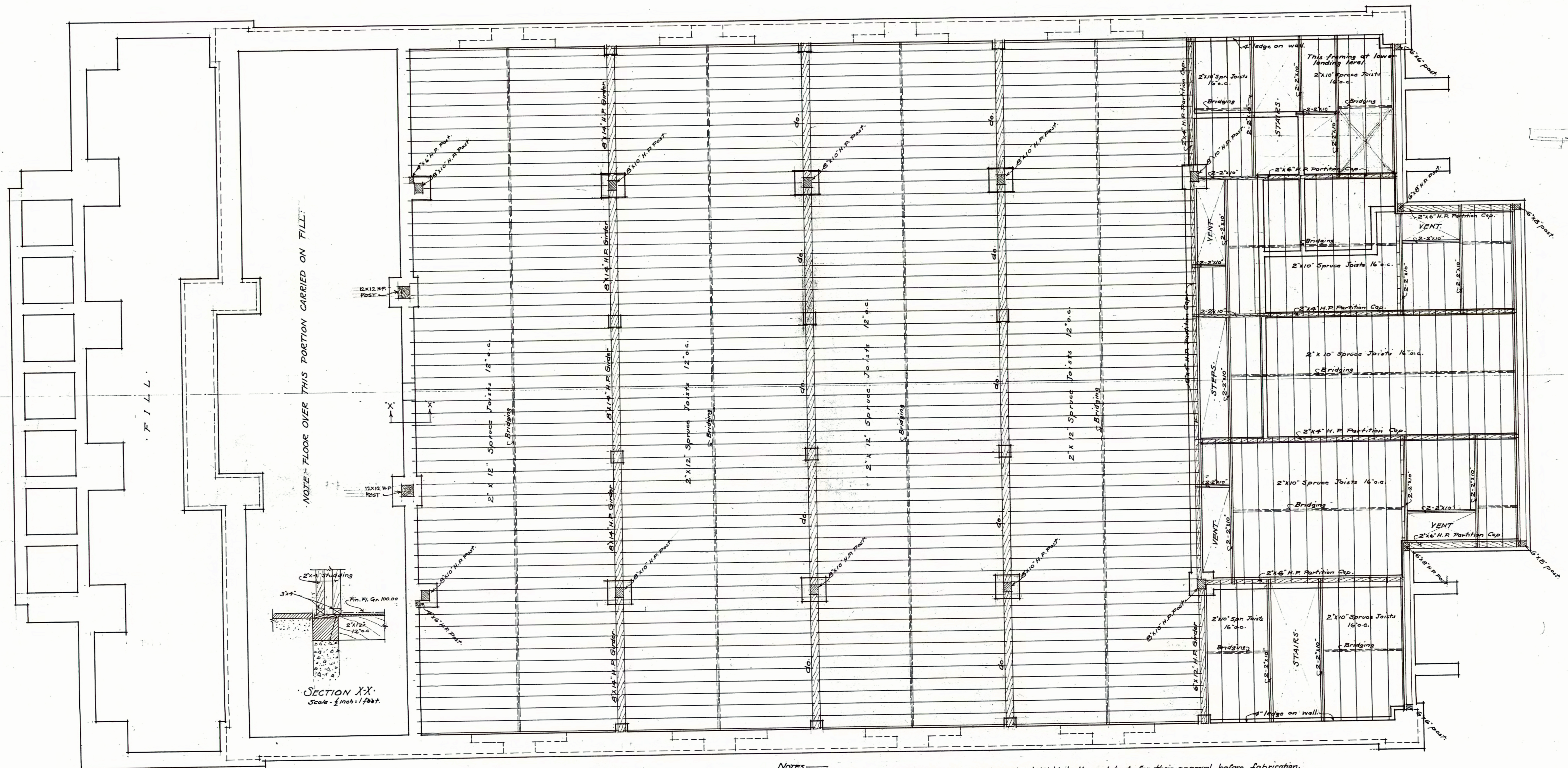




**SECOND FLOOR PLAN**  
SCALE: 1/8"=1'-0"







**Notes**  
 Contractor is required to submit drawings of all structural details to the architect for their approval before fabrication. Unless otherwise noted on plans:  
 Angle limbs shall be provided over all masonry openings where other steel is not provided, as follows: - 1-3x3x3/8 L to each 4" of wall thickness for spans up to 9 ft. - 1-4x3x3/8 L to each 4" of wall thickness for spans between 9 ft and 12 ft. - 1-5x3x3/8 L to each 4" of wall thickness for spans over 12 ft. or their equivalents.  
 All double beams are to have riveted steel diaphragms spaced not over 5'-0" on centers.  
 All joist supporting beams are to be reinforced with steel reinforcement, is to be of 1-2-4 mixture.  
 All concrete for column footings, piers, and other foundations shall be placed and consolidated in accordance with the provisions of the specifications for concrete.  
 Concrete walls which act as retaining walls shall be designed to withstand earth pressure.  
 All wood framing marked H.P. to be Georgia Long Leaf Yellow Pine.  
 Joist bridges where shown with 2x4 stiff cut-in and nailed securely with at least two nails at each end. Joists for long spans use 3x5, set 7' o.c.  
 Each pair of joists bearing on masonry shall be anchored into the wall at intervals of not more than 8 ft. with wrought iron anchors 2x8 x 1'-6" long, securely fastened to joist. Where joists run parallel to wall, anchors shall be long enough to be fastened to at least three joists.  
 All stud partitions to rest on 3x4 (or 6) H.P. studs, and have 2x4 (or 6) H.P. caps, unless otherwise noted. Interior partition studs to be 2x4 @ 16" o.c. unless otherwise noted. Exterior studs 2x6 set 16" o.c. unless otherwise noted.  
 All stud partitions to be bridged horizontally at least once in their height. 3x4 (or 6) at above, trussed over openings over 3'-0" in width. Use 4x4 @ 6' where there is not room for truss.  
 All bolts used in connection with wood framing shall have washers of such sizes as may be necessary.

FIRST FLOOR FRAMING PLAN  
 Scale - 1/4 inch = One foot

PHOTOGRAPHED  
 DATE June 1963

THE MEAD MEMORIAL CHAPEL  
 MIDDLEBURY, VERMONT  
 ALLEN & COLLENS, ARCHITECTS & BOSTON, MASS.  
 Drawn by T. E. L. Checked W. H. N.  
 Title No. 065216  
 FEB. 25, 1955

065216

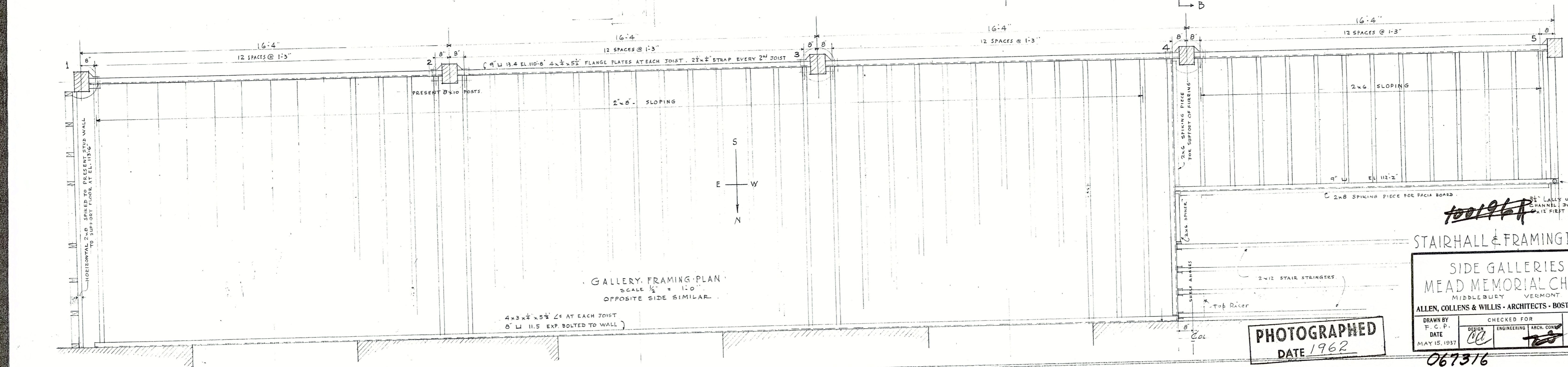
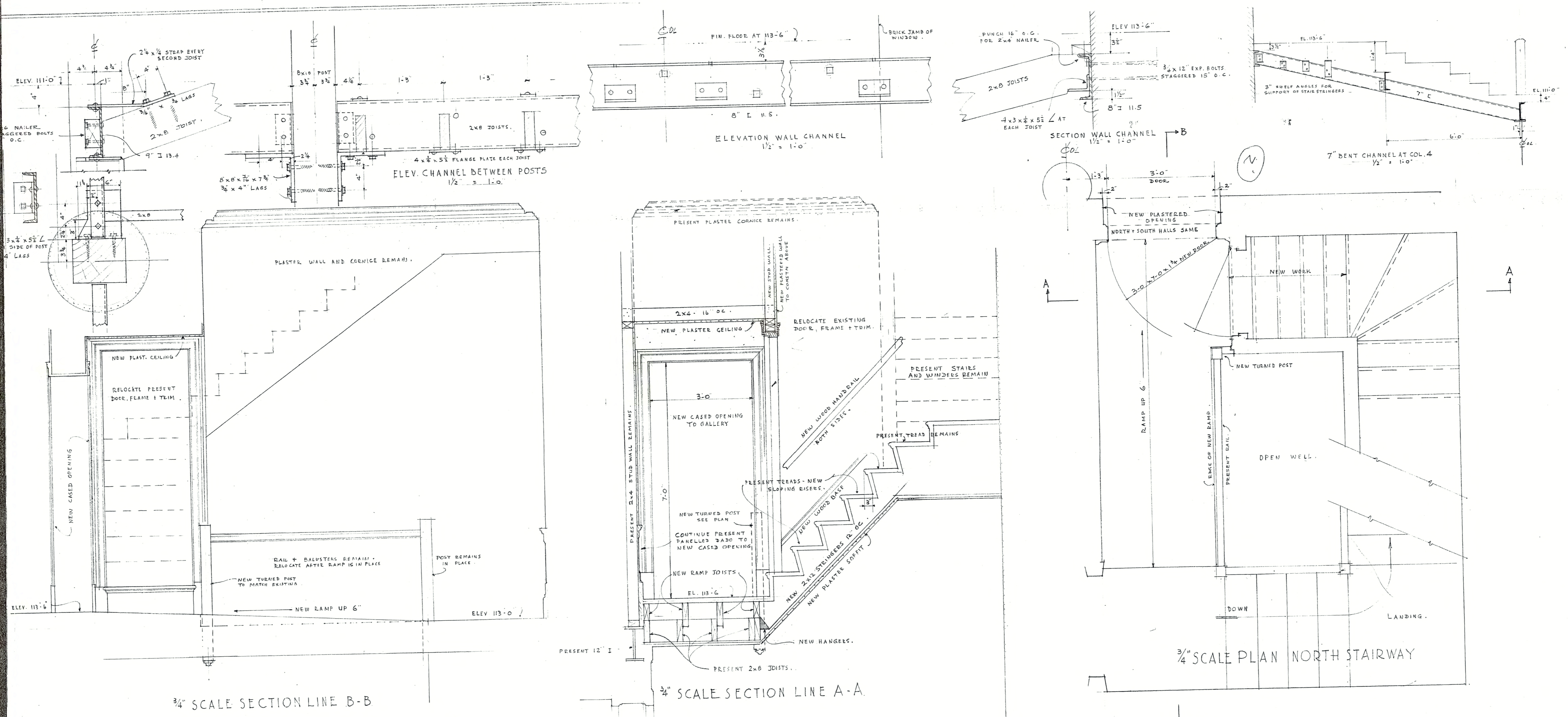
100194

TH



S-05

9-1537 / STAIRHALL DETAILS



100964

STAIRHALL & FRAMING DETAILS

SIDE GALLERIES  
 MEAD MEMORIAL CHAPEL  
 MIDDLEBURY VERMONT

ALLEN, COLLENS & WILLIS - ARCHITECTS - BOSTON, MASS.

DRAWN BY T.C.P.  
 DATE MAY 15, 1957

CHECKED FOR ENGINEERING MECH. COPY

NUMBER 3

PHOTOGRAPHED  
 DATE 1962

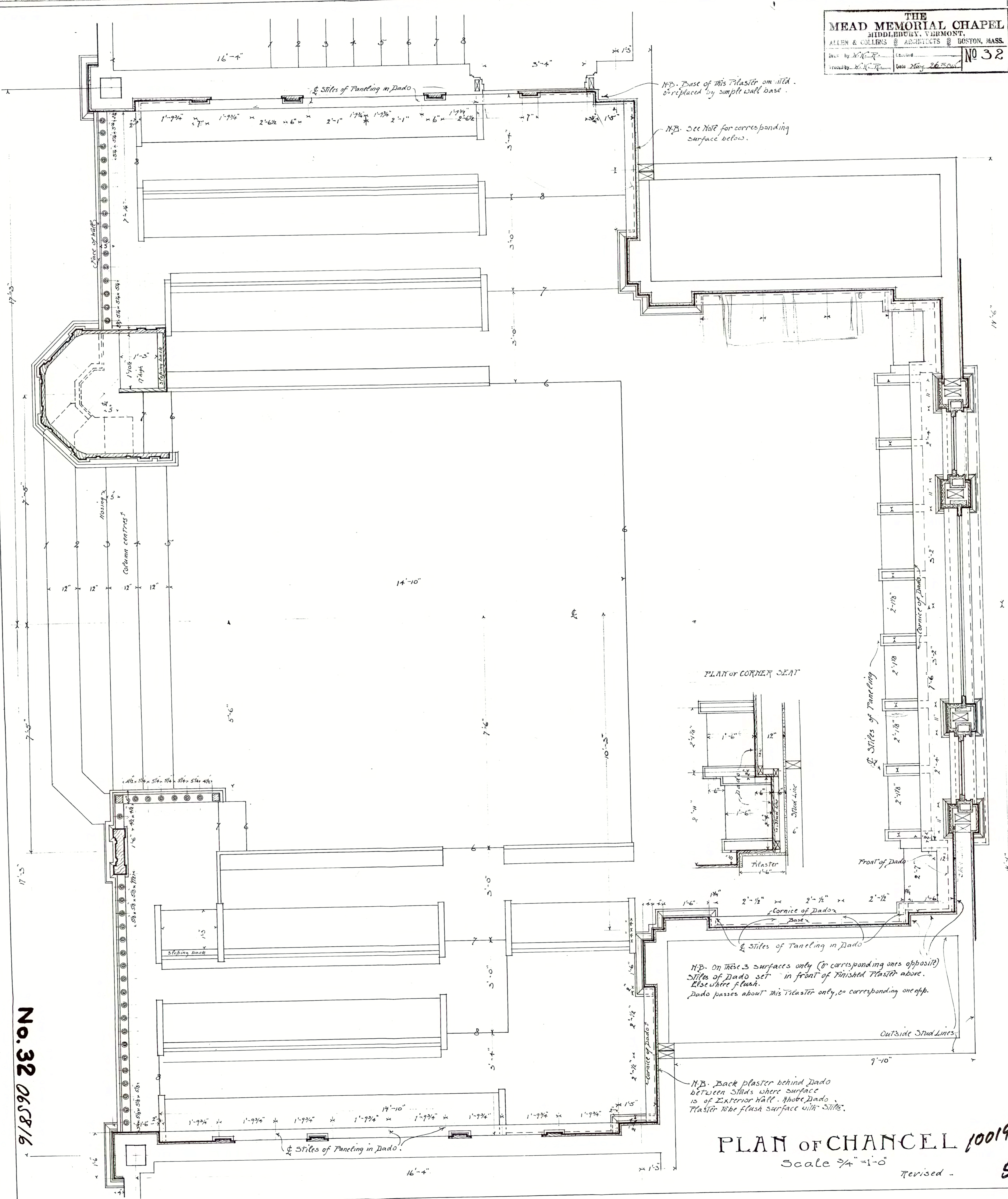
067316







**THE MEAD MEMORIAL CHAPEL**  
 MIDDLEBURY, VERMONT.  
 ALLEN & COLLINS ARCHITECTS BOSTON, MASS.  
 Drawn by *[Signature]* Date May 26 1914  
 No 32



No. 32 0658/16

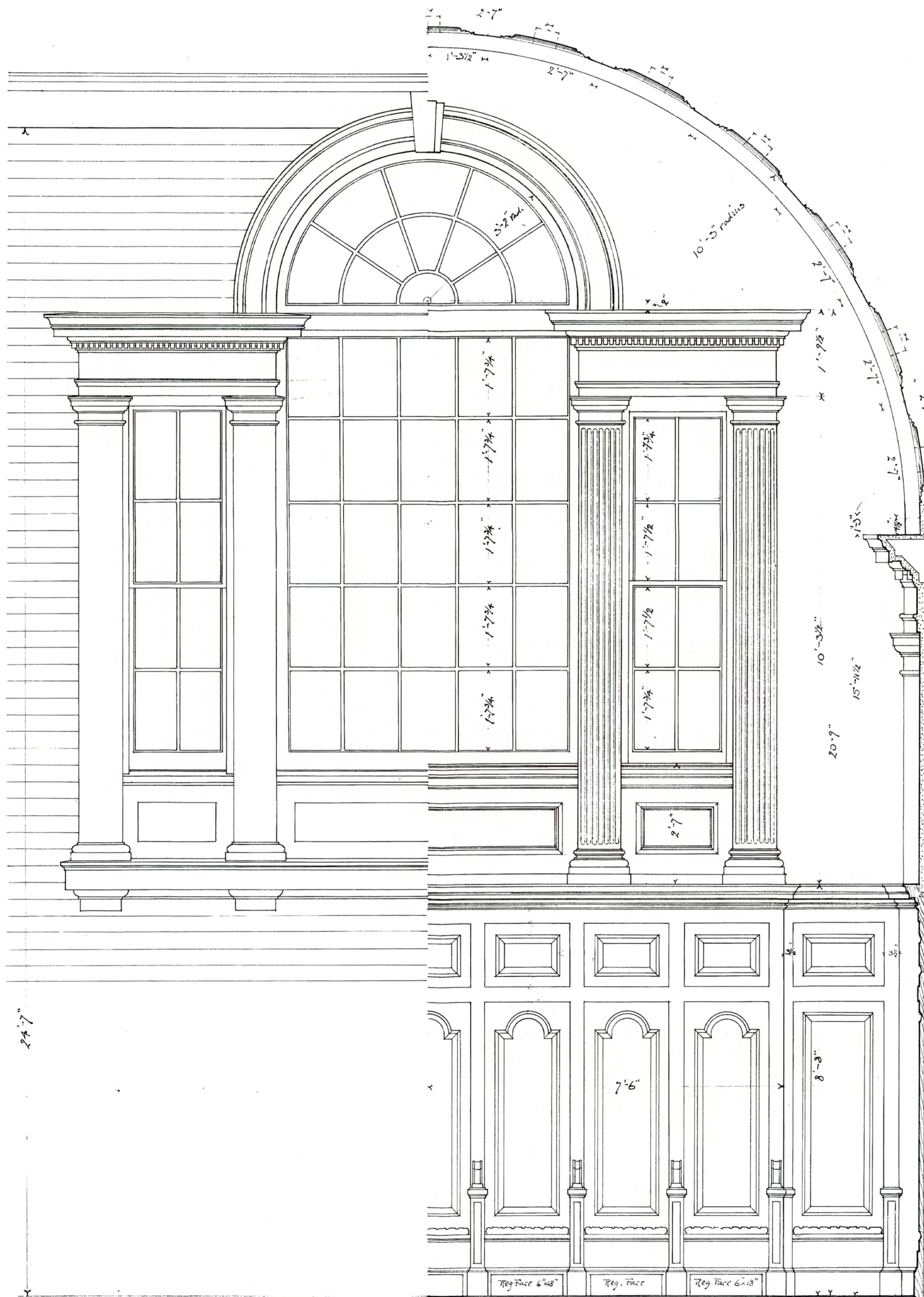
**PLAN of CHANCEL 100194**  
 Scale 3/4" = 1'-0"  
 Revised - 5



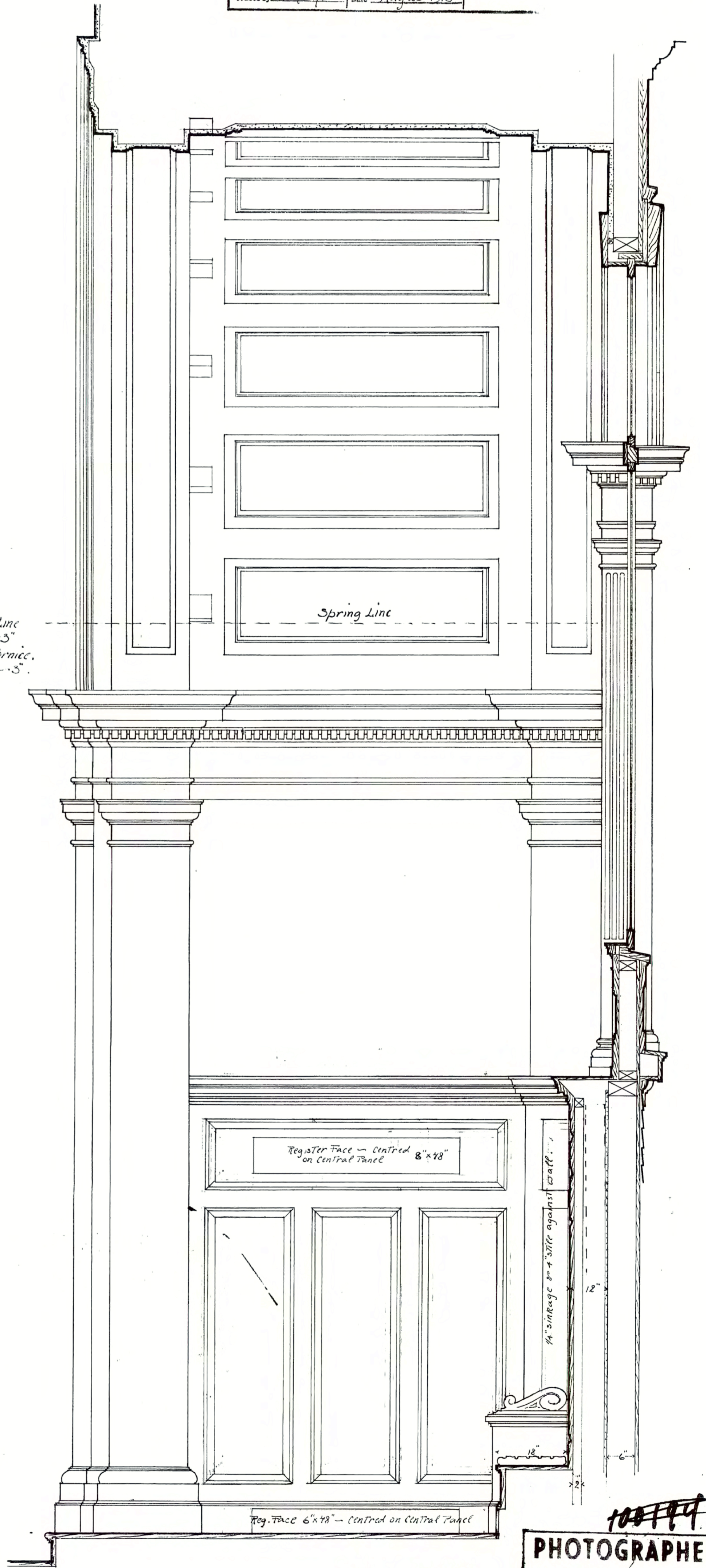
PALLADIAN WINDOW

Scale 7/8"=1'-0"  
Revised

THE  
MEAD MEMORIAL CHAPEL  
MIDDLEBURY, VERMONT.  
ALLEN & COLLINGS ARCHITECTS BOSTON, MASS.  
Drawn by *W.C.P.* Checked *W.C.P.* No. 33  
Traced by *W.C.P.* Date *May 26 1915*



N.B. Spring Line  
of Ceiling 1'-5"  
above Main Cornice.  
not as drawn - 5"



PHOTOGRAPHED  
DATE June 1963

No. 33 066216

105777

45

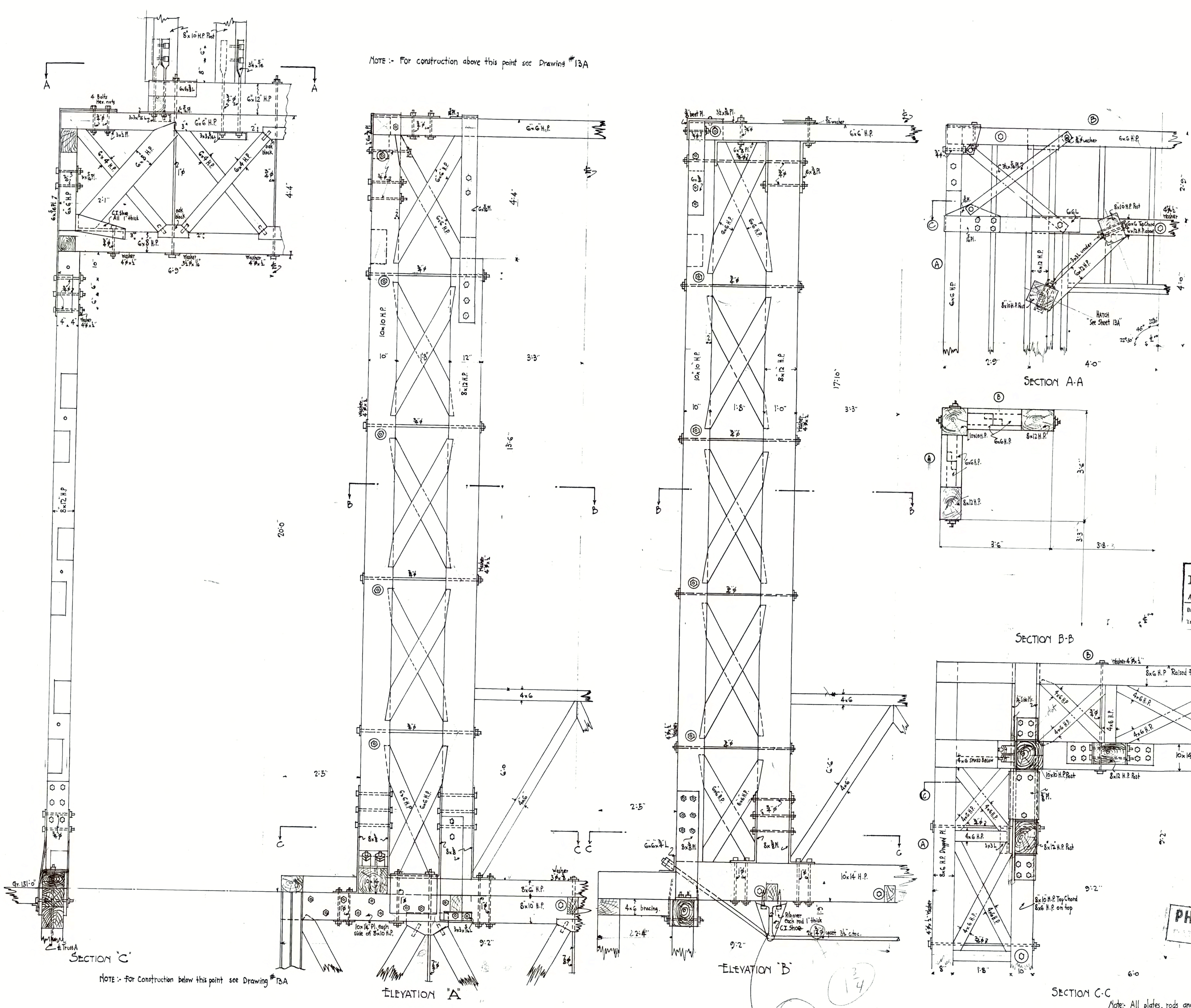
S-10

3-B-15 PALLADIAN WINDOWS



S-11

8-26-15 / FRAMING DETAILS



NOTE :- For construction above this point see Drawing #13A

NOTE :- For construction below this point see Drawing #13A

THE  
MEAD MEMORIAL CHAPEL  
MIDDLEBURY, VERMONT.  
ALLEN & COLLENS ARCHITECTS BOSTON, MASS.

Drawn by: J.S. Checked: \_\_\_\_\_  
Traced by: \_\_\_\_\_ Date: 2.23.26 **NO 46**

PHOTOGRAPHED  
DATE June 1963

Notes: All plates, rods and bolts to be steel.  
Nuts to be of sufficient size to develop full strength of bolt or rod section.

266516 No 46 271



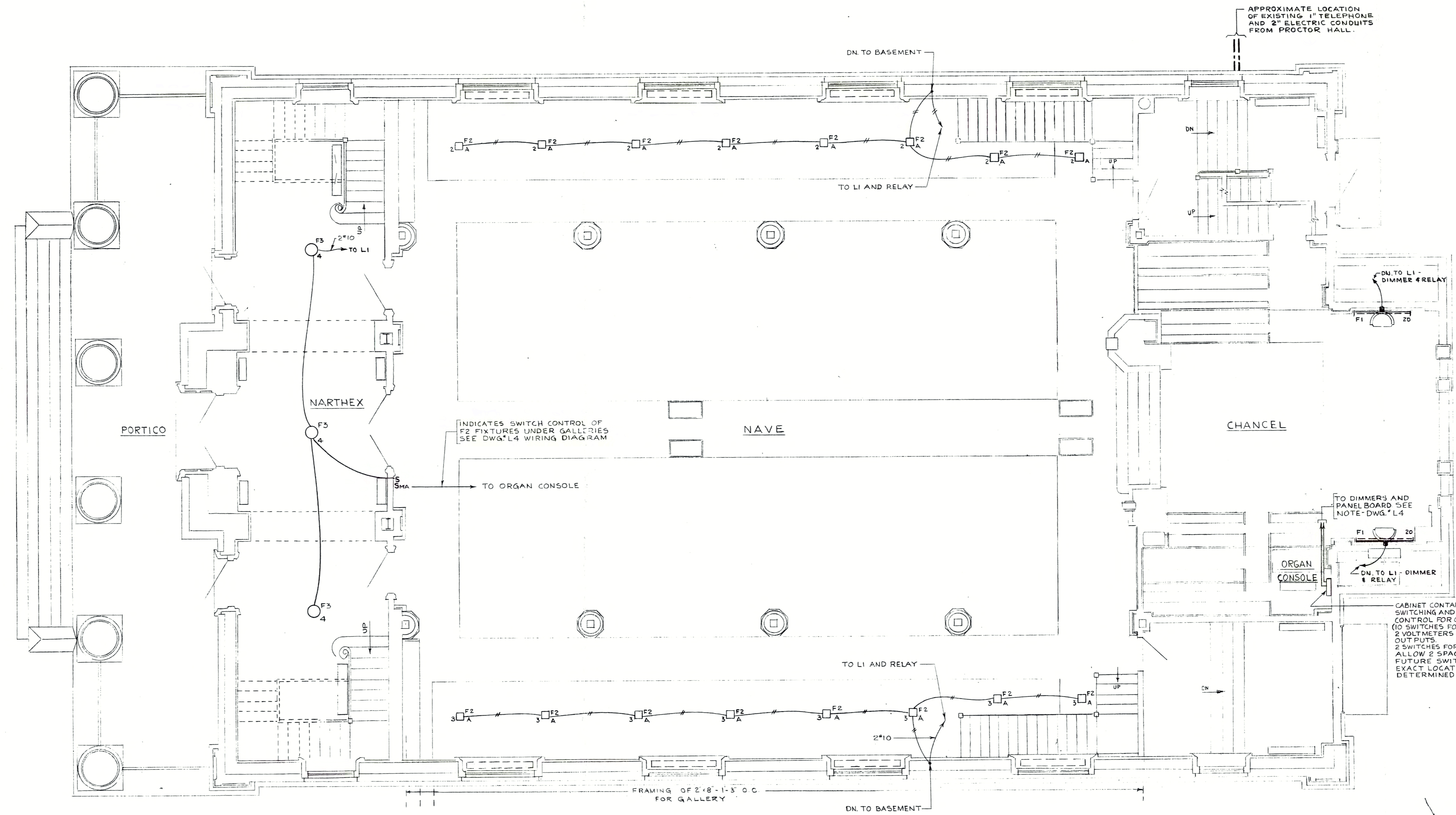
— SYMBOL LIST —

- F1 3/4 A — SURFACE OR SUSPENDED MOUNTED FIXTURE. "F" FOLLOWED BY NO. INDICATES FIXTURE TYPE, LETTER INDICATES SWITCH CONTROL NUMBER INDICATES CIRCUIT NO.
- — RECESSED FIXTURE
- (E) — EXISTING CHANDELIER TO BE RELOCATED
- CONDUIT - CONCEALED - ARROW INDICATES HOME RUN, DIAGONAL LINES INDICATE NUMBER OF WIRES - 2 WIRES NOT MARKED
- N.M.C. CABLE
- S — SINGLE POLE SWITCH
- SHA — MOMENTARY CONTACT SWITCH

— GENERAL NOTES —

1. SEE DWG. # L3 FOR DETAILS OF LIGHTING CONTROL.
2. SEE DWG. # L3 FOR DETAILS OF SERVICE ENTRANCE AND DISTRIBUTION.
3. THE USE OF N.M.C. CABLE IS PLANNED FOR THIS FLOOR.
4. ALL ELECTRICAL EQUIPMENT NOT INCLUDED IN THE SCOPE OF THIS WORK, NOW CONNECTED TO THE EXISTING DISTRIBUTION EQUIPMENT, SHALL BE RECONNECTED TO THE NEW DISTRIBUTION EQUIPMENT.
5. CONTRACTOR SHALL PROVIDE JUNCTION BOX OR COVERED OUTLET BOX AT EACH FIXTURE OUTLET; RECESSED FIXTURES SHALL NOT HAVE JUNCTION BOX ATTACHED. RECESSED FIXTURES FURNISHED UNDER ALLOWANCE SHALL HAVE N.E.C. REQUIREMENTS OF FLEXIBLE ARMORED CABLE.

CABINET CONTAINING ALL SWITCHING AND DIMMING CONTROL FOR ORGANIST (10 SWITCHES FOR RELAYS, 2 VOLTMETERS FOR DIMMER OUTPUTS, 2 SWITCHES FOR DIMMER MOTORS ALLOW 6 SPACES FOR POSSIBLE FUTURE SWITCHES). EXACT LOCATION SHALL BE DETERMINED ON THE JOB.



FIRST FLOOR  
— SCALE: 1/4" = 1'-0" —

100193

MEAD CHAPEL MIDDLEBURY COLLEGE MIDDLEBURY, VERMONT		SCALE - 1/4" = 1'-0"
FIRST FLOOR PLAN		DATE - 6-27-02
THOMPSON ENGINEERING COMPANY ELECTRICAL ENGINEERS BOSTON, MASS.		DRAWING No. - LI

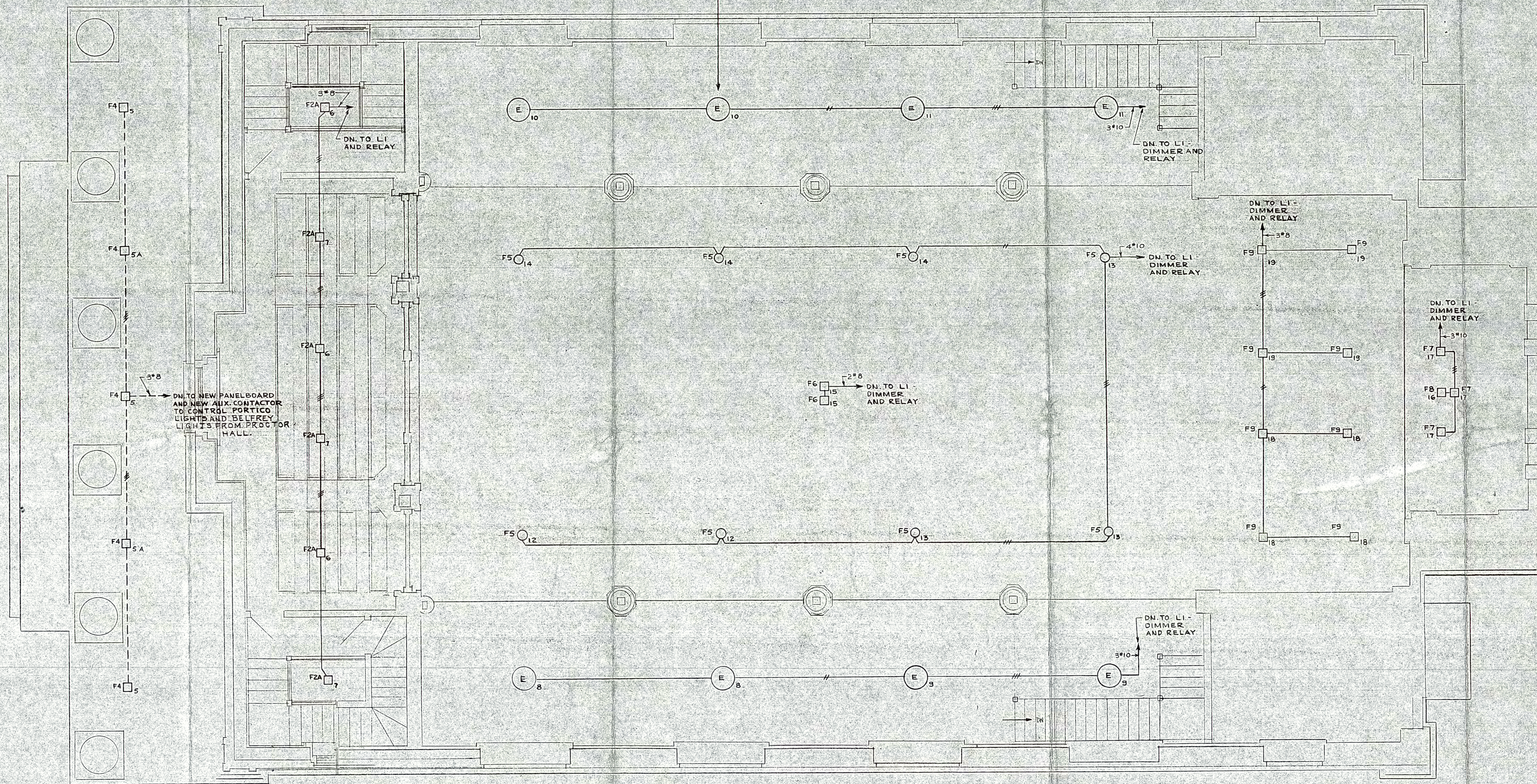
068016

E-01

8-27-02 / FIRST FLOOR



NOTE: THE FOUR EXISTING CHANDELIER FIXTURES IN THE ARCHWAY OVER THE FRONT OF THE GALLERY ON BOTH SIDES (TOTAL OF 8) SHALL BE REMOVED, CLEANED, REWIRED AND RELOCATED TO THE POSITIONS INDICATED.



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

100193

MEAD CHAPEL  
MIDDLEBURY COLLEGE  
MIDDLEBURY, VERMONT

GALLERY FLOOR  
PLAN

SCALE: 1/4" = 1'-0"  
DATE: 8-27-62  
J.O. No. -  
DRAWING No. -

THOMPSON ENGINEERING COMPANY  
ELECTRICAL ENGINEERS  
BOSTON, MASS.

068116

L2

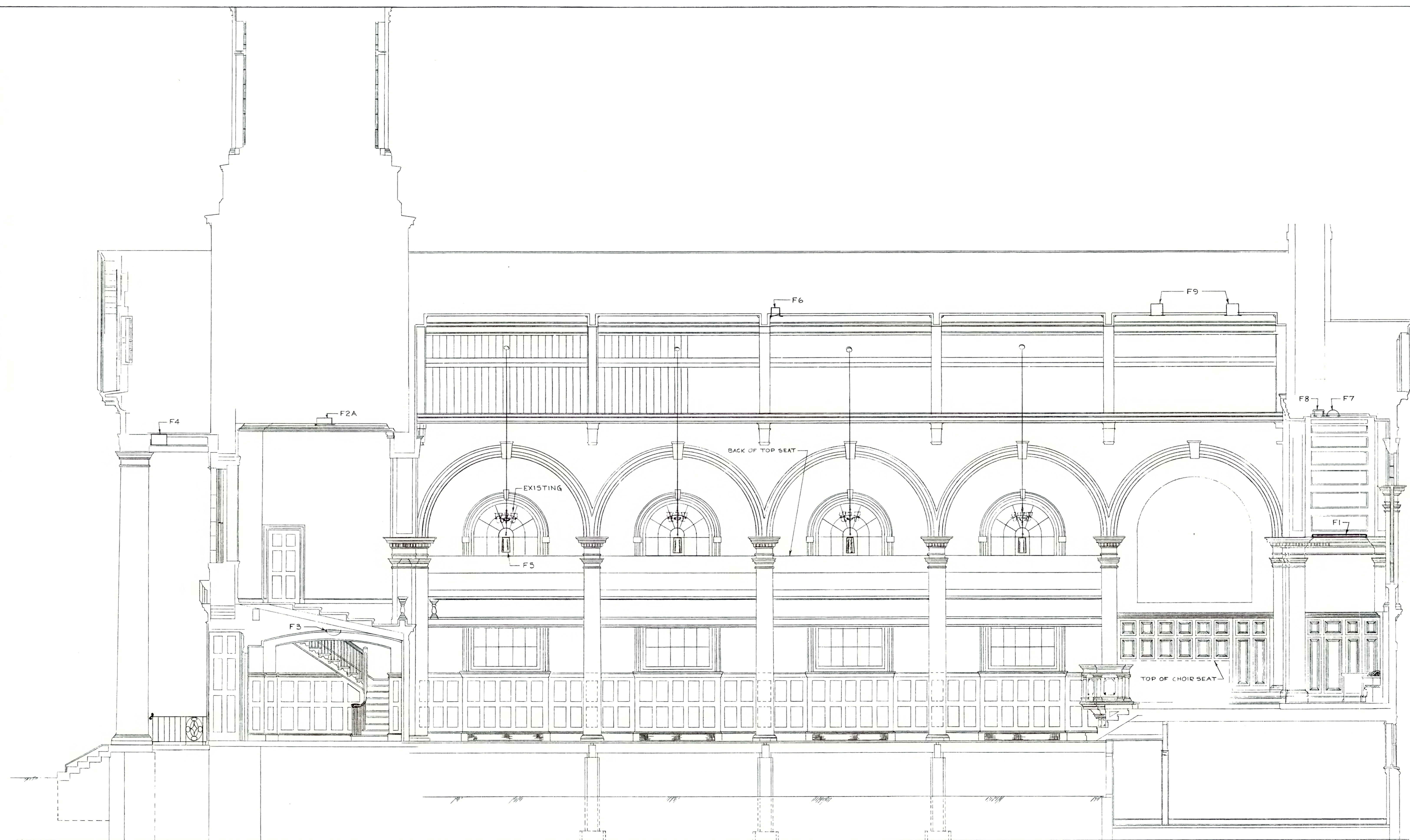
E-02

52782 / GALLERY PLAN



E-03

8-27-62 / BUILDING SECTION



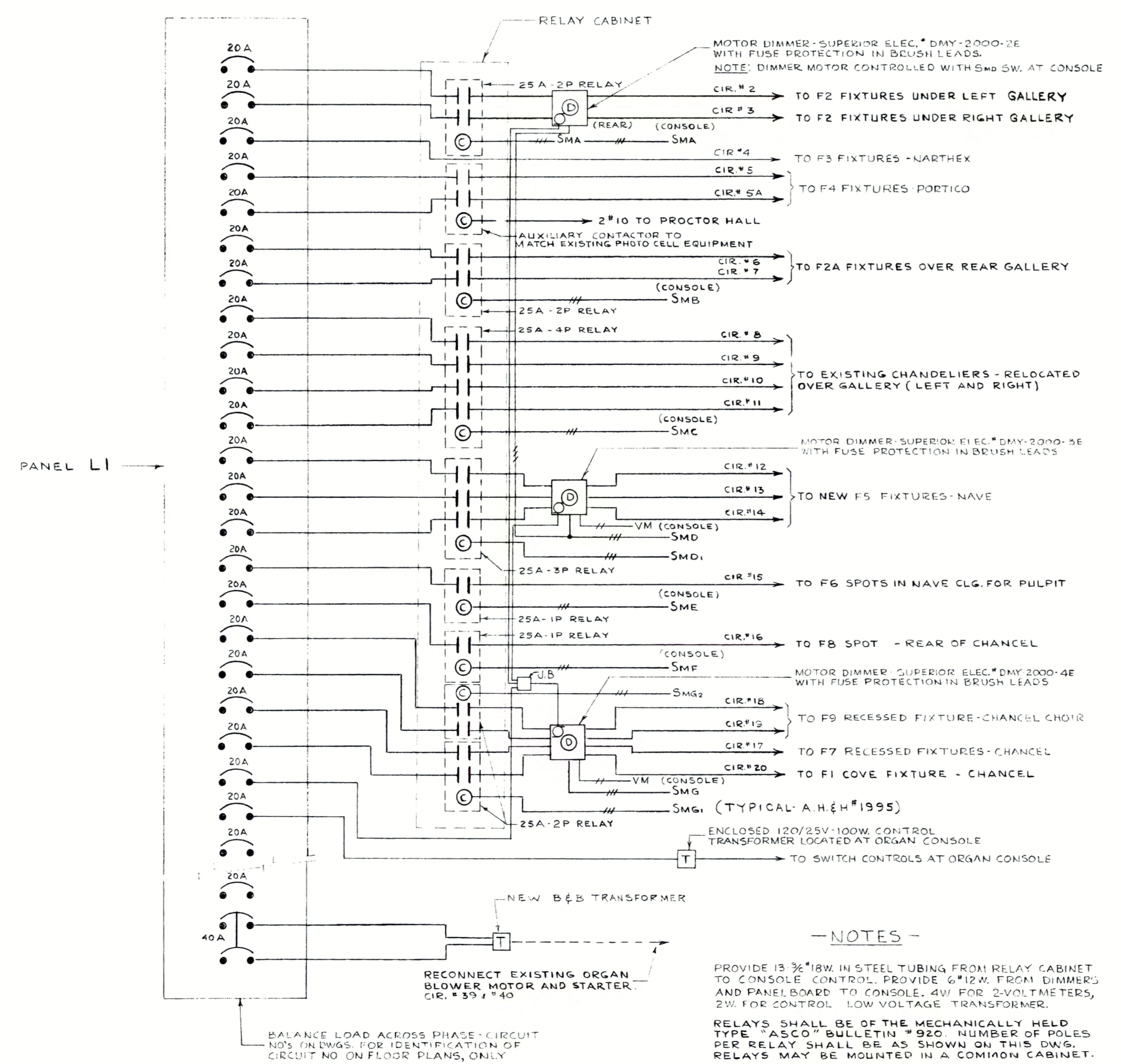
*100193*

MEAD CHAPEL MIDDLEBURY COLLEGE MIDDLEBURY, VERMONT		SCALE - 1/4" = 1'-0"
LONGITUDINAL SECTION		DATE - 8-27-62
THOMPSON ENGINEERING COMPANY ELECTRICAL ENGINEERS BOSTON, MASS.		J.O. No. - DRAWING No. -
		L 3

068216



E-04



**NOTES -**

PROVIDE 3/4" I.B.W. IN STEEL TUBING FROM RELAY CABINET TO CONSOLE CONTROL. PROVIDE 6"x2"x1" FROM DIMMERS AND PANELBOARD TO CONSOLE. 4W FOR 2-VOLT METERS, 2W FOR CONTROL LOW VOLTAGE TRANSFORMER.

RELAYS SHALL BE OF THE MECHANICALLY HELD TYPE "ASCO" BULLETIN # 920. NUMBER OF POLES PER RELAY SHALL BE AS SHOWN ON THIS DWG. RELAYS MAY BE MOUNTED IN A COMMON CABINET.

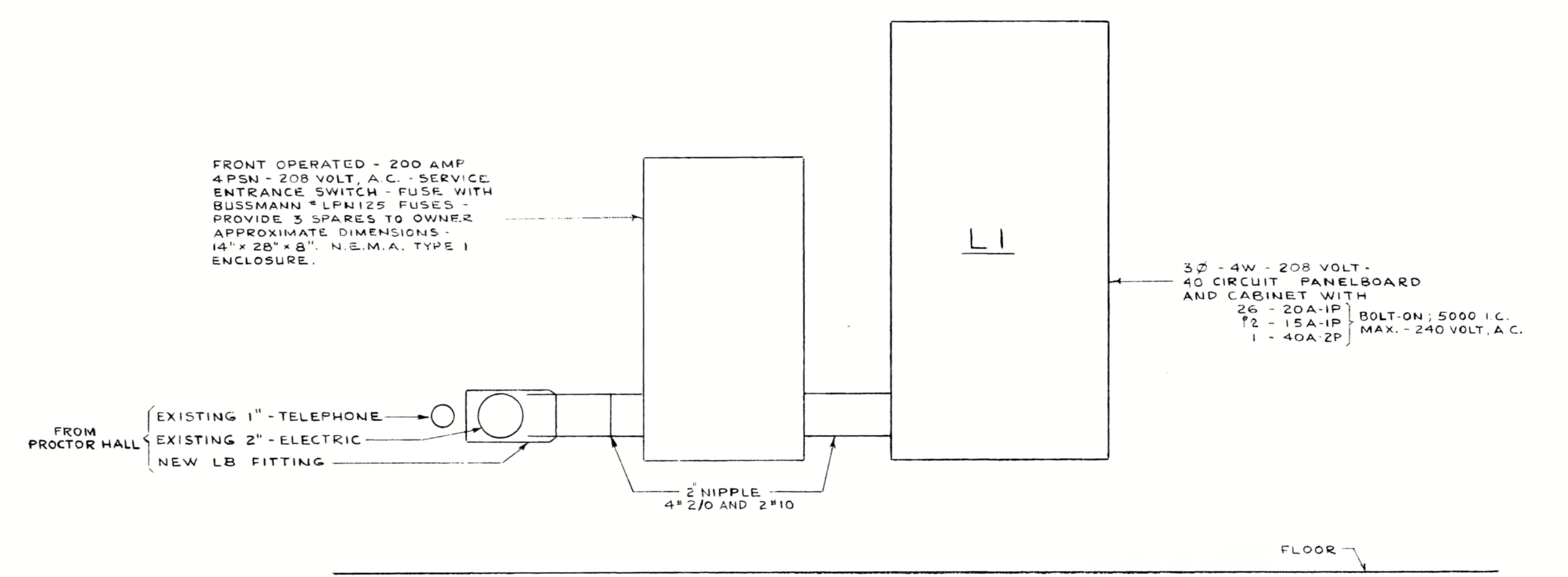
RELAYS AND DIMMERS LOCATED ADJACENT TO PANEL LI. EXACT LOCATION SHALL BE DETERMINED AT JOB.

FOR EXACT NO. OF FIXTURES CONTROLLED SEE DWG'S # LI # L2

MOMENTARY CONTACT SWITCHES WITH DIM. BRIGHT AND CENTER OFF POSITIONS LOCATED IN CONSOLE. PROVIDE NAMEPLATES

PROVIDE 2-VOLT METERS IN SWITCH PANEL TO INDICATE EACH DIMMER VOLTAGE.

**ONE LINE WIRING DIAGRAM FOR CONTROL OF LIGHTS**  
NOT TO SCALE



**FRONT ELEVATION**  
**MAIN 208/120V A.C. SERVICE DISTRIBUTION EQUIPMENT**  
NOT TO SCALE

**NOTE -**  
THE EXACT LOCATION OF THE EQUIPMENT AS WELL AS RELAY AND DIMMER CABINETS SHALL BE A JOB CONDITION.

MEAD CHAPEL  
MIDDLEBURY COLLEGE  
MIDDLEBURY, VERMONT

DIAGRAMS -  
DETAILS

AS NOTED  
8-27-62

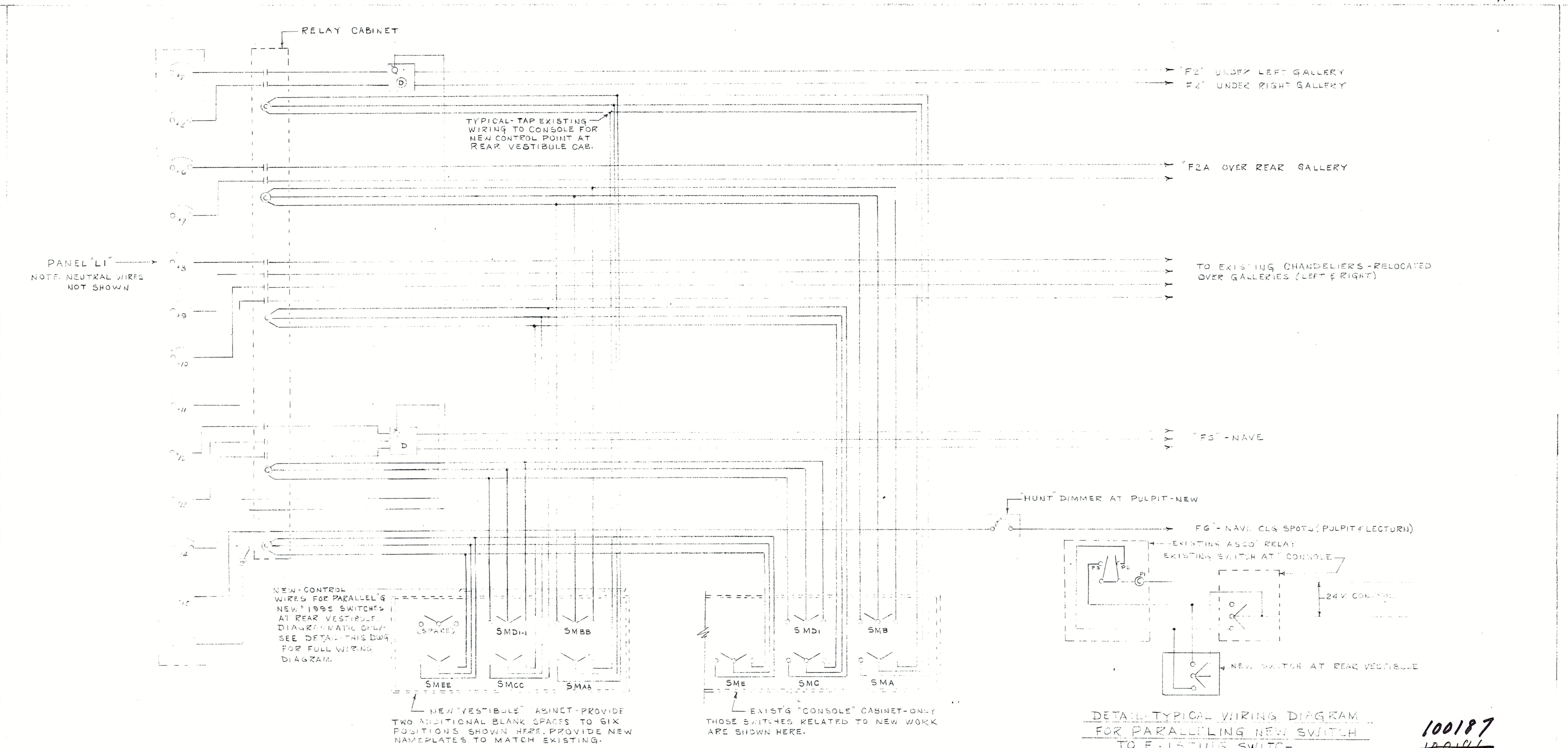
068316

L4



E-05

10-2966-7 WIRING DIAGRAM



PANEL "LI"  
NOTE: NEUTRAL WIRES  
NOT SHOWN

NEW CONTROL WIRE FOR PARALLELING NEW 1995 SWITCHES AT REAR VESTIBULE. DIAGRAM WATIC ONLY. SEE DETAIL THIS DWG FOR FULL WIRING DIAGRAM.

NEW VESTIBULE CABINET- PROVIDE TWO ADDITIONAL BLANK SPACES TO SIX POSITIONS SHOWN HERE. PROVIDE NEW NAMEPLATES TO MATCH EXISTING.

EXISTING CONSOLE CABINET- ONLY THOSE SWITCHES RELATED TO NEW WORK ARE SHOWN HERE.

DETAIL-TYPICAL WIRING DIAGRAM FOR PARALLELING NEW SWITCH TO EXISTING SWITCH  
N.T.S.

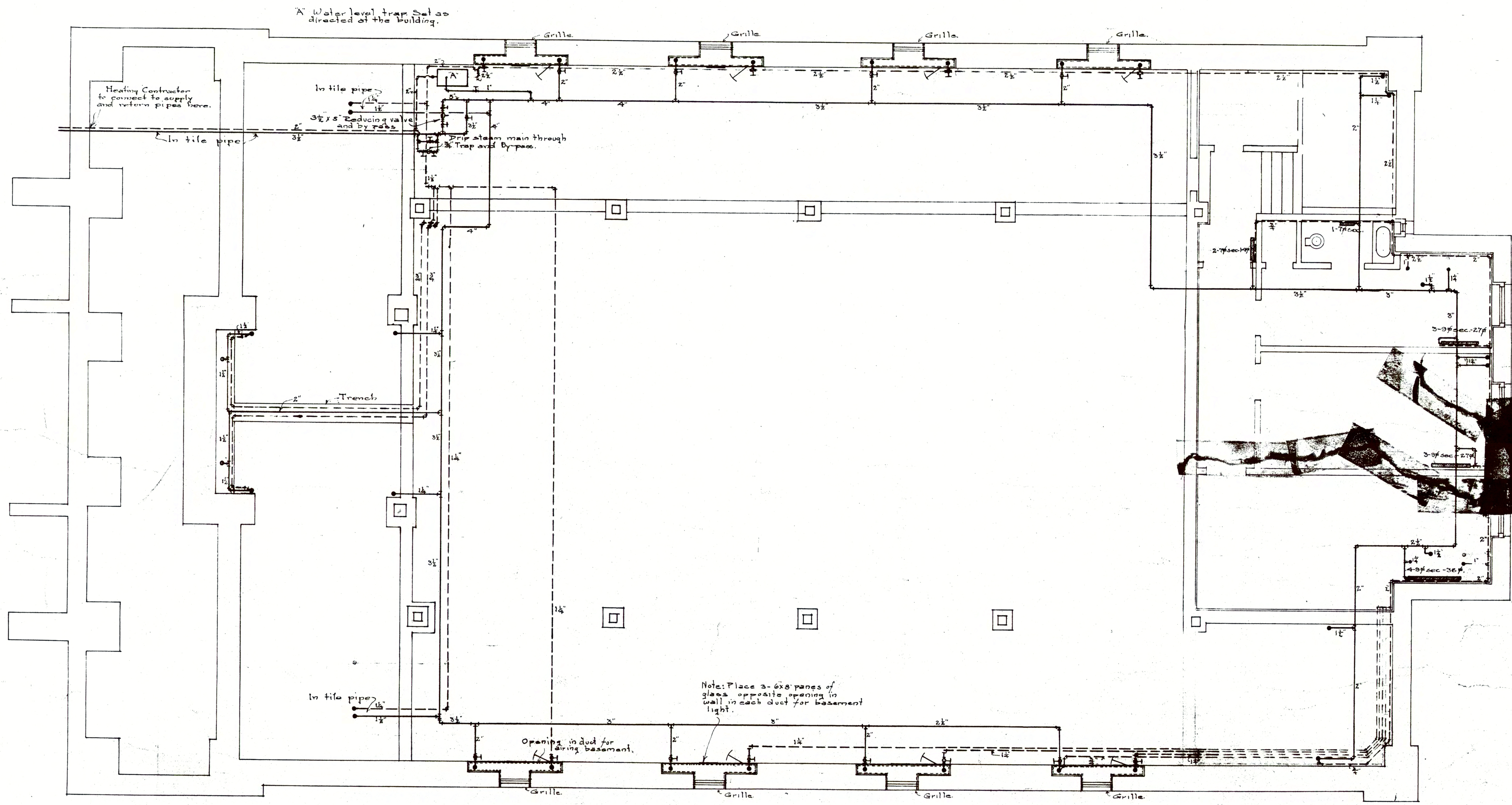
GENERAL NOTE:  
THE SYMBOLS-NUMBERS-LETTERS-MATERIALS-EQUIPMENT SHOWN HERE IS KEYED TO "BID" DWG. NO. L4-DATED 8-27-62.

100187  
~~100186~~

MEAL CHAPEL MIDDLEBURY COLLEGE MIDDLEBURY, VERMONT		SCALE NONE
WIRING DIAGRAM	DATE: OCT. 29, 63	J.C. No.
THE OLYN ENGINEERING COMPANY ELECTRICAL ENGINEERS BOSTON, MASS.	DRAWING NO. 1	SUP-L4

068416





A Water level trap set as directed at the building.

Heating Contractor to connect to supply and return pipes here.

In tile pipe  
3/4" Reducing valve and by pipe

Drain clean main through  
Trap and by pipe.

Trench

In tile pipe

Note: Place 3-6x8 panes of glass opposite opening in wall in each duct for basement light.

Opening in duct for airing basement.

~ BASEMENT PLAN ~

HEATING & VENTILATING PLANS FOR  
**NEW CHAPEL**  
 MIDDLEBURY COLLEGE MIDDLEBURY V.  
 ALLEN & COLLINS ARCHITECTS BOSTON MASS.  
 Drawn by F.C. Traced by G.W.K. Checked by  
 Scale 1/4" = 1'-0" Approved by  
**RICHARD D. KIMBALL CO.**  
 ENGINEERS  
 6 BEACON STREET BOSTON, MASS.  
 Date, Sept. 8-1914. Dwg. No. 1015-1.

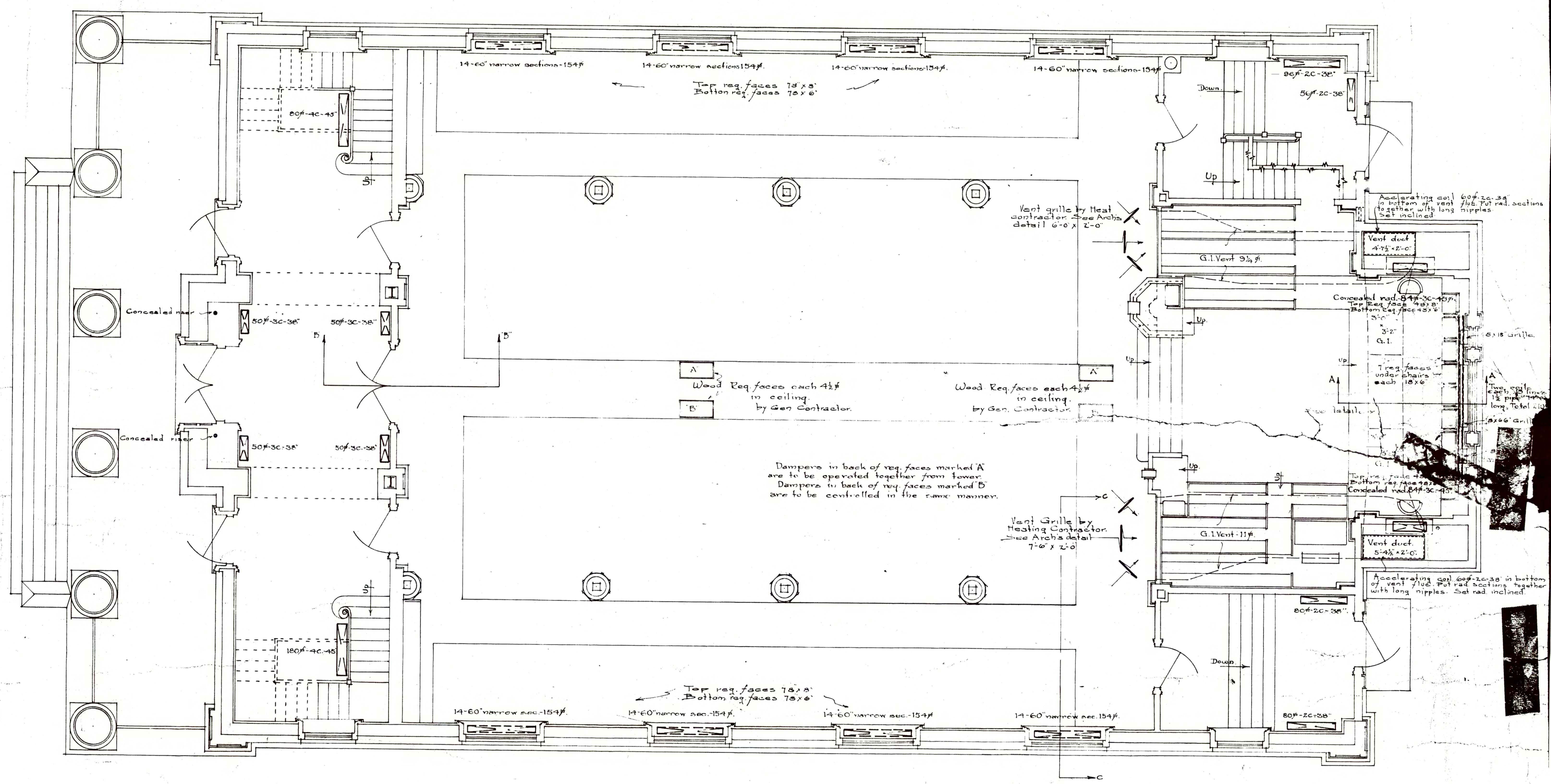
I.V.-01

9-8-14 / BASEMENT



HV-02

9-8-14 / FIRST FLOOR



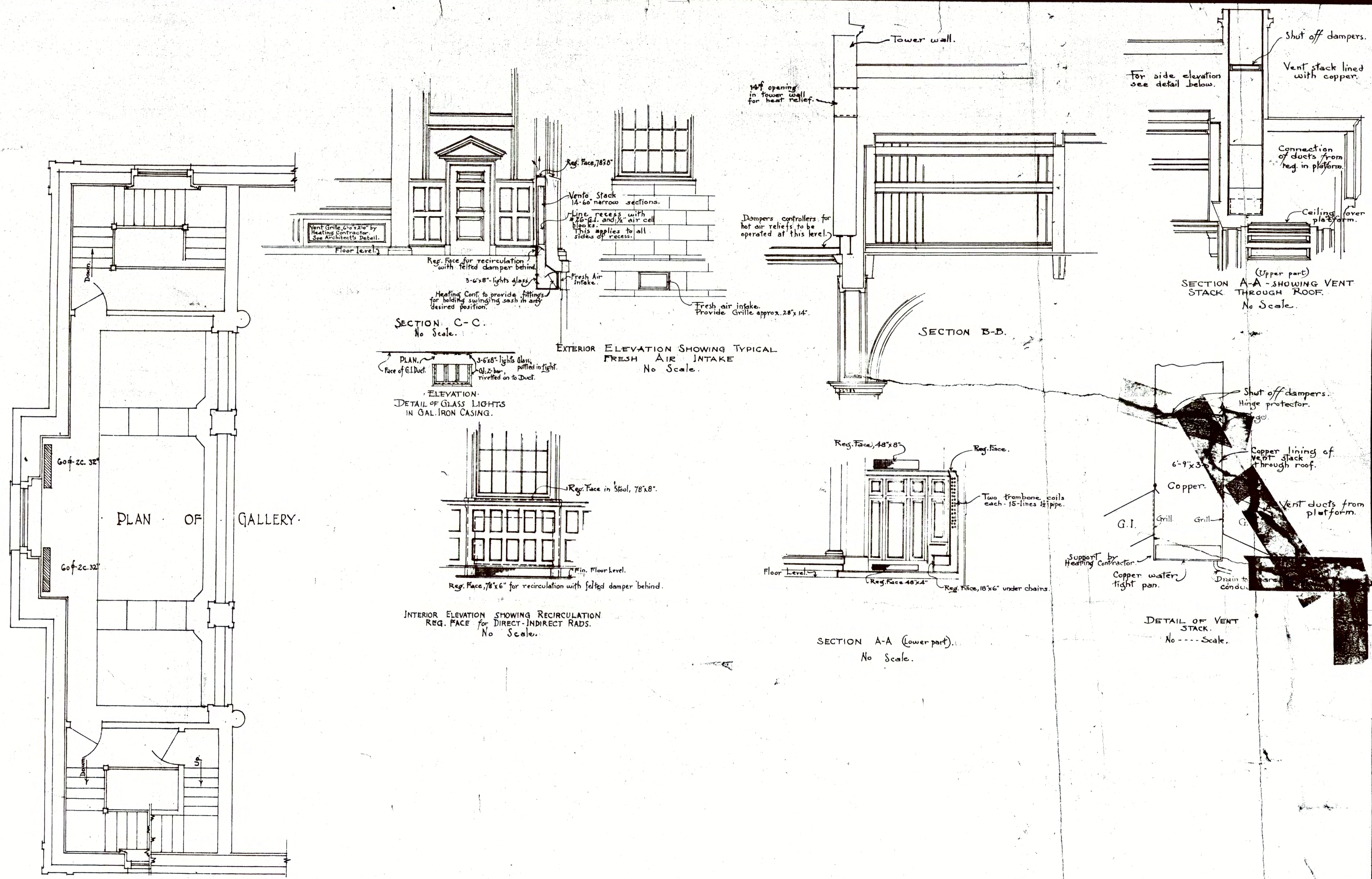
FIRST FLOOR

HEATING & VENTILATING PLANS FOR  
NEW CHAPEL  
MIDDLEBURY COLLEGE MIDDLEBURY VT  
ALLEN & COLLINS ARCHITECTS BOSTON MASS  
Drawn by J.C. Traced by G.W.K. Checked by  
Scale 3/8" = 1'-0" Approved by  
RICHARD D. KIMBALL CO.  
ENGINEERS  
6 BEACON STREET BOSTON, MASS.  
Date, Sept. 8-1914. Dwg. No. 1015-2



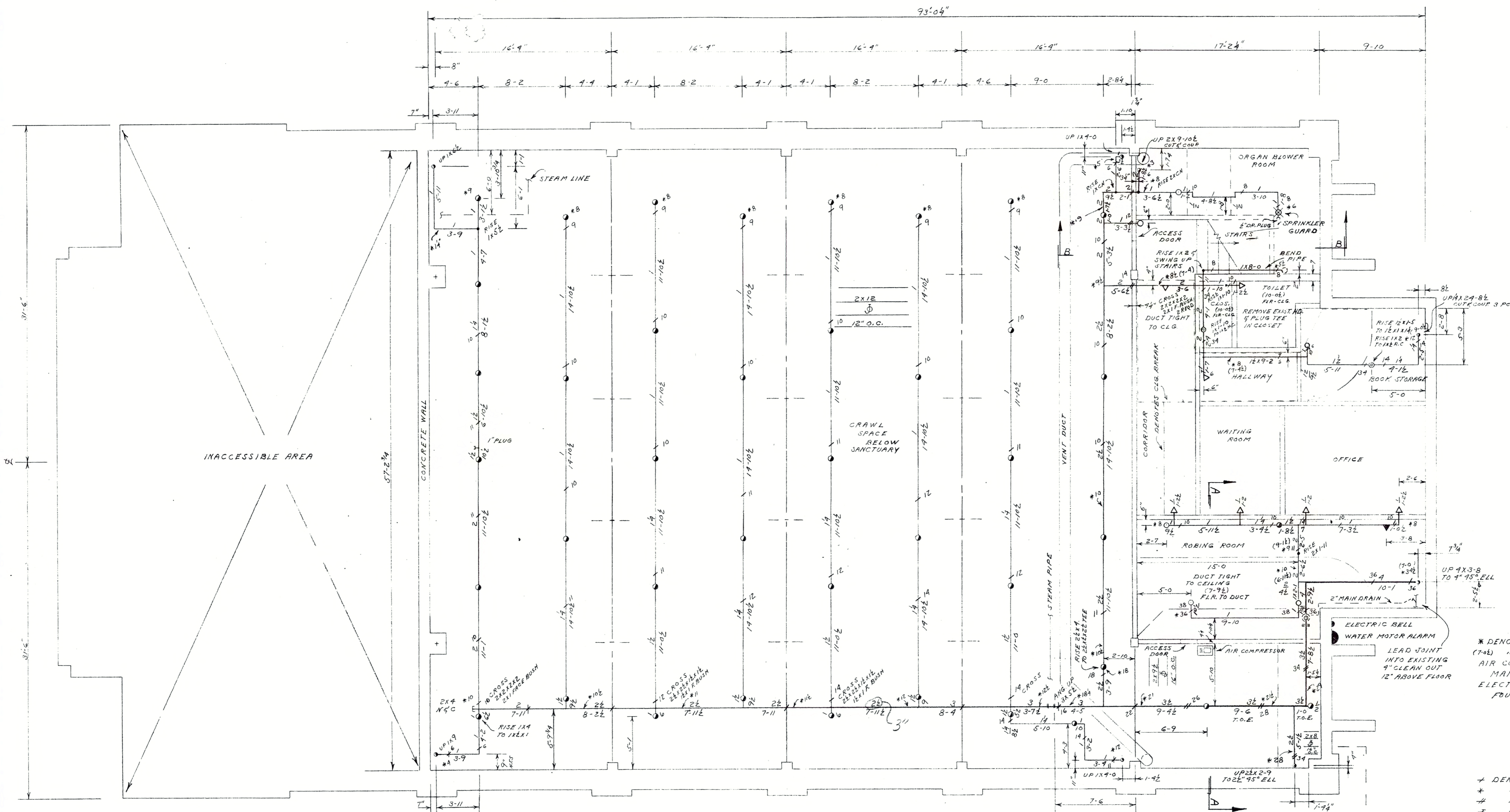
HV-03

B-14 / GALLERY PLANS



HEATING & VENTILATION PLANS FOR  
 NEW CHURCH  
 MIDDLEBURY COLLEGE, MIDDLEBURY VT.  
 ALLEN & COLLINS ARCHT. BOSTON MASS.  
 Drawn by J.C. Checked by W. J. C.  
 Scale: 1/4" = 1'-0"  
 Approved by  
 RICHARD D. K. CO.  
 ENGINEERS  
 6 DEACON STREET, BOSTON, MASS.  
 Date: Oct 28-1914



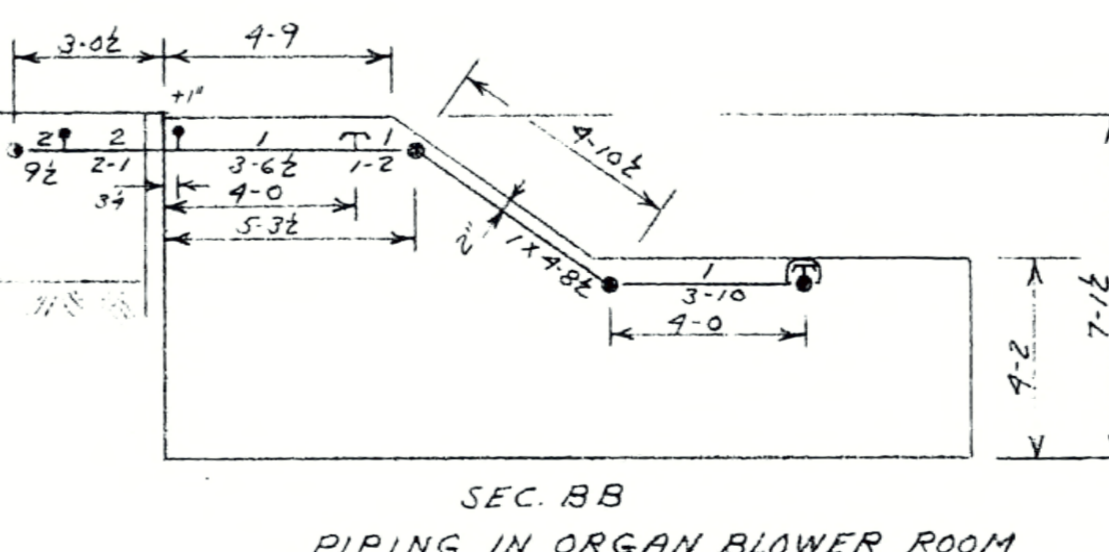
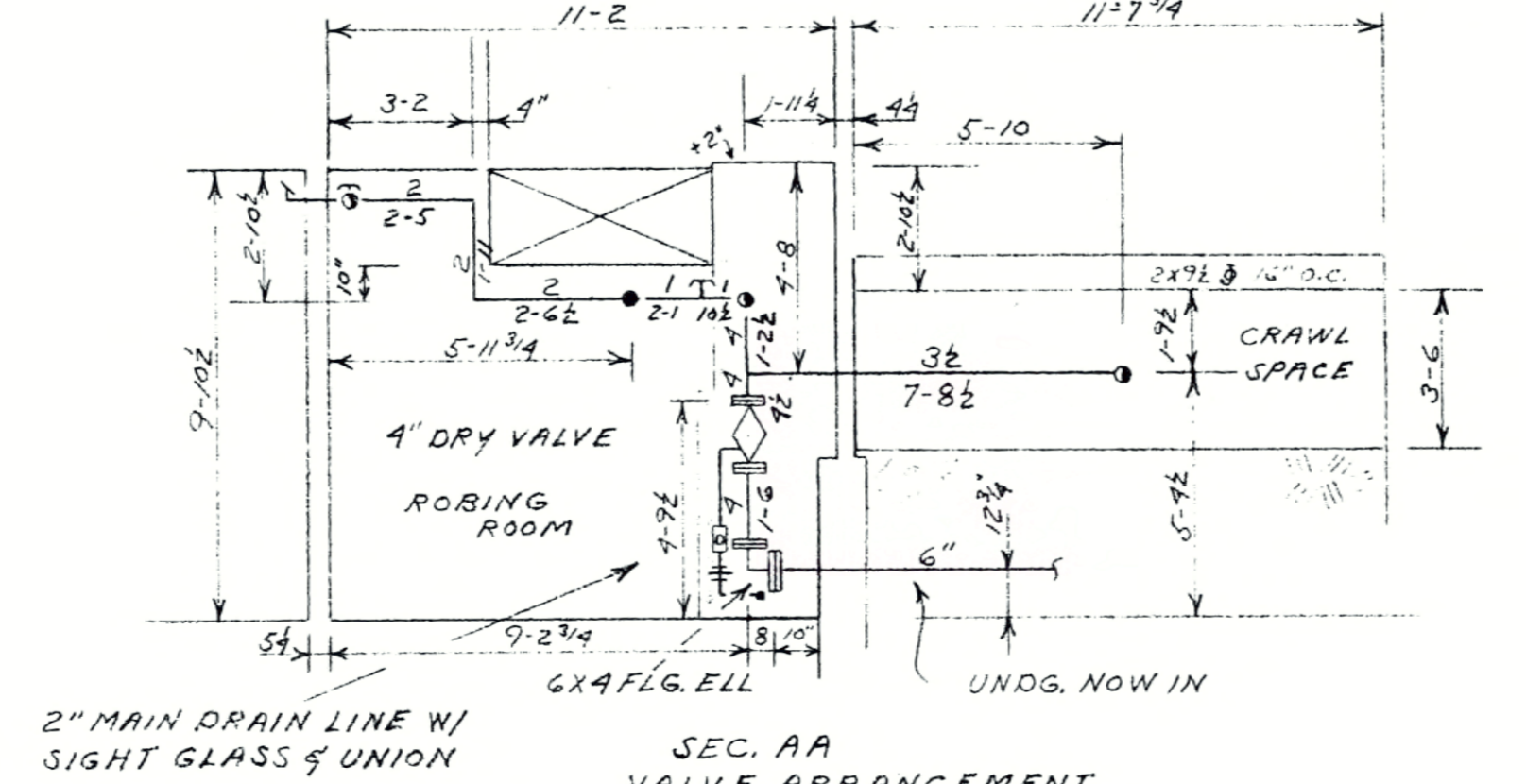


NOTES  
 \* DENOTES 2" OF PIPE BELOW JOISTS OR CEILING  
 (7-42) " " " " ABOVE FIN FLOOR  
 AIR COMPRESSOR TO BE CONNECTED FOR  
 MANUAL OPERATION  
 ELECTRICAL CURRENT IS THREE PHASE  
 FOUR WIRE 120-208 VOLT

HANGER NOTES  
 + DENOTES C.S. ROD #1/2" 4" 101 RING W/ ROD BUTTONS  
 " " " " " " W/2X4 HEADER  
 # 205 U-HOOK  
 # 223 CAST IRON BRACKET #1  
 # 149 SQ. HD. ROD, 4" 101 A.S. RING  
 W/3X3 COACH SCREW

PHOTOGRAPHED  
 DATE 1971

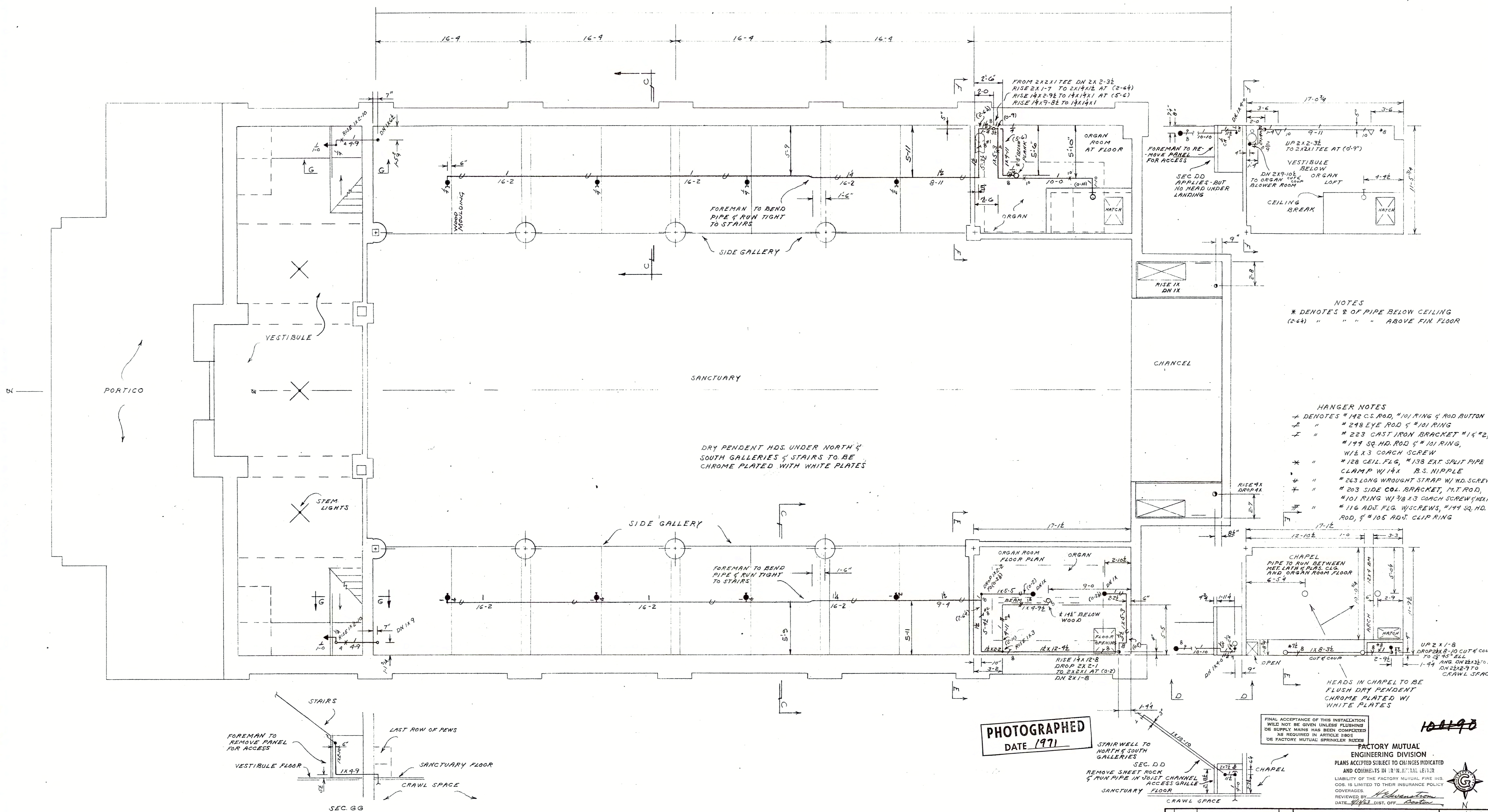
6" CI PIPE  
 INSTALLED BY OTHERS  
 FINAL ACCEPTANCE OF THIS INSTALLATION  
 WILL NOT BE GIVEN UNLESS FINISHING  
 OR SURVEY MARKS HAVE BEEN COMPLETED  
 AS REQUIRED IN ARTICLE 1800  
 OF FACTORY MUTUAL SPRINKLER RIGGER  
 DATE 11/16/71 DIST. OFF. [Signature]



MIDDLEBURY COLLEGE MEAD MEMORIAL CHAPEL MIDDLEBURY, VERMONT			SCALE: 1/4" = 1'-0"
NO.	DATE	REVISIONS & APPROVALS	BY DATE
1		ORDINARY HAZARD DRY SYSTEM	
BASEMENT & CRAWL SPACE			PUR. ORD. / JOB NO.
CONTRACT WITH			FILE NO.
GRINNELL FIRE PROTECTION SYSTEMS			DRAWING NO. 1 OF 5
TOTAL 59			CONTRACT NO. 4FP-1682

069516





NOTES  
 \* DENOTES 2" OF PIPE BELOW CEILING (244) " " " ABOVE FIN FLOOR

HANGER NOTES  
 + DENOTES #142 C.S. ROD, #101 RING & ROD BUTT  
 - " #248 EYE ROD & #101 RING  
 - " #223 CAST IRON BRACKET #1 1/2"  
 \* " #199 SQ. HD. ROD & #101 RING, W/ 1/2 X 3 COACH SCREW  
 \* " #128 CEIL. FLG, #138 EXT. SPLIT PIPE CLAMP W/ 1/4 X B.S. NIPPLE  
 \* " #263 LONG WROUGHT STRAP W/ WD. SCREWS  
 \* " #203 SIDE COL. BRACKET, 1/2" ROD, #101 RING W/ 3/8 X 3 COACH SCREWS  
 \* " #116 ADJ. FLG. W/ SCREWS, #199 SQ. HD. ROD, & #105 ADJ. CLIP RING

DRY PENDENT HDS. UNDER NORTH & SOUTH GALLERIES & STAIRS TO BE CHROME PLATED WITH WHITE PLATES

CHAPEL PIPE TO RUN BETWEEN METAL TRUSS BEAMS AND ORGAN ROOM FLOOR  
 HEADS IN CHAPEL TO BE FLUSH DRY PENDENT CHROME PLATED W/ WHITE PLATES

PHOTOGRAPHED  
 DATE 1971

FINAL ACCEPTANCE OF THIS INSTALLATION WILL NOT BE GIVEN UNLESS FLUSHING OF SUPPLY MAINS HAS BEEN COMPLETED AS REQUIRED IN ARTICLE 800 OF FACTORY MUTUAL SPRINKLER RIDER

FACTORY MUTUAL ENGINEERING DIVISION  
 PLANS ACCEPTED SUBJECT TO CHANGES INDICATED AND COMMENTS IN 12 IN. LETTER  
 LIABILITY OF THE FACTORY MUTUAL FIRE INS. COS. IS LIMITED TO THEIR INSURANCE POLICY COVERAGES.  
 REVIEWED BY: [Signature]  
 DATE: 4/16/82 DIST. OFF. Boston

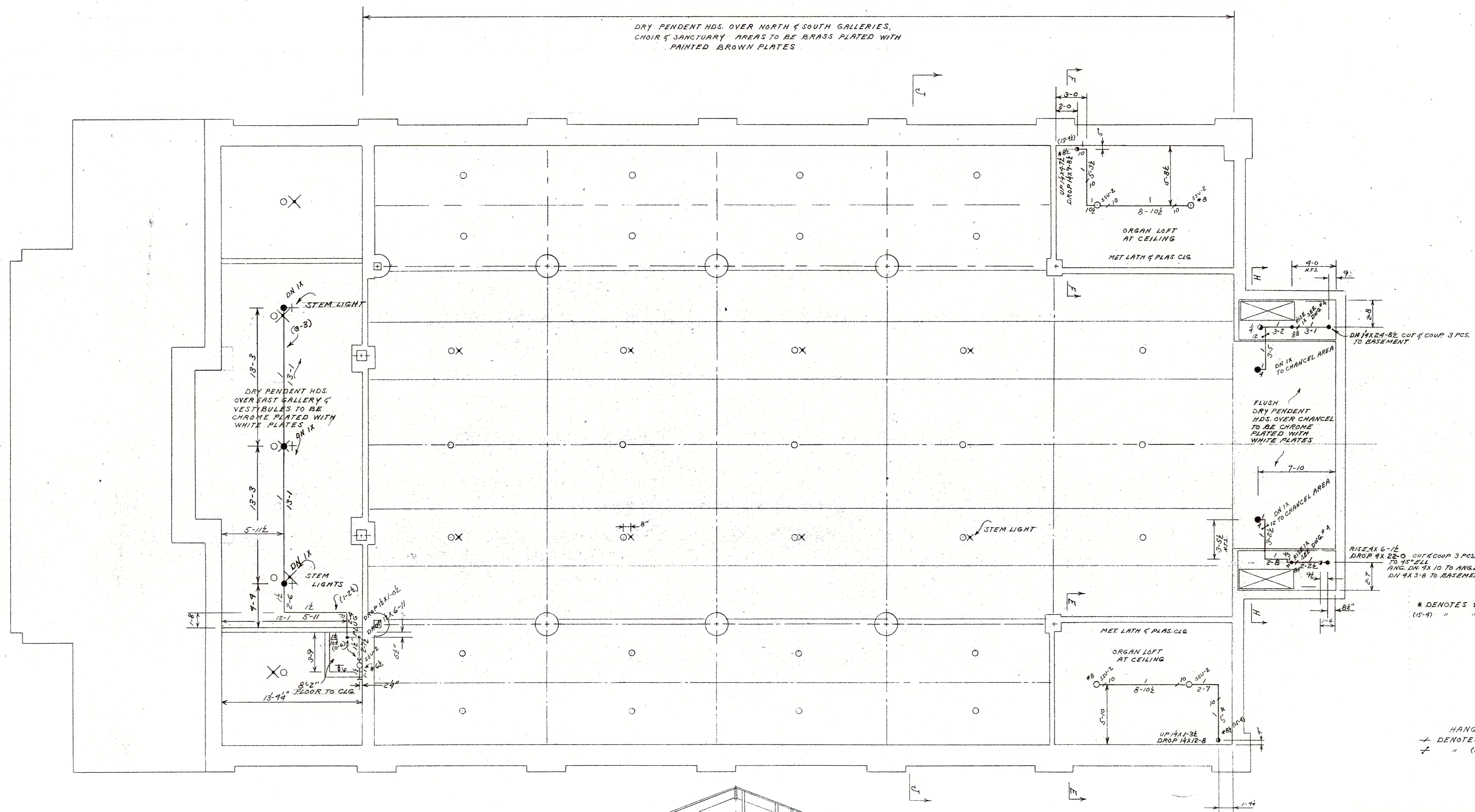
MIDDLEBURY COLLEGE MEAD MEMORIAL CHAPEL MIDDLEBURY, VERMONT				SCALE: 1/2" = 1'-0"																																
GALLERIES, ORGAN ROOM & CHAPEL				PUR. ORD. / JOB NO.																																
CONTRACT WITH				FILE NO.																																
GRINNELL				DRAWING NO.																																
FIRE PROTECTION SYSTEMS				CONTRACT NO.																																
<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS &amp; APPROVALS</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>				NO.	DATE	REVISIONS & APPROVALS	BY					<table border="1"> <tr> <th>SYMBOL</th> <th>DEVICE</th> <th>RATING</th> <th>QUAN.</th> </tr> <tr> <td>○</td> <td>DRY PENDENT STRAP</td> <td>125°</td> <td>22</td> </tr> <tr> <td>○</td> <td>DURASPEED SS W/ 1/2"</td> <td>135°</td> <td>6</td> </tr> <tr> <td>△</td> <td>SIDEWALL</td> <td>135°</td> <td>2</td> </tr> <tr> <td>▲</td> <td>"</td> <td>175°</td> <td>2</td> </tr> <tr> <td colspan="2">TOTAL</td> <td></td> <td>22</td> </tr> </table>	SYMBOL	DEVICE	RATING	QUAN.	○	DRY PENDENT STRAP	125°	22	○	DURASPEED SS W/ 1/2"	135°	6	△	SIDEWALL	135°	2	▲	"	175°	2	TOTAL			22
NO.	DATE	REVISIONS & APPROVALS	BY																																	
SYMBOL	DEVICE	RATING	QUAN.																																	
○	DRY PENDENT STRAP	125°	22																																	
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△	SIDEWALL	135°	2																																	
▲	"	175°	2																																	
TOTAL			22																																	

069616



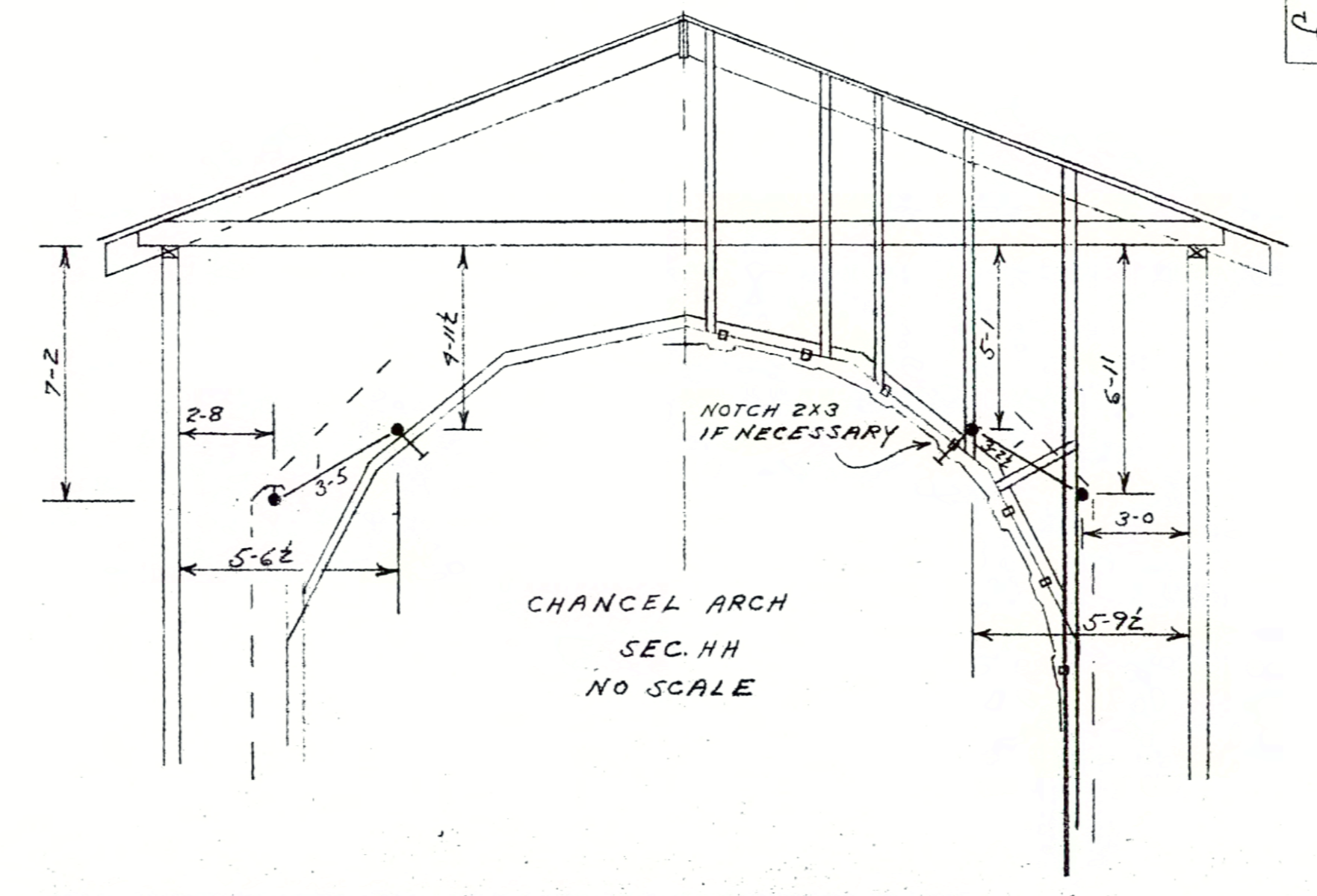
FP-03

4-12-63 / REFLECTED CEILING - ORGAN LOFTS

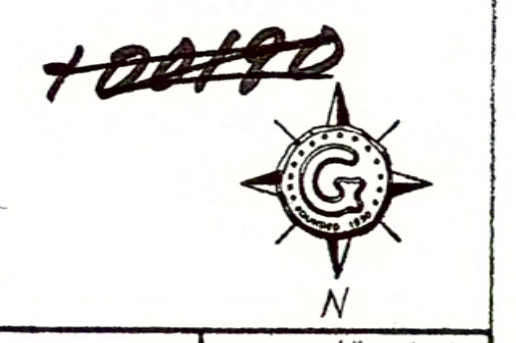


NOTES  
 \* DENOTES 2" OF PIPE BELOW JOISTS OR CEILING (15'-9" " " " " ABOVE FIN. FLOOR

HANGER NOTES  
 + DENOTES 2" 1/2 C.S. ROD, 4" # 101 RING  
 - " (2)" 2925-H STAR TOGGLE, M.T. ROD # 101 RING



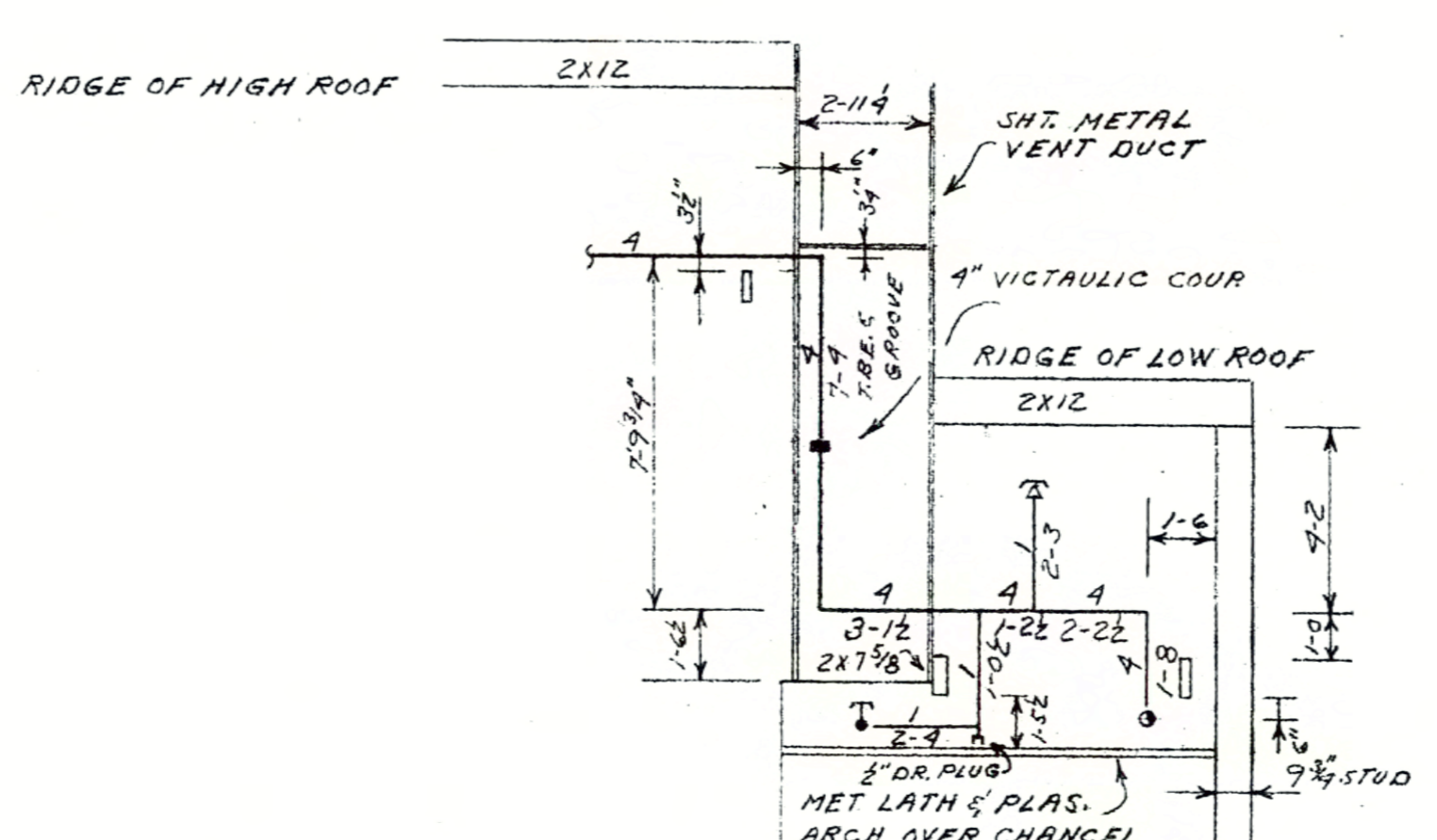
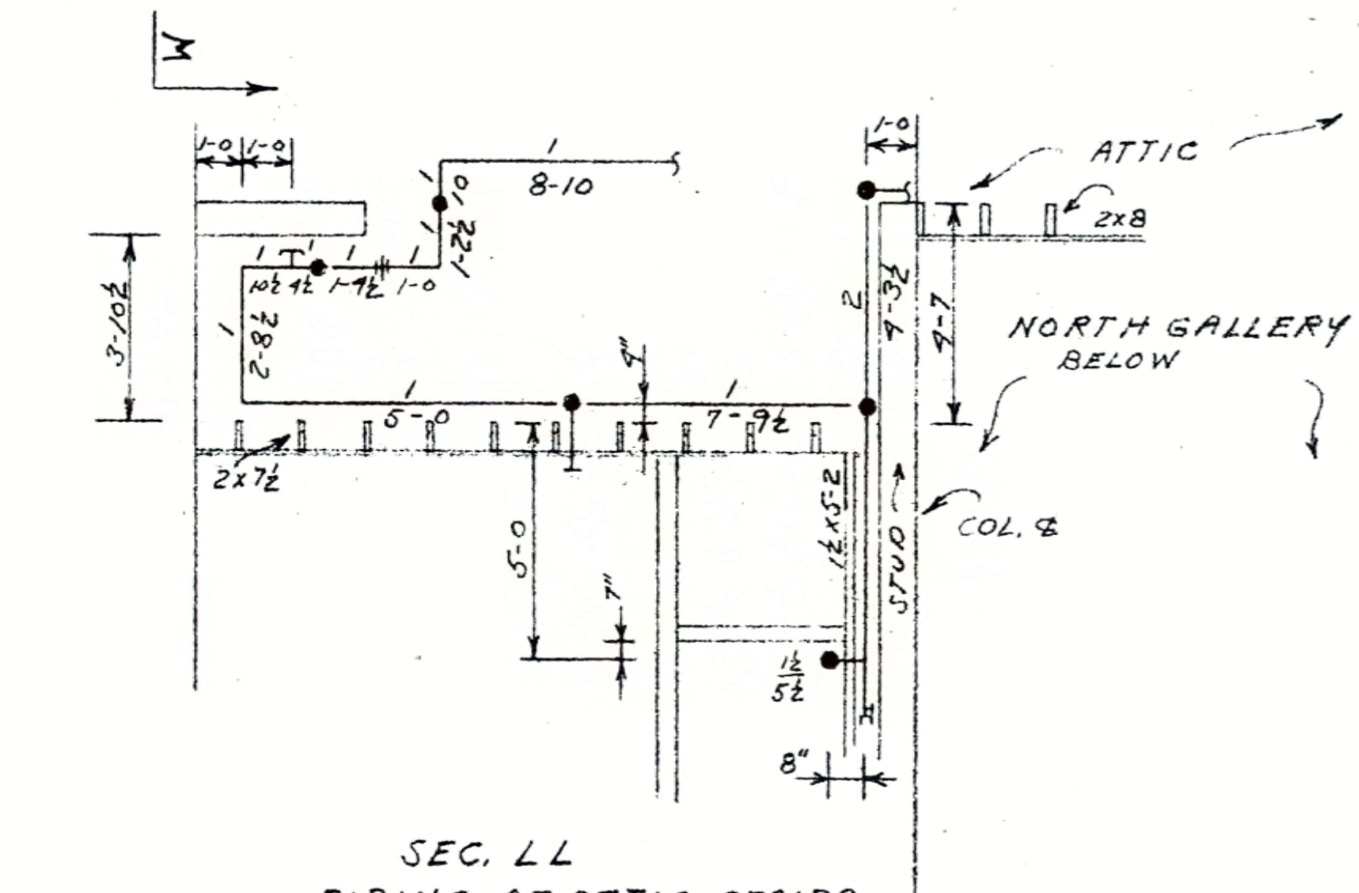
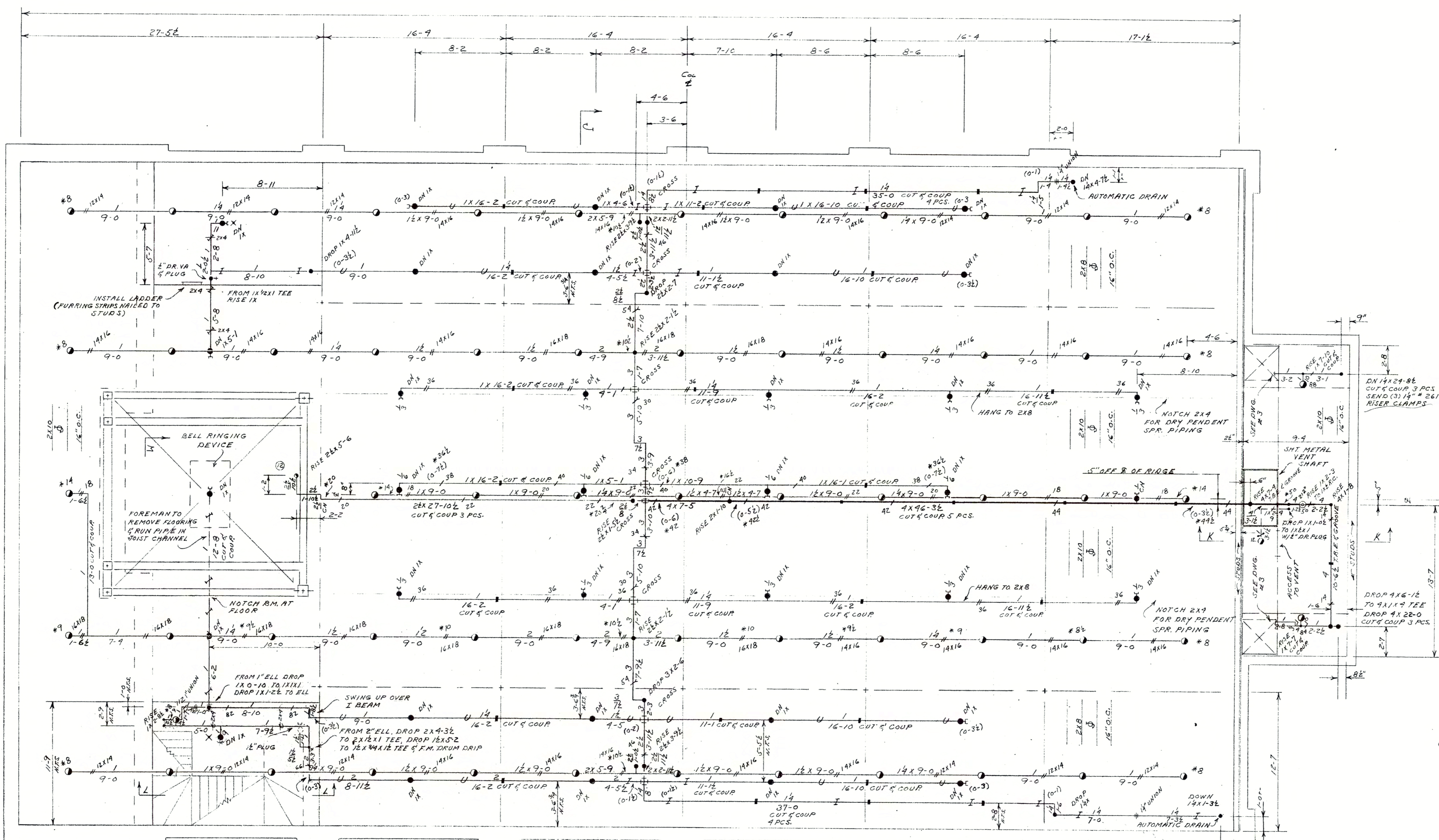
PHOTOGRAPHED  
 DATE 1971



MIDDLEBURY COLLEGE MEAD MEMORIAL CHAPEL MIDDLEBURY, VERMONT				SCALE: 1/4" = 1'-0"
NO.	DATE	REVISIONS & APPROVALS	BY	SURVEY BY DATE
				DRAWN 10/24/62
				CHECKED
				LISTED
REFLECTED CEILING & ORGAN LOFTS				PUR. ORD./JOB NO.
CONTRACT WITH				FILE NO.
GRINNELL				DRAWING NO.
FIRE PROTECTION SYSTEMS				3 OF 5
				CONTRACT NO.
				4FP-16A2
TOTAL			44	

069716





**PHOTOGRAPHED**  
DATE 1971

FACTORY MUTUAL ENGINEERING DIVISION  
PLANS ACCEPTED SUBJECT TO CHANGES INDICATED AND COMMENTS IN INSTRUMENTAL LETTER  
FACILITY OF THE FACTORY MUTUAL FIRE INS. CO. IS LIMITED TO THEIR INSURANCE POLICY OVERAGES.  
VIEWED BY: *Hebert*  
DATE: *10-1-71*

NOTES  
X DENOTES 2" OF PIPE BELOW JOIST  
(O-32) " " " ABOVE JOIST

HANGER NOTES  
+ DENOTES #192 C.S. ROD #101 A.S. RING  
" " " " " W/2x4  
" " " " " #205 U-HOOK OR ANGLE U-HOOK W/ LENGTH SHOWN ON PLAN  
" " " " " #263 LONG WROUGHT STRAP W/ WD. SCREWS  
" " " " " #262 SHORT WROUGHT STRAP W/ WD. SCREWS  
" " " " " (1) #2925-H STAR TOGGLE, N.T. ROD/RING

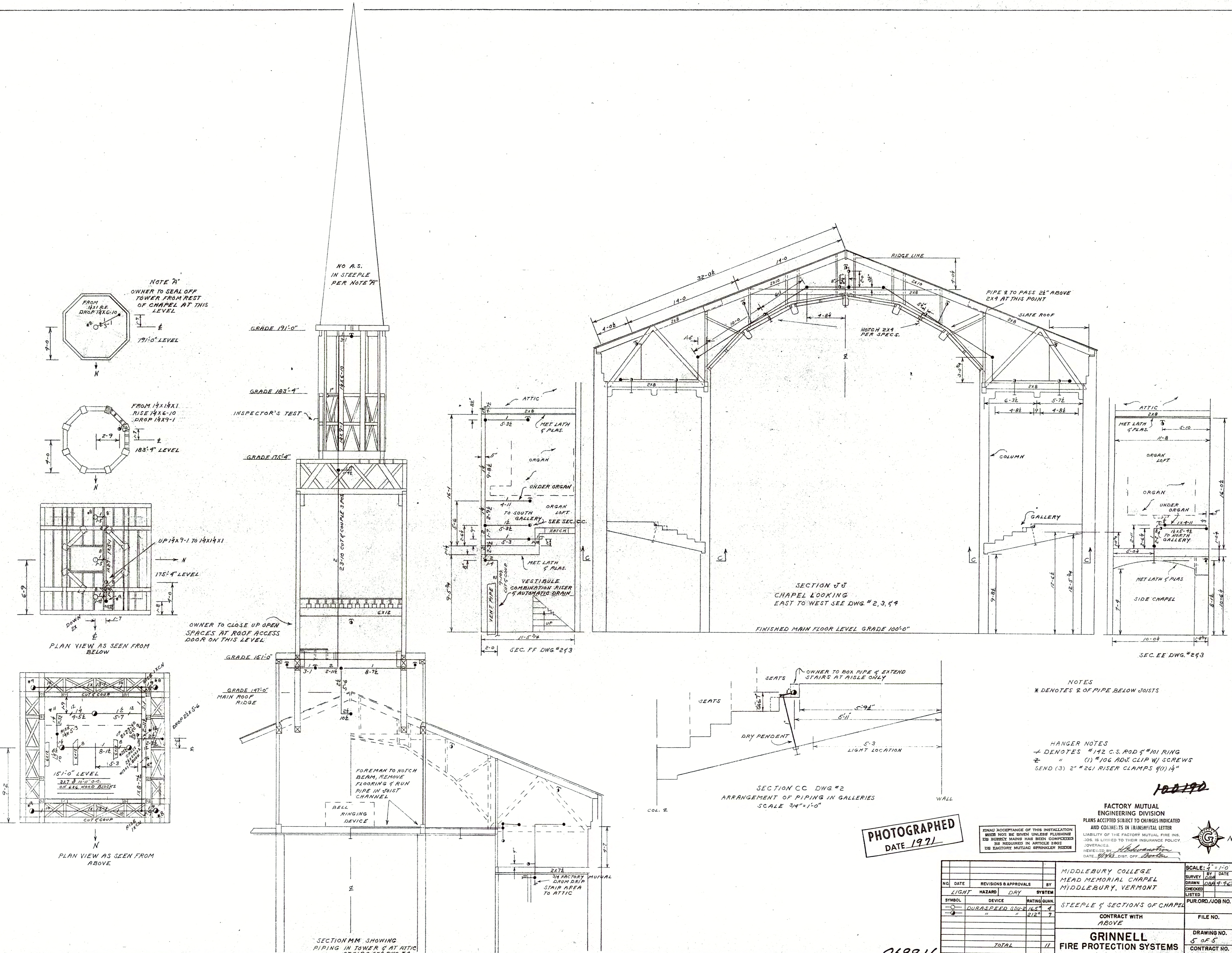
MIDDLEBURY COLLEGE HEAD MEMORIAL CHAPEL MIDDLEBURY, VERMONT				SCALE: 1/4" = 1'-0"
NO.	DATE	REVISIONS & APPROVALS	BY	BY DATE
1		ORDINARY HAZARD		10/1/71
2		DRY		10/1/71
3		SYSTEM		10/1/71
SYMBOL DEVICE RATHO QUAN				PUR. ORD./JOB NO.
1	DRY	150	2	
2	"	150	2	
3	"	150	1	
TOTAL 63				FILE NO.
GRINNELL FIRE PROTECTION SYSTEMS				DRAWING NO. 4 OF 5
				CONTRACT NO. 117-1687

069816

FP-04

4-13-63 ATTIC PLAN





**PHOTOGRAPHED**  
DATE 1977

**NOTES**  
\* DENOTES 2" OF PIPE BELOW JOISTS

**HANGER NOTES**  
- DENOTES #12 C.S. ROD @ #11 RING  
- DENOTES (1) #106 ADJ. CLIP W/ SCREWS  
- DENOTES (3) 2" #261 RISER CLAMPS @ (1) 1/4"

**FACTORY MUTUAL ENGINEERING DIVISION**  
PLANS ACCEPTED SUBJECT TO CHANGES INDICATED AND COMMENTS IN TRANSMITTAL LETTER  
LIABILITY OF THE FACTORY MUTUAL FIRE INS. CO. IS LIMITED TO THEIR INSURANCE POLICY COVERAGE  
REVIEWED BY: *[Signature]*  
DATE: 4/16/77 DIST. OFF. Boston

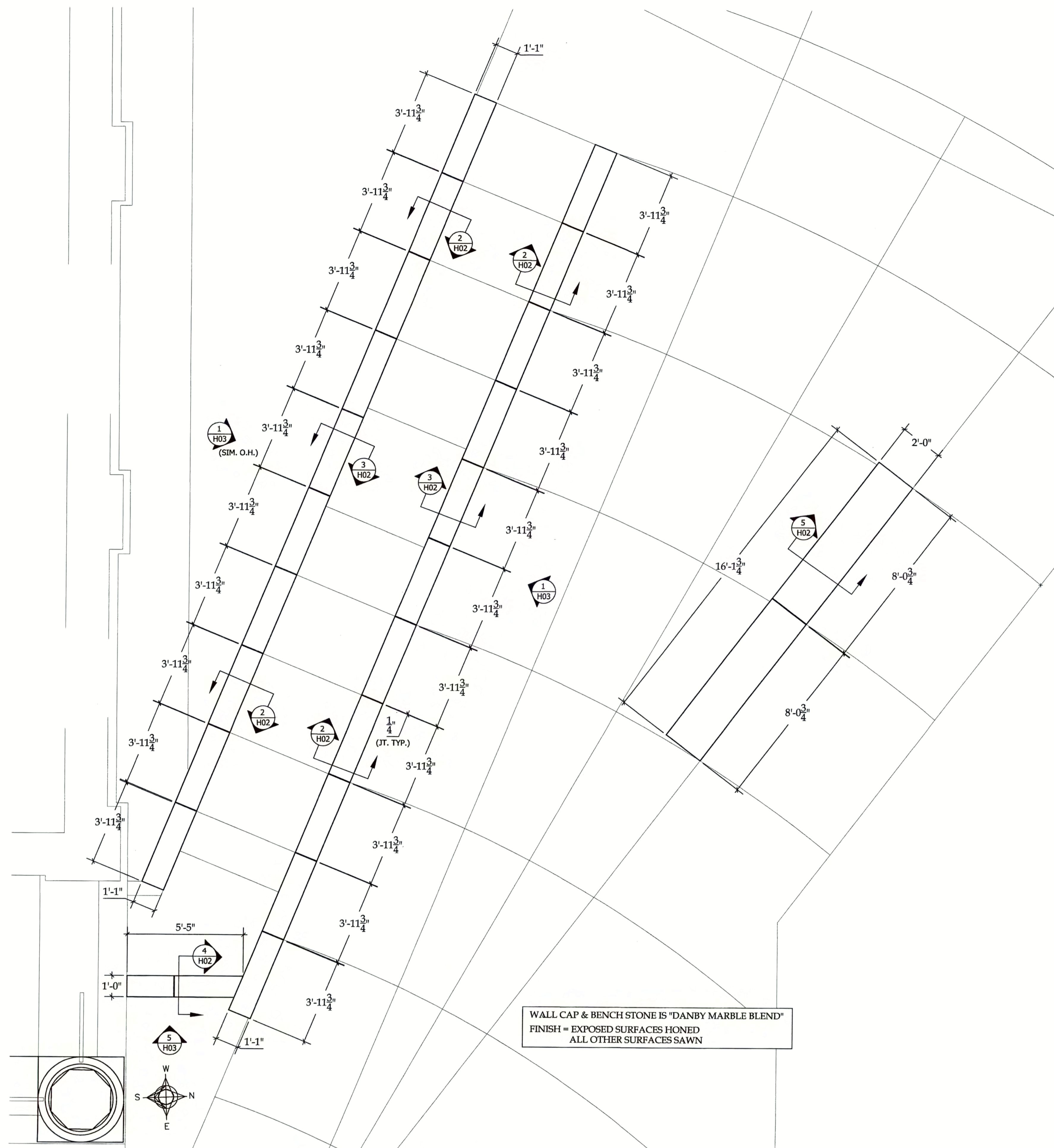
MIDDLEBURY COLLEGE MEAD MEMORIAL CHAPEL MIDDLEBURY, VERMONT			SCALE: 1" = 1'-0"
NO.	DATE	REVISIONS & APPROVALS	BY DATE
		LIGHT HAZARD DRY	SYSTEM
SUBJECT	DEVICE	RATING	QUAN.
	QUASPEED	5K5	4
	"	212	7
TOTAL			11

PURCHASER/JOB NO.  
FILE NO.  
DRAWING NO.  
5 OF 5  
CONTRACT NO.  
4FR-1682

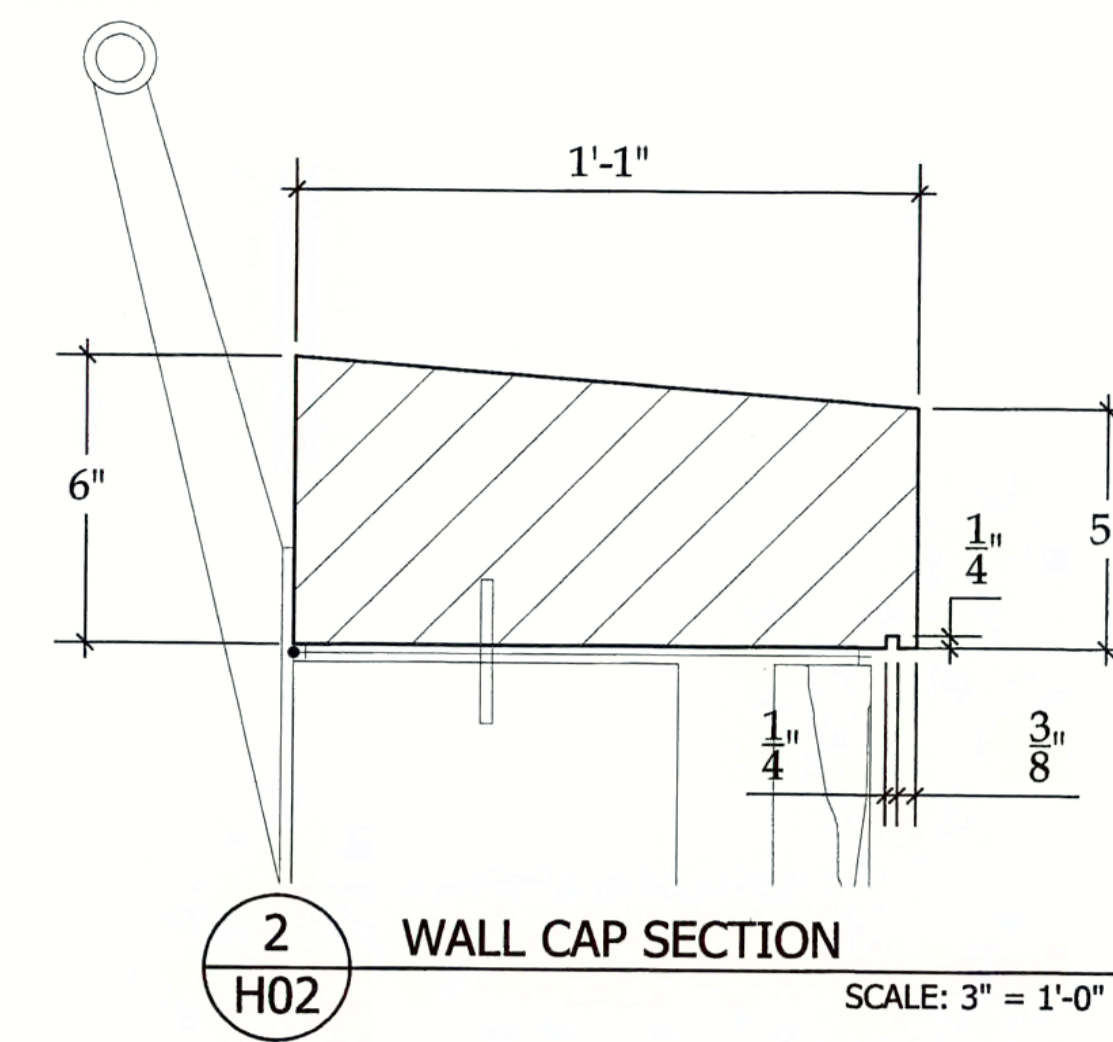
**GRINNELL FIRE PROTECTION SYSTEMS**

069916

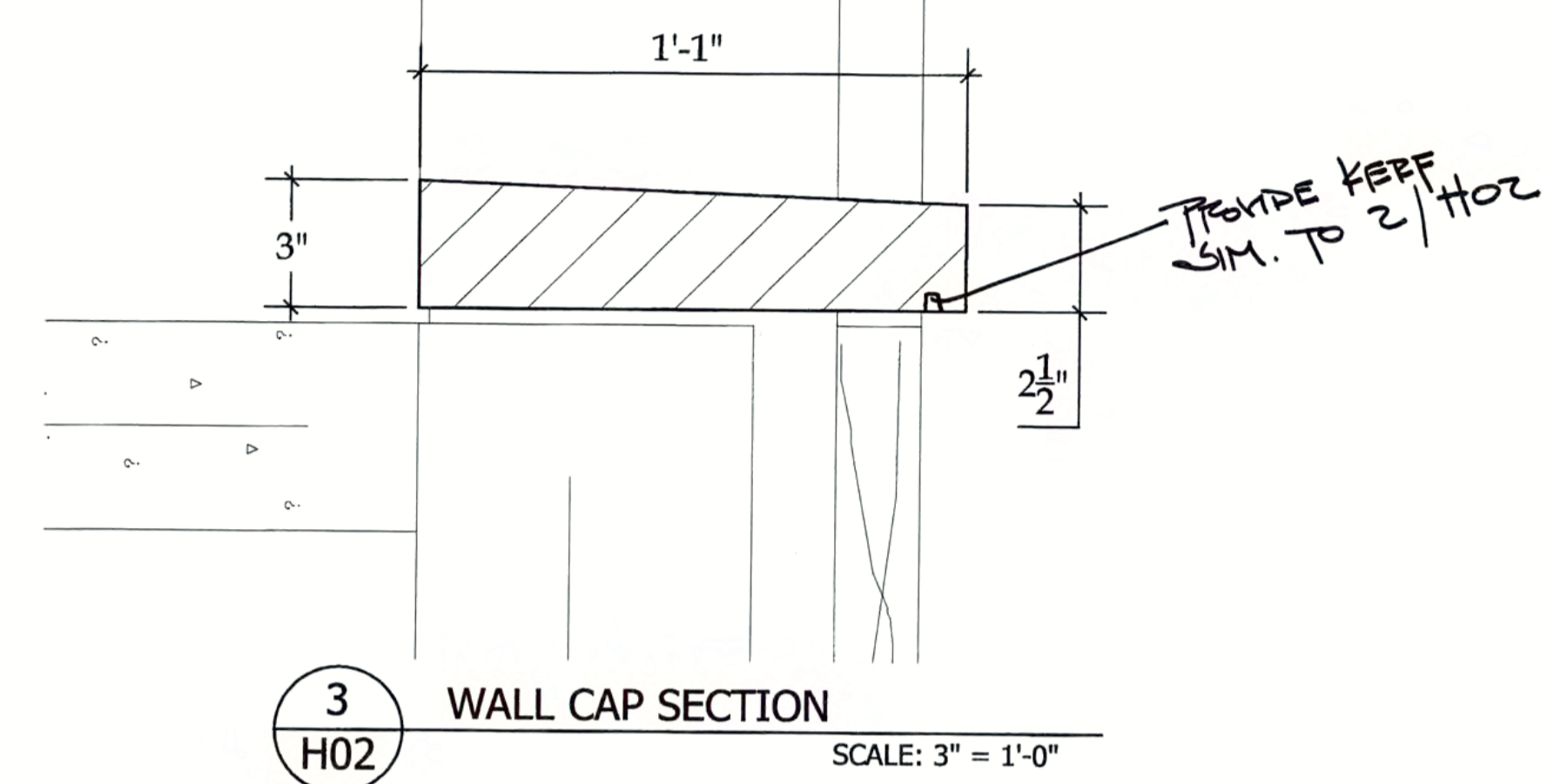




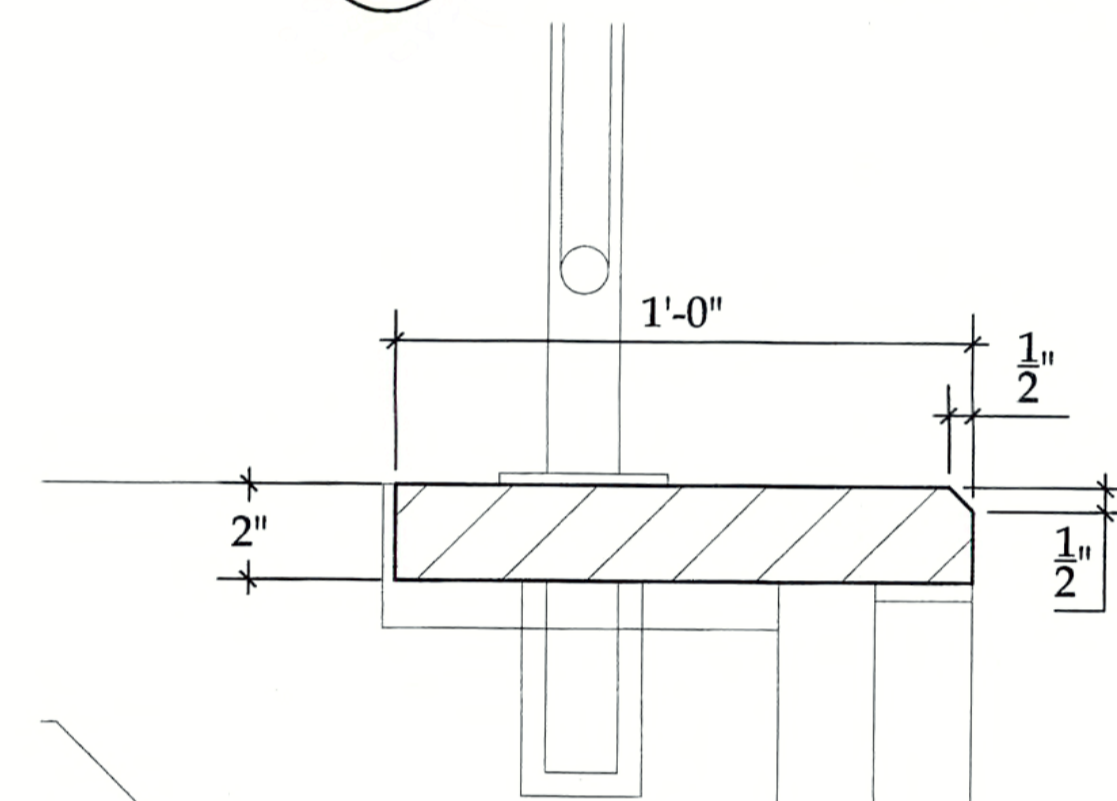
**1**  
H02 PARTIAL PLAN - MEAD CHAPEL  
SCALE: 3/8" = 1'-0"



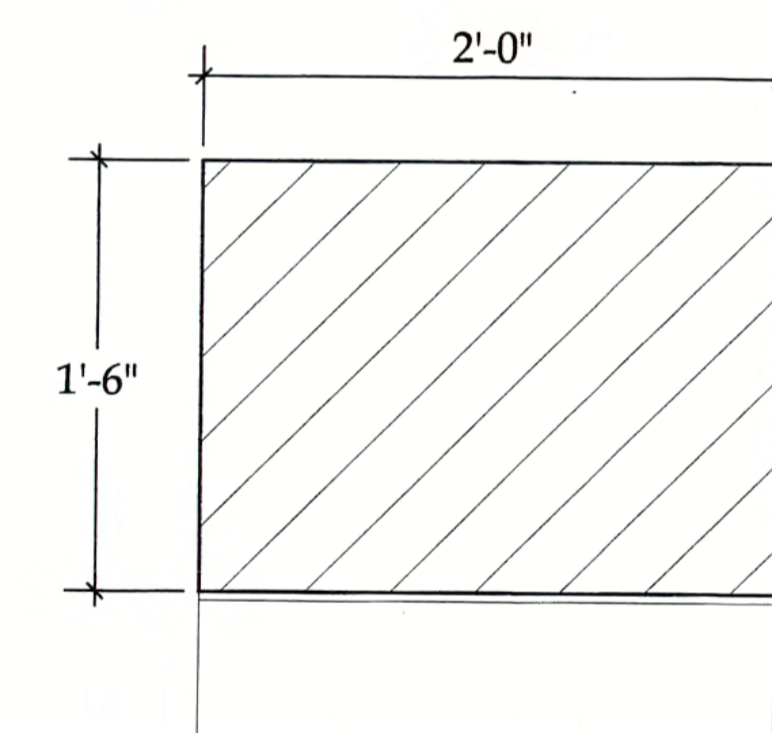
**2**  
H02 WALL CAP SECTION  
SCALE: 3" = 1'-0"



**3**  
H02 WALL CAP SECTION  
SCALE: 3" = 1'-0"



**4**  
H02 WALL CAP SECTION  
SCALE: 3" = 1'-0"



**5**  
H02 BENCH SECTION  
SCALE: 1-1/2" = 1'-0"

TROWEL TRADES SUPPLY, INC. IS NOT RESPONSIBLE FOR ANY ENGINEERING, DIMENSIONING, OR DESIGN WITH REGARD TO THE WORK ON THIS PROJECT. SHOP DRAWINGS WILL SHOW STONE WHICH MUST BE APPROVED WITHIN THE OVERALL ENGINEERING DESIGN REQUIREMENTS OF THE PROJECT.

TROWEL TRADES SUPPLY, INC.  
206 HEGEMAN AVE. COLCHESTER, VT  
P: (802) 655-3166 F: (802) 655-5841



ARCHITECT: SMITH ALVAREZ SIENKIEWICZ  
GENERAL CONTRACTOR: MIDDLEBURY COLLEGE  
MASON CONTRACTOR: ARNOLD CAMPNEY

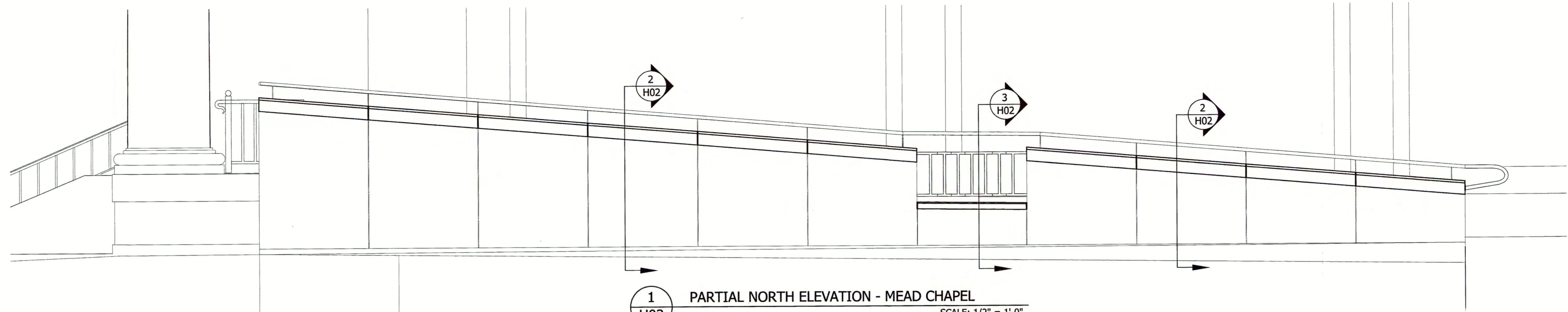
SUNDERLAND HALL RAMP &  
MEAD CHAPEL RAMP  
MIDDLEBURY COLLEGE  
MIDDLEBURY, VERMONT  
CUT STONE SHOP DRAWINGS

DATE: 08-29-05  
DRAWN BY: JS

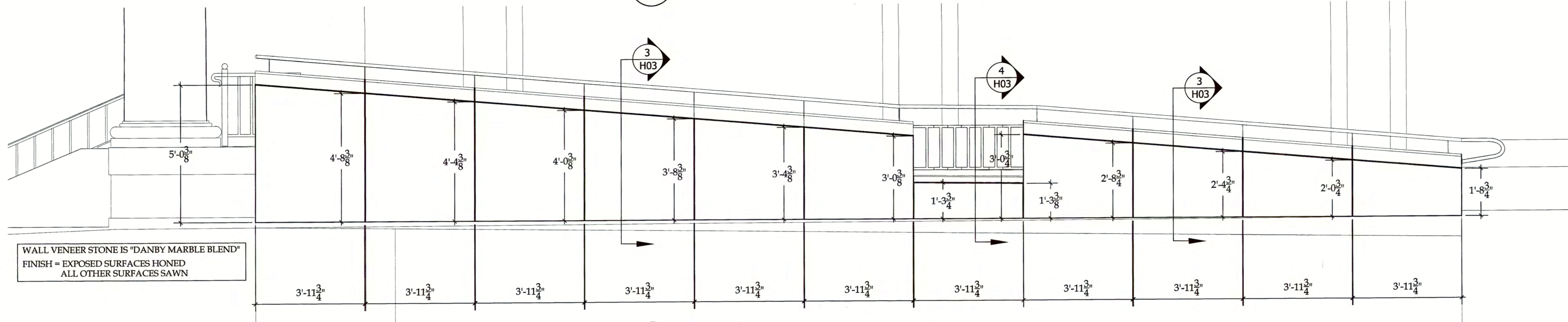
MEAD CHAPEL

H02

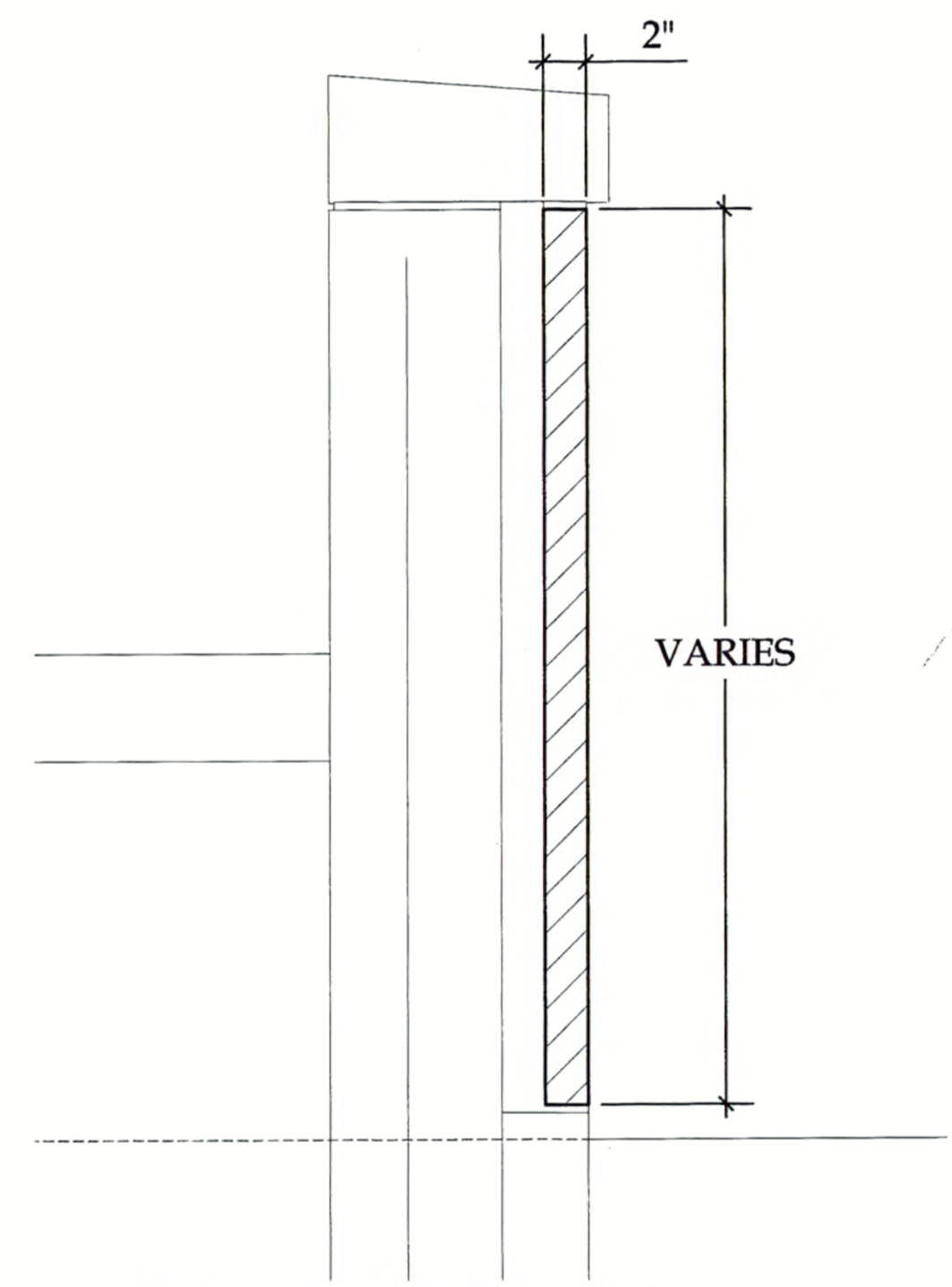




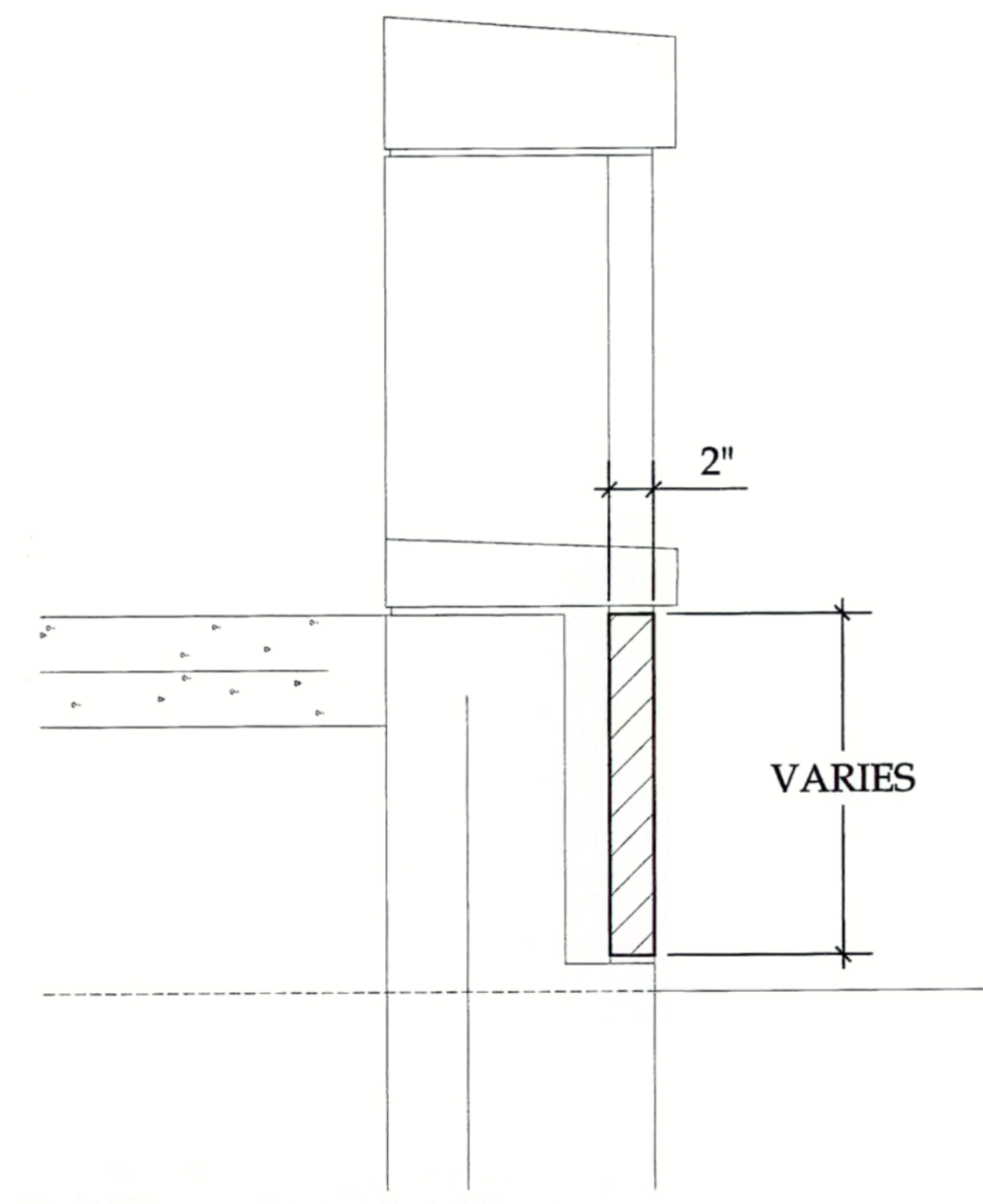
1 PARTIAL NORTH ELEVATION - MEAD CHAPEL  
SCALE: 1/2" = 1'-0"



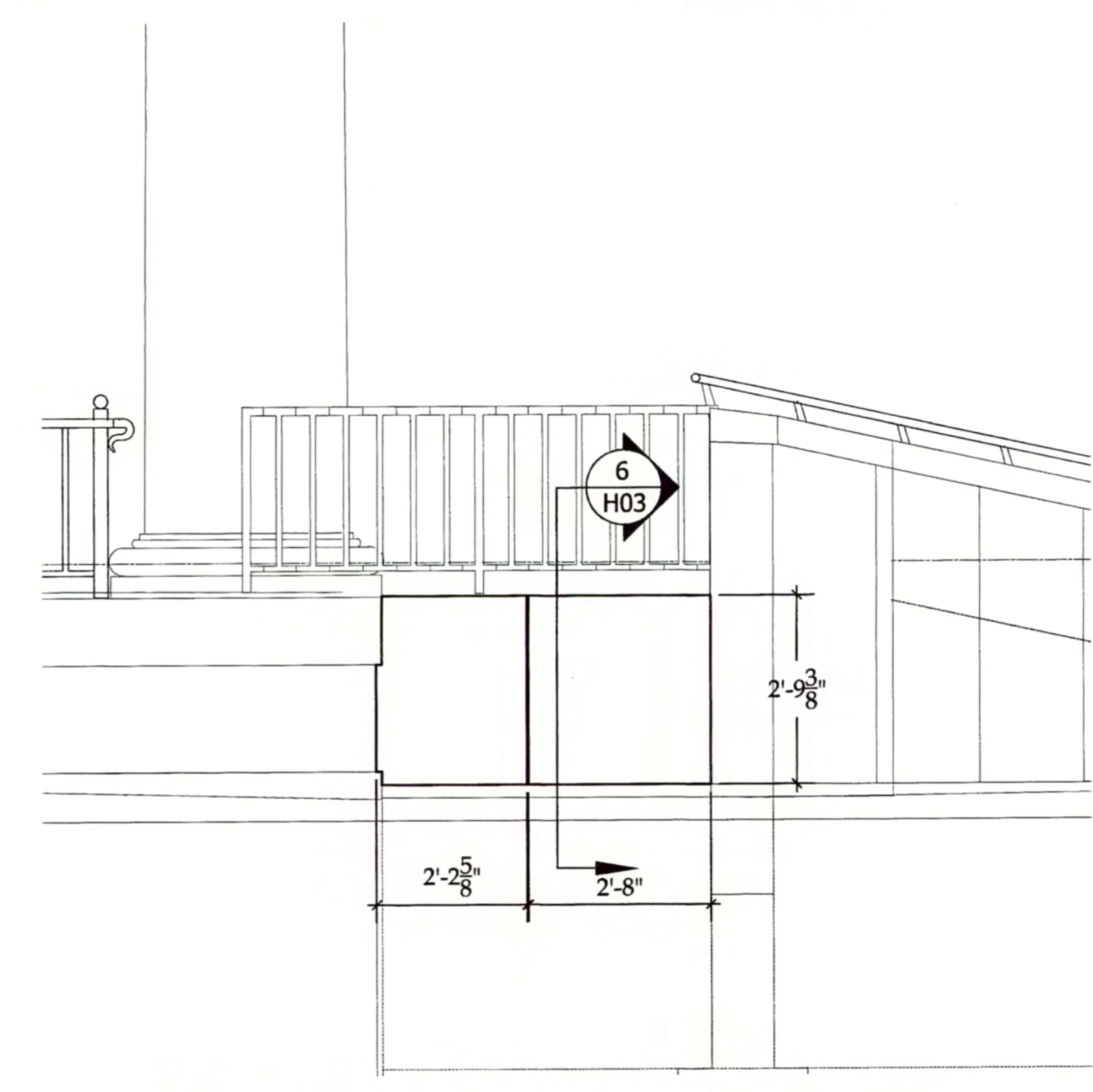
2 PARTIAL NORTH ELEVATION - MEAD CHAPEL  
SCALE: 1/2" = 1'-0"



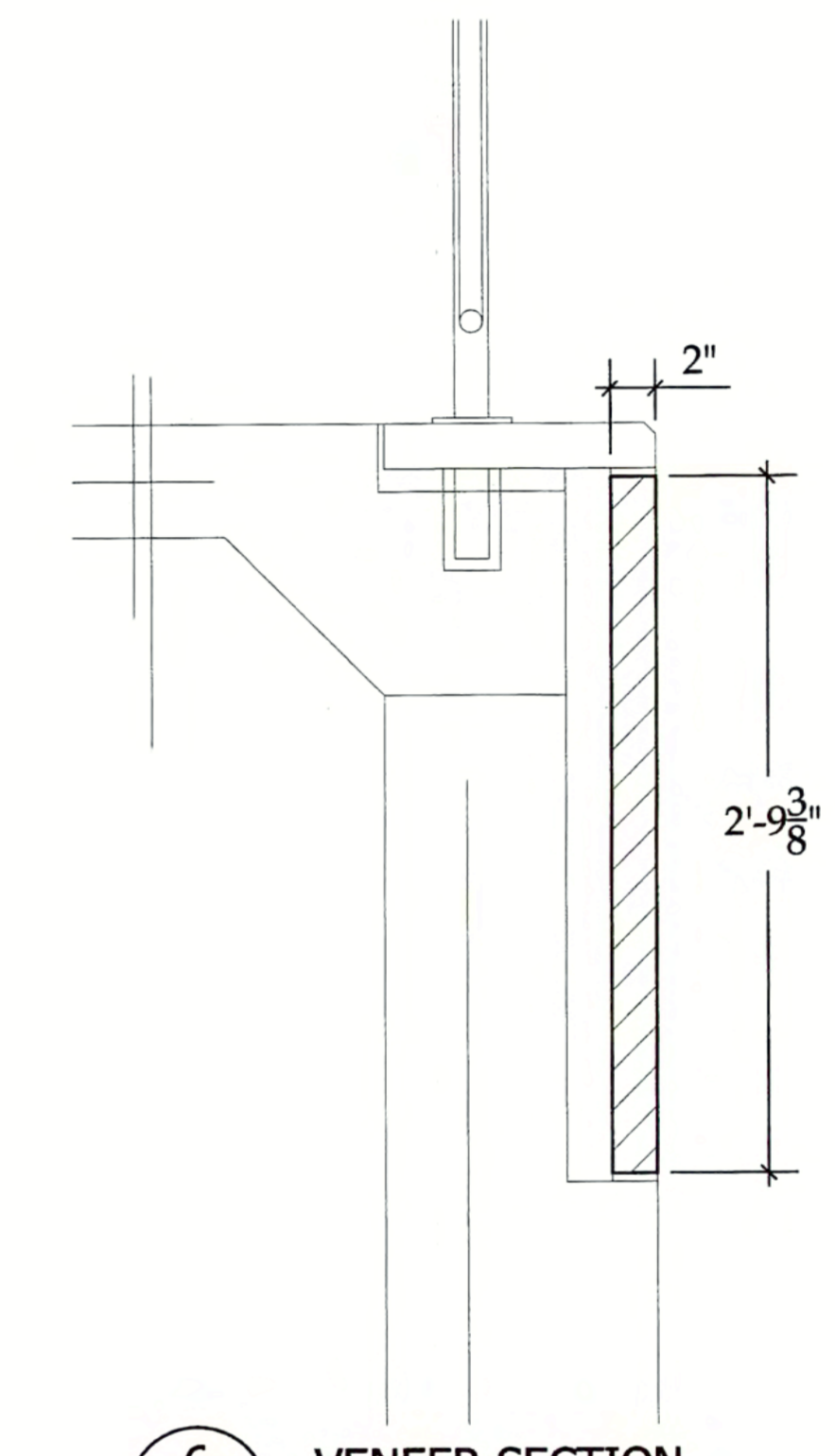
3 VENEER SECTION  
SCALE: 1-1/2" = 1'-0"



4 VENEER SECTION  
SCALE: 1-1/2" = 1'-0"



5 PARTIAL WEST ELEVATION - MEAD CHAPEL  
SCALE: 1/2" = 1'-0"



6 VENEER SECTION  
SCALE: 1-1/2" = 1'-0"

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MEAD CHAPEL

H03

TROWEL TRADES SUPPLY, INC.  
206 HEGEMAN AVE. COLCHESTER, VT  
P: (802) 655-3166 F: (802) 655-5841



ARCHITECT: SMITH ALVAREZ SIENKIEWICZ  
GENERAL CONTRACTOR: MIDDLEBURY COLLEGE  
MASON CONTRACTOR: ARNOLD CAMPNEY

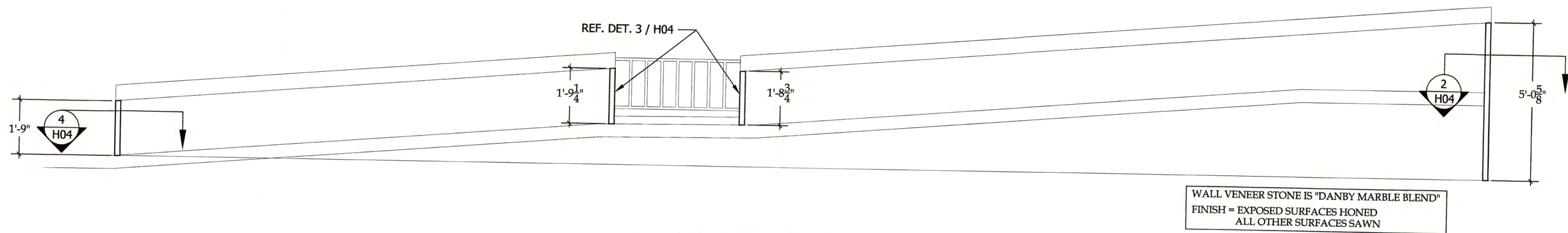
SUNDERLAND HALL RAMP &  
MEAD CHAPEL RAMP  
MIDDLEBURY COLLEGE  
MIDDLEBURY, VERMONT  
CUT STONE SHOP DRAWINGS

DATE: 08-29-05  
DRAWN BY: JS

MEAD CHAPEL

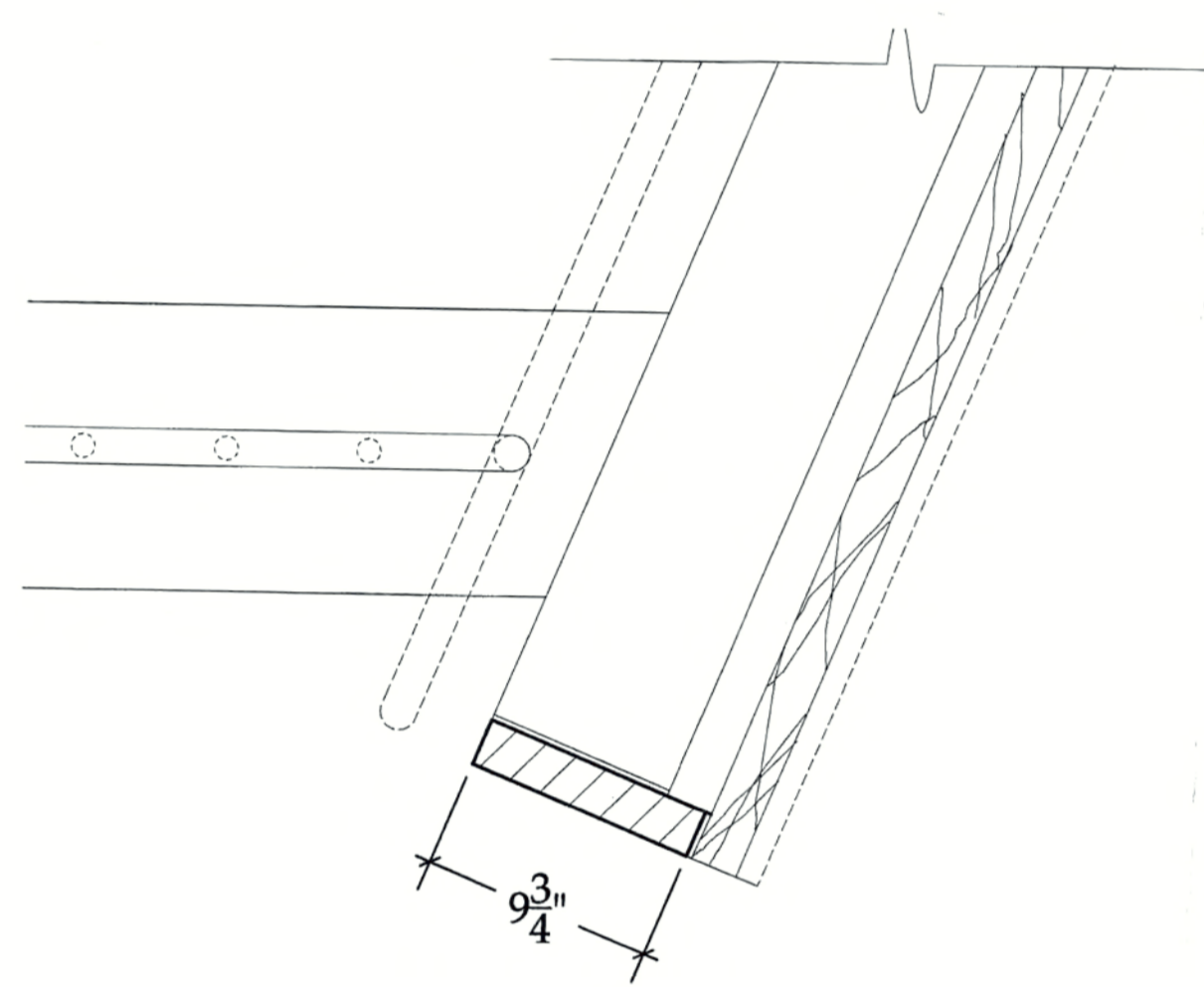
H03



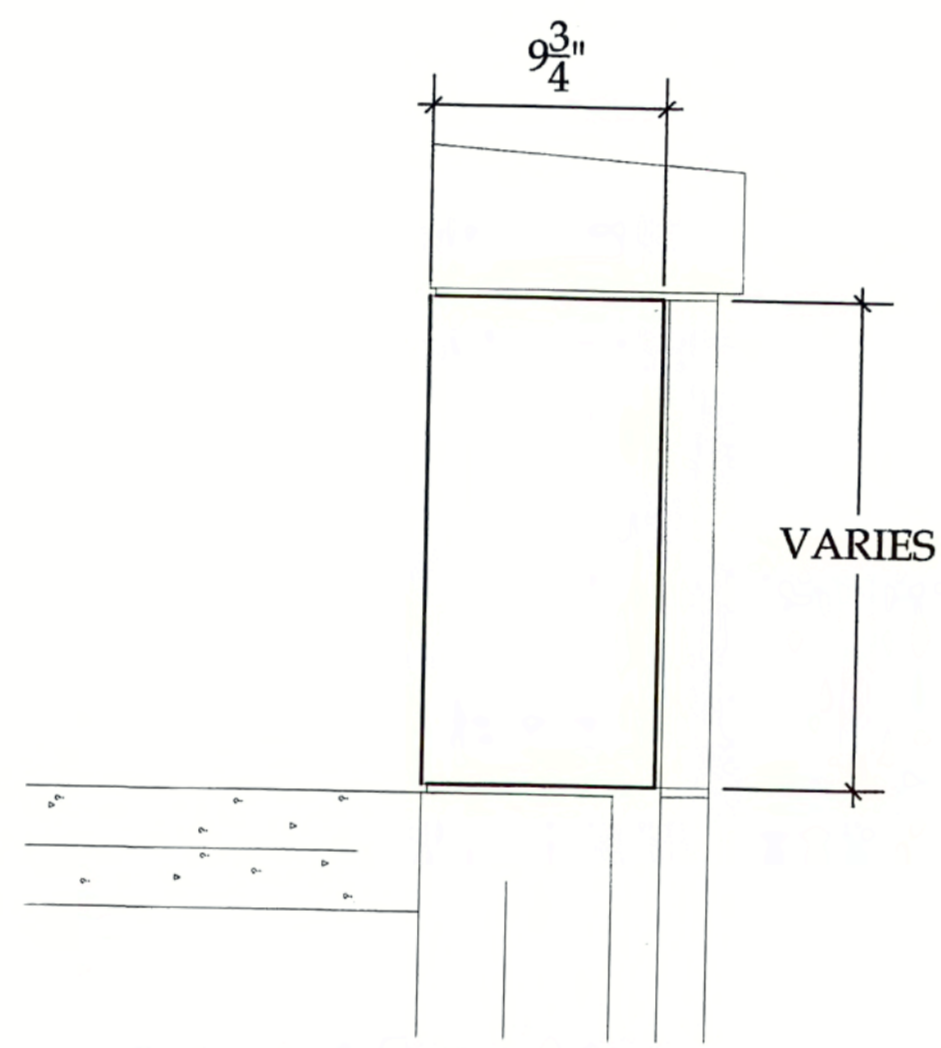


WALL VENEER STONE IS "DANBY MARBLE BLEND"  
 FINISH = EXPOSED SURFACES HONIED  
 ALL OTHER SURFACES SAWN

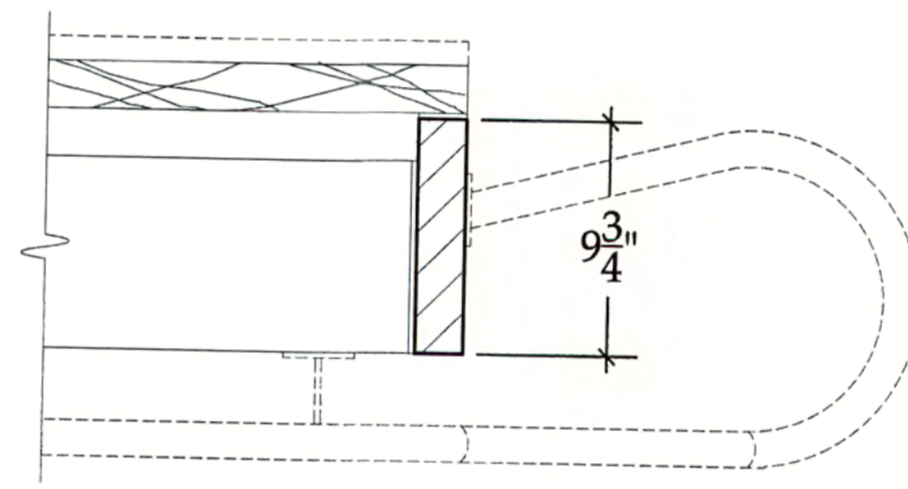
1 MEAD CHAPEL RAMP SECTION  
 H04 SCALE: 1/2" = 1'-0"



2 END OF WALL @ LANDING  
 H04 SCALE: 1-1/2" = 1'-0"



3 LANDING SECTION @ RAMP  
 H04 SCALE: 1-1/2" = 1'-0"



4 END OF WALL @ RAILING RETURN  
 H04 SCALE: 1-1/2" = 1'-0"

TROWEL TRADES SUPPLY, INC. IS NOT RESPONSIBLE FOR ANY ENGINEERING, DIMENSIONING, OR DESIGN WITH REGARD TO THE WORK ON THIS PROJECT. SHOP DRAWINGS WILL SHOW STONE WHICH MUST BE APPROVED WITHIN THE OVERALL ENGINEERING DESIGN REQUIREMENTS OF THE PROJECT.

H04

TROWEL TRADES SUPPLY, INC.  
 206 HEGEMAN AVE. COLCHESTER, VT  
 P: (802) 655-3166 F: (802) 655-5841



ARCHITECT: SMITH ALVAREZ SIENKIEWICZ  
 GENERAL CONTRACTOR: MIDDLEBURY COLLEGE  
 MASON CONTRACTOR: ARNOLD CAMPNEY

SUNDERLAND HALL RAMP &  
 MEAD CHAPEL RAMP  
 MIDDLEBURY COLLEGE  
 MIDDLEBURY, VERMONT  
 CUT STONE SHOP DRAWINGS

DATE: 08-29-05  
 DRAWN BY: JS

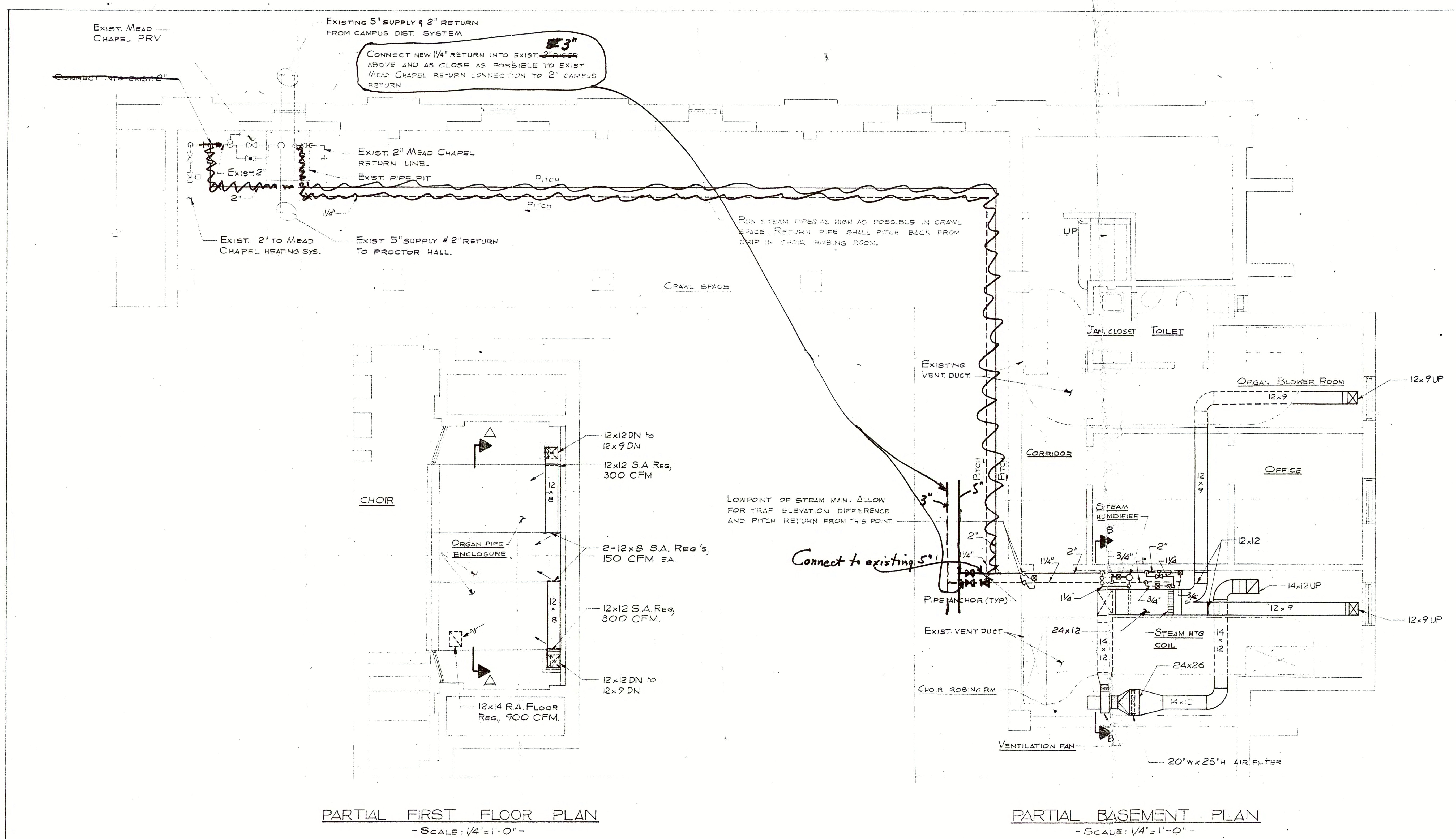
MEAD CHAPEL

H04



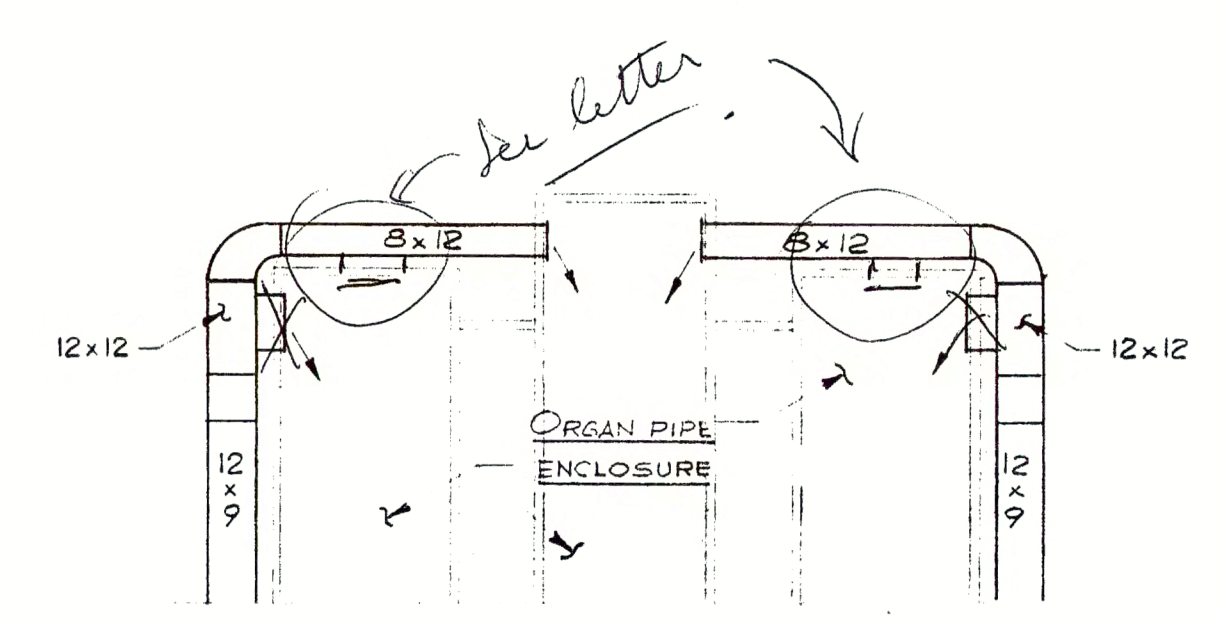
HV-04

2-17.1 ORGAN VENTILATION

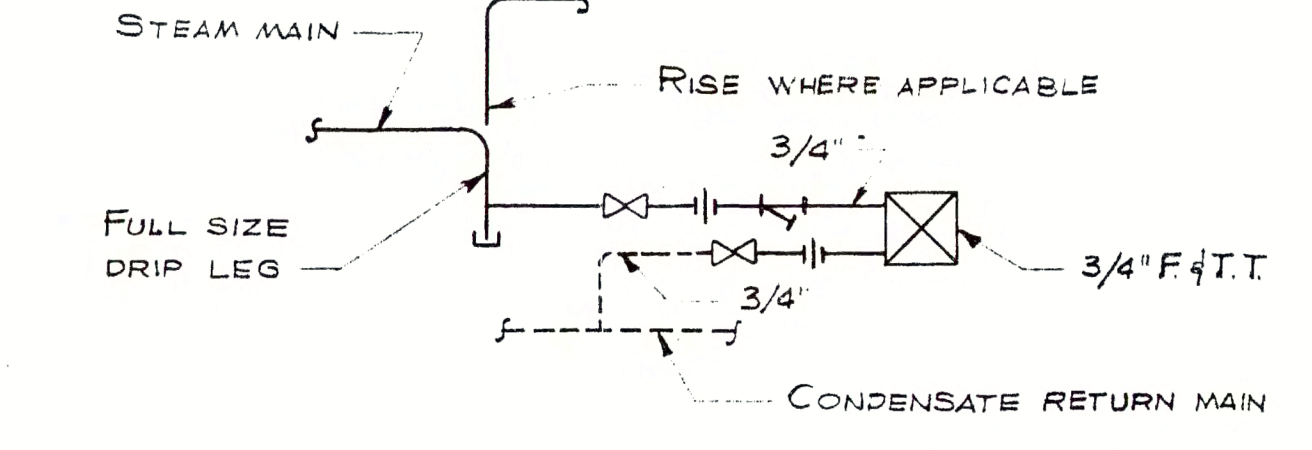


PARTIAL FIRST FLOOR PLAN - SCALE: 1/4" = 1'-0"

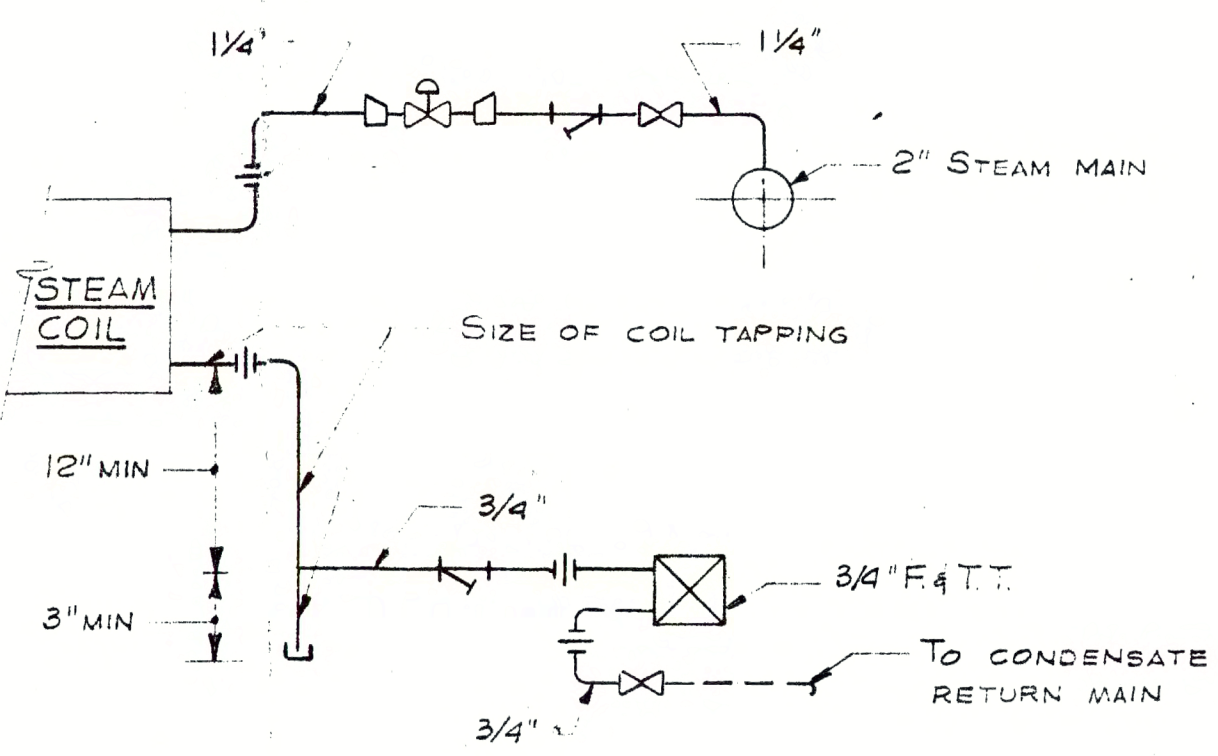
PARTIAL BASEMENT PLAN - SCALE: 1/4" = 1'-0"



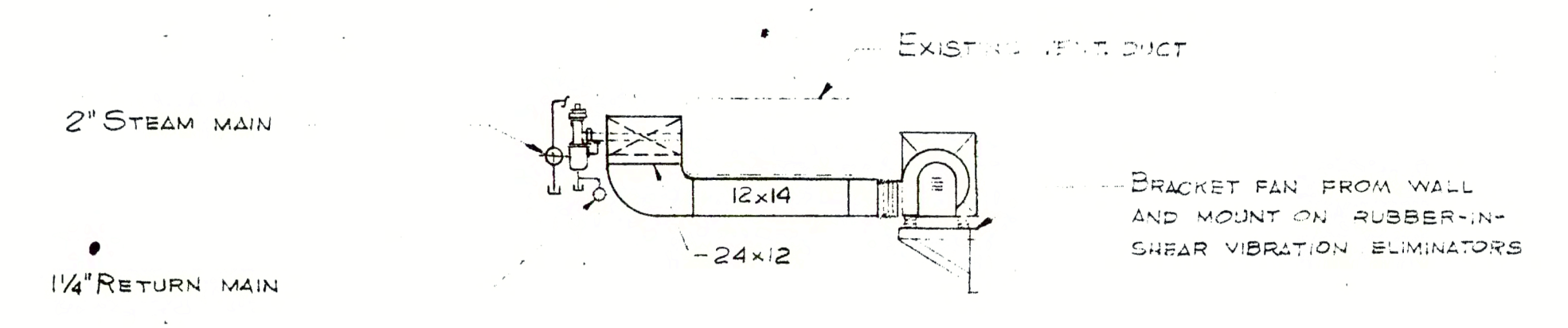
SECTION A-A - SCALE: 1/4" = 1'-0"



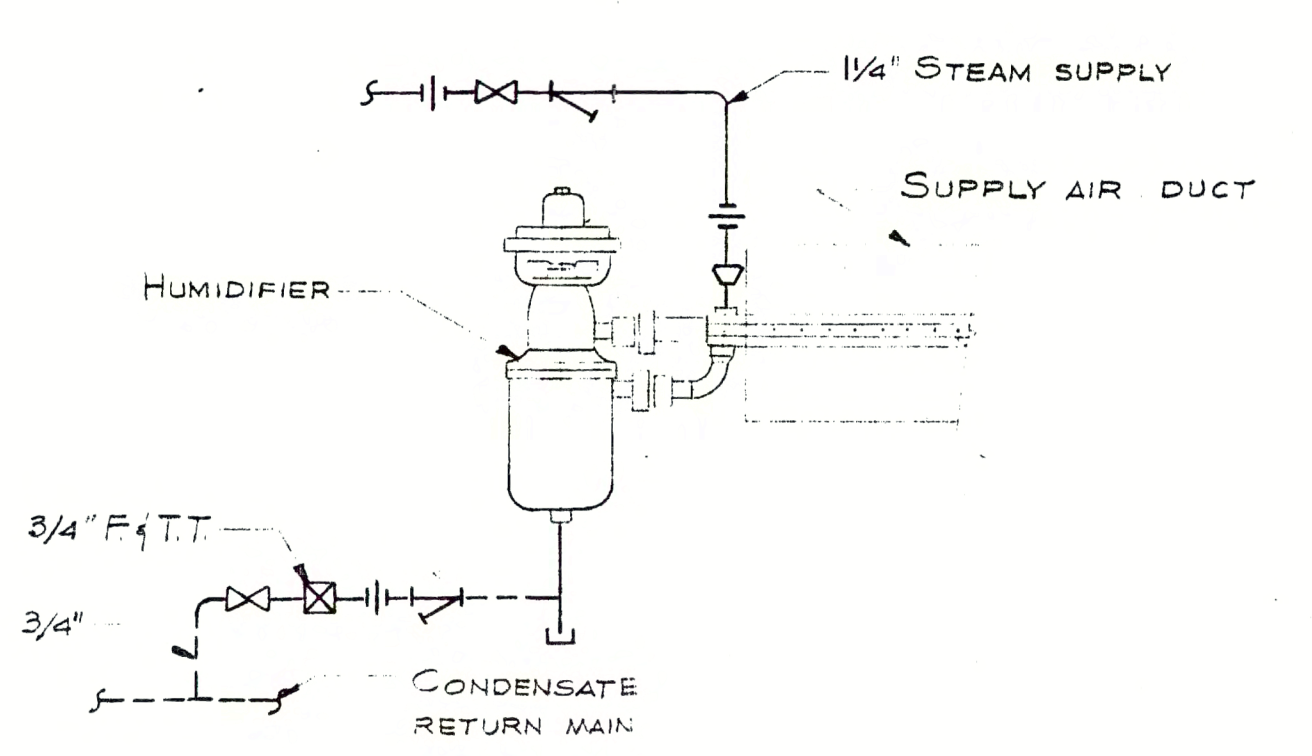
TYPICAL STEAM MAIN RISE AND END OF MAIN DRIP PIPING DETAIL - NO SCALE -



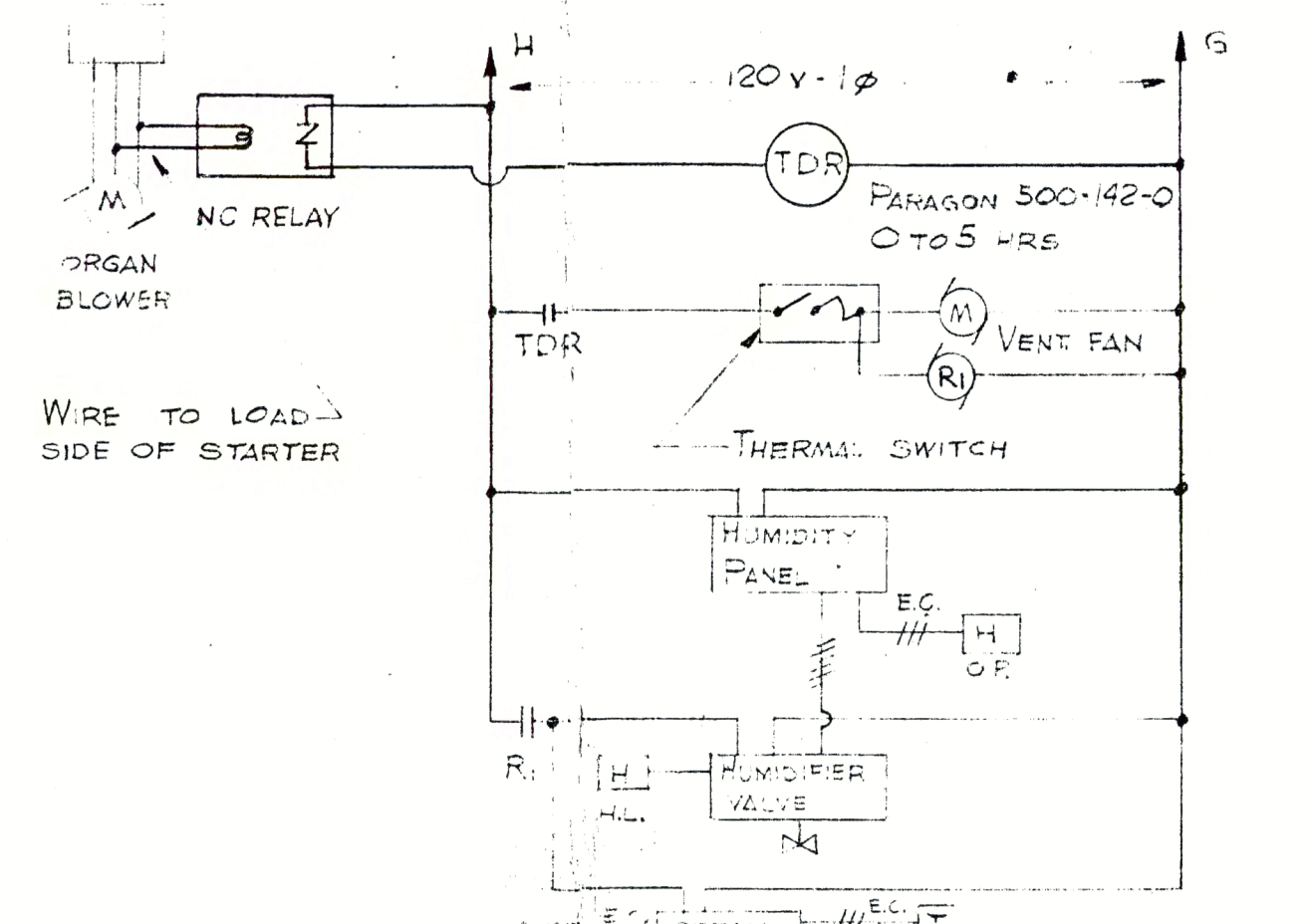
TYPICAL STEAM COIL PIPING DETAIL - NO SCALE -



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



STEAM HUMIDIFIER PIPING DETAIL - NO SCALE -



ORGAN CHAMBER VENTILATION SYSTEM WIRING DIAGRAM

WORK TO BE PERFORMED

- WORK INCLUDED**
- FURNISH ALL LABOR, MATERIALS AND EQUIPMENT FOR THE COMPLETE INSTALLATION OF THE WORK AS REQUIRED BY THE DRAWINGS AND DETAILS, IN GENERAL, TO INCLUDE THE FOLLOWING:
- (1.) INSTALLATION OF A HOT AIR HEATING SYSTEM FOR THE ORGAN CHAMBER WITH A STEAM HEATING COIL AND STEAM HUMIDIFIER.
  - (2.) STEAM AND RETURN PIPING.
  - (3.) CUTTING AND PATCHING.
  - (4.) AUTOMATIC TEMPERATURE AND HUMIDITY CONTROLS.
  - (5.) ALL ELECTRIC WIRING.

CUTTING AND PATCHING

- DO ALL CUTTING AND PATCHING FOR THE WORK. COORDINATE ALL CUTTING AND PATCHING SO THAT THE WORK CAN BE PROPERLY INSTALLED AND BUILD INTO WORK ANY AND ALL ITEMS FURNISHED.
- ITEMS OF PATCHING SHALL INCLUDE THE FOLLOWING:**
- (1.) PATCH ALL SURFACES WHERE NEW ITEMS ARE INSTALLED.
  - (2.) PATCH ALL SURFACES DAMAGED BY CONSTRUCTION OPERATIONS.
  - (3.) ALL OTHER CUTTING AND PATCHING INCIDENTAL TO THE WORK. ALL PATCHING SHALL MATCH ADJACENT SURFACES.

HANGERS

FURNISH AND INSTALL ALL HANGERS AND SUPPORTS REQUIRED FOR THE VARIOUS PARTS OF THE SYSTEM. PIPE HANGERS SHALL BE CLEVIS TYPE ON PIPE 2" AND LARGER AND STRAP TYPE ON PIPE 1-1/2" AND SMALLER. PIPE HUNG FROM WALL SHALL HAVE OFFSET ROOFS OR BRACKETS TO SUPPORT HANGERS. PIPING SHALL BE HUNG AT INTERVALS OF NOT OVER 10 FEET.

STEAM AND RETURN PIPING

ALL STEAM PIPING SHALL BE STANDARD HEIGHT SCHEDULE 40 STEEL AND ALL RETURN PIPING SHALL BE SCHEDULE 80 STEEL. ALL PIPING SHALL BE RUN TRUE AND STRAIGHT. LINES OF PIPE SHALL PITCH DOWN NOT LESS THAN 1/4" IN 10 FEET IN THE DIRECTION OF FLOW OF CONDENSATE. SWING JOINTS OR OTHER MEANS SHALL BE PROVIDED SO THAT THE PIPING WILL BE FREE TO EXPAND WITHOUT PLACING UNDESIRABLE STRAIN ON FITTINGS. PIPING SHALL BE HUNG AND GUIDED IN SUCH A WAY THAT PIPES WILL BE NOISELESS WHEN THEY EXPAND AND CONTRACT. NO PIPING SHALL BE ALLOWED TO CONTACT A WOODEN SURFACE. PROVIDE DROPS AT ALL POINTS SHOWN ON THE PLANS AND AT ANY OTHER POINTS WHERE NECESSARY FOR THE PROPER DRAINAGE OF CONDENSATE. ENDS OF PIPE SHALL BE REAMED TO FULL SIZE. PIPES 2-1/2" AND LARGER SHALL BE WELDED. FITTINGS IN WELDED PIPE SHALL BE TUBE TURNS, WALWORTH, GRINNELL OR APPROVED EQUAL. WELDING FITTINGS OF THE SAME MATERIAL AS THE PIPE. FITTINGS IN SCREWED PIPE SHALL BE 125 LB. CAST IRON, GRINNELL, WALWORTH, OR APPROVED EQUAL. ALL REDUCTIONS IN STEAM MAIN SIZES SHALL BE MADE WITH ECCENTRIC FITTINGS.

VALVES

VALVES SHALL BE JENKIN BROTHERS FOR 125 PSI. STEAM SERVICE. DRAFFOFF COCKS SHALL BE PROVIDED ON LOW POINTS OF SYSTEMS WHETHER INDICATED ON THE PLANS OR NOT. VALVES SHALL BE INSTALLED IN HORIZONTAL PIPING. VALVES 2-1/2" AND LARGER SHALL BE FLANGED IRON BODY BRONZE MOUNTED AND VALVES 2" AND SMALLER SHALL HAVE SCREWED ENDS AND SHALL BE BRASS.

TRAPS

ALL LOW PRESSURE TRAPS SHALL BE BARNES AND JONES, SARCO, DUNHAM OR APPROVED EQUAL. ALL TRAPS SHALL HAVE STAINLESS STEEL VALVE PLUGS AND SEATS AND FLOATS SHALL BE COPPER PLATED STEEL. FLOAT AND THERMOSTATIC TRAPS SHALL HAVE STRAINER AND DIRT POCKET.

STRAINERS

FURNISH AND INSTALL BARNES AND JONES, SARCO, DUNHAM OR APPROVED EQUAL. STRAINERS BEFORE ALL FLOAT AND THERMOSTATIC TRAPS. STRAINER BASKETS SHALL BE STAINLESS STEEL.

STEAM COIL

STEAM COIL SHALL BE TRANE, AMERICAN BLOWER, WESTINGHOUSE OR EQUAL COPPER TUBE AND ALUMINUM PLATE FIN COIL WITH STEAM DISTRIBUTING TUBES AND STEAM AND RETURN CONNECTIONS AT SAME END. COIL TO BE SIMILAR AND EQUAL TO TRANE TYPE T, 1 ROW, SERIES 11 FIN WITH CAPACITY OF 300 CFM FROM 80°F TO 90°F AND 0.1 INCH U.G. MAXIMUM AIR FRICTION. COIL SIZE 24" x 12".

STEAM HUMIDIFIER

PROVIDE AN ARMSTRONG ENR-320-M STEAM HUMIDIFIER WITH STEAM JACKETED DISTRIBUTION MANIFOLD OF SUFFICIENT LENGTH FOR DUCT UNIT SHALL HAVE A 7/32 INCH ORIFICE WITH A CAPACITY OF 25 POUNDS PER HOUR AT 4 PSIG STEAM. OPERATOR SHALL BE A NORMALLY CLOSED HONEYWELL ELECTRONIC MOTOR OPERATOR COMPATIBLE WITH THE ELECTRONIC CONTROL SYSTEM SPECIFIED.

VENTILATION FAN

PROVIDE A TRANE 10FC-80 UTILITY SET OR EQUAL WITH CAPACITY OF 300 CFM AT 3/4 INCH STATIC PRESSURE. MAXIMUM BRAKE HP = 0.23, 1/3 HP MOTOR FOR 120 VOLTS SINGLE PHASE CURRENT. FAN TO HAVE V-BELT DRIVE AND BELT GUARD. PROVIDE RUBBER-IN-SHEAR VIBRATION ELIMINATORS. PROVIDE THERMAL SWITCH FOR MOTOR.

FILTER

PROVIDE A THROW AWAY TYPE AAF 5700 INDUSTRIAL TYPE FILTER WITH FIELD FABRICATED SLIDE TYPE FILTER RACK WITH ACCESS FROM BOTTOM OF DUCT.

DUCTWORK

ALL DUCT SHALL BE OF GALVANIZED SHEET STEEL. THE GAUGE AND CONSTRUCTION SHALL CONFORM WITH THE LATEST RECOMMENDATIONS OF THE ASHRAE GUIDE. ALL ELBOWS SHALL HAVE AN INSIDE RADIUS OF THREE QUARTERS THE WIDTH OF THE DUCT AND TRANSITIONS SHALL BE MADE WITH SIDES SLOPING AT NOT MORE THAN 15 DEGREES TO THE LONGITUDINAL AXIS. DUCT SHALL BE MADE AS AIR TIGHT AS POSSIBLE AND SEALED WITH PERMACEL NO. P-670 FOUR INCH WIDE TAPE. INSTALL SPLITTER DAMPERS OR BUTTERFLY DAMPERS TO BALANCE AIR FLOW. PROVIDE FLEXIBLE CONNECTION USING SIX INCH WIDE VEIT GLAS AT SUCTION AND DISCHARGE OF THE FAN.

REGISTERS

PROVIDE TUTTLE AND BAILEY T88 RETURN REGISTERS AND T557 SUPPLY REGISTERS AS SHOWN.

COVERING

ALL COVERING SHALL CONFORM TO THE CODE OF WORKMANSHIP OF THE INTERNATIONAL ASSOCIATION OF HEAT AND FROST INSULATORS AND ASBESTOS WORKERS WHERE APPLICABLE. COVER NEW STEAM AND RETURN PIPING WITH 1 INCH THICK FIBERGLASS SECTIONAL COVERING. COVER FITTINGS IN THESE LINES WITH TWO COATS OF ASBESTOS CEMENT. COVERING SHALL HAVE PASTED AND BANNED GLASS CLOTH JACKET.

ALL ASBESTOS CEMENT SHALL BE OF THE NON-CHECKING TYPE AND THE SECOND COAT SHALL BE TROWELED TO A SMOOTH HARD FINISH AND SHALL BE COVERED WITH GLASS CLOTH PASTED ON.

TEMPERATURE AND HUMIDITY CONTROLS

PROVIDE HONEYWELL INCORPORATED AUTOMATIC TEMPERATURE AND HUMIDITY CONTROLS AS DESCRIBED HEREIN TOGETHER WITH ALL WIRING. CONTROLS SHALL BE INSTALLED UNDER THE SUPERVISION OF HONEYWELL. FURNISH CONTROL DRAWINGS INCLUDING LADDER WIRING DIAGRAMS AND SEQUENCE OF OPERATION INSTRUCTIONS.

FURNISH ALL CONTROLS INCLUDING RELAYS, SWITCHES, LINKAGES, ELECTRONIC CABLE AND TRANSFORMERS AS REQUIRED TO OBTAIN THE FOLLOWING CONTROL SEQUENCES:

- PROVIDE A NORMALLY CLOSED RELAY WIRED TO THE LOAD SIDE OF THE ORGAN BLOWER STARTER AND A TIME DELAY RELAY, ADJUSTABLE FROM 15 MINUTES TO TWO HOURS, TO START THE SUPPLY AIR FAN AFTER A TIME DELAY WHEN THE ORGAN BLOWER IS TURNED OFF. PROVIDE A DPST RELAY TO ALLOW THE STEAM COIL VALVE AND THE HUMIDIFIER CONTROL VALVE TO OPEN ONLY IF THE SUPPLY AIR FAN IS RUNNING.
- PROVIDE A HONEYWELL HUMIDISTAT WITH RANGE OF AT LEAST 20% TO 50% RELATIVE HUMIDITY TO CONTROL THE NORMALLY CLOSED MODULATING STEAM VALVE ON THE HUMIDIFIER. PROVIDE A SECOND HUMIDISTAT SET AT 45% RELATIVE HUMIDITY TO CLOSE THE STEAM VALVE IF THE HUMIDITY RISES TO OR ABOVE THIS LEVEL. BOTH HUMIDISTATS SHALL BE LOCATED IN THE RETURN AIR DUCT FROM THE ORGAN CHAMBER.
- PROVIDE TWO L7033A ELECTRONIC SENSORS LOCATED IN THE RETURN AIR AND SUPPLY AIR AND A NORMALLY CLOSED ELECTRONIC STEAM VALVE TO CONTROL THE TEMPERATURE IN THE ORGAN CHAMBER AS SENSED IN THE RETURN DUCT AT 65 DEGREES F. PROVIDE A REMOTE MOUNTED POTENTIOMETER FOR RESET OF THE TEMPERATURE.

ELECTRIC WORK

PROVIDE ALL ELECTRIC WORK SHOWN, SPECIFIED OR REQUIRED. MATERIALS FOR THE WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE, ALL LOCAL CODES AND THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION'S SPECIFICATIONS. MATERIALS SHALL BE THE BEST OF THEIR RESPECTIVE KINDS AND SHALL BEAR THE LABEL OF UNDERWRITERS LABORATORIES.

189416

VENTILATION OF ORGAN		PROJECT NO. 702004
MEAD MEMORIAL CHAPEL MIDDLEBURY COLLEGE MIDDLEBURY, VERMONT		DATE FEB 8 1971
CLEVERDON VARNEY & PIKE CONSULTING ENGINEERS 112 SHAWMUT AVENUE, BOSTON, MASSACHUSETTS 02110		DRAWN SBL JER
		CHECKED JER
		DRAWING NO. HV-1 OF 1