

# **arch 1100 + 1140**

**professor Montgomery**

**autumn 2010**





SUBJECT

# ARCHITECTURAL DRAWING I

## course overview

DATE

AUTUMN 2010

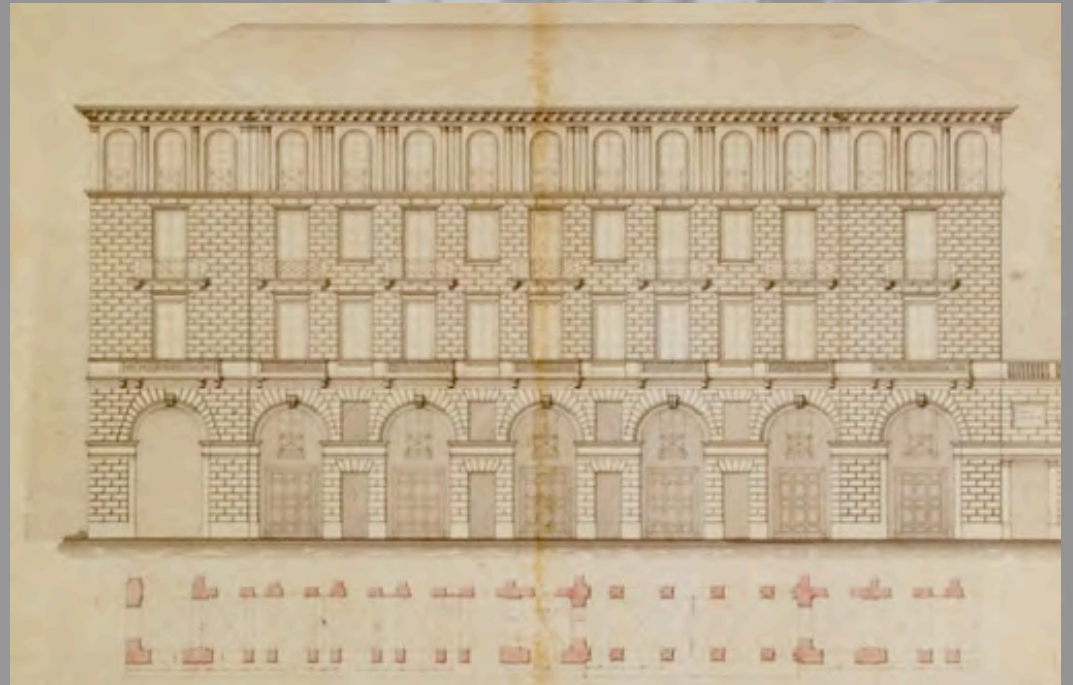
PROFESSOR

MONTGOMERY

# this week

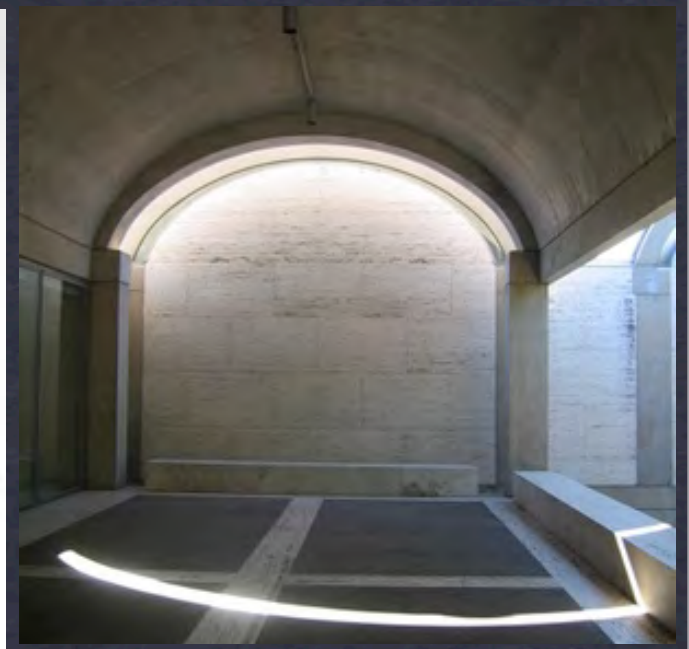
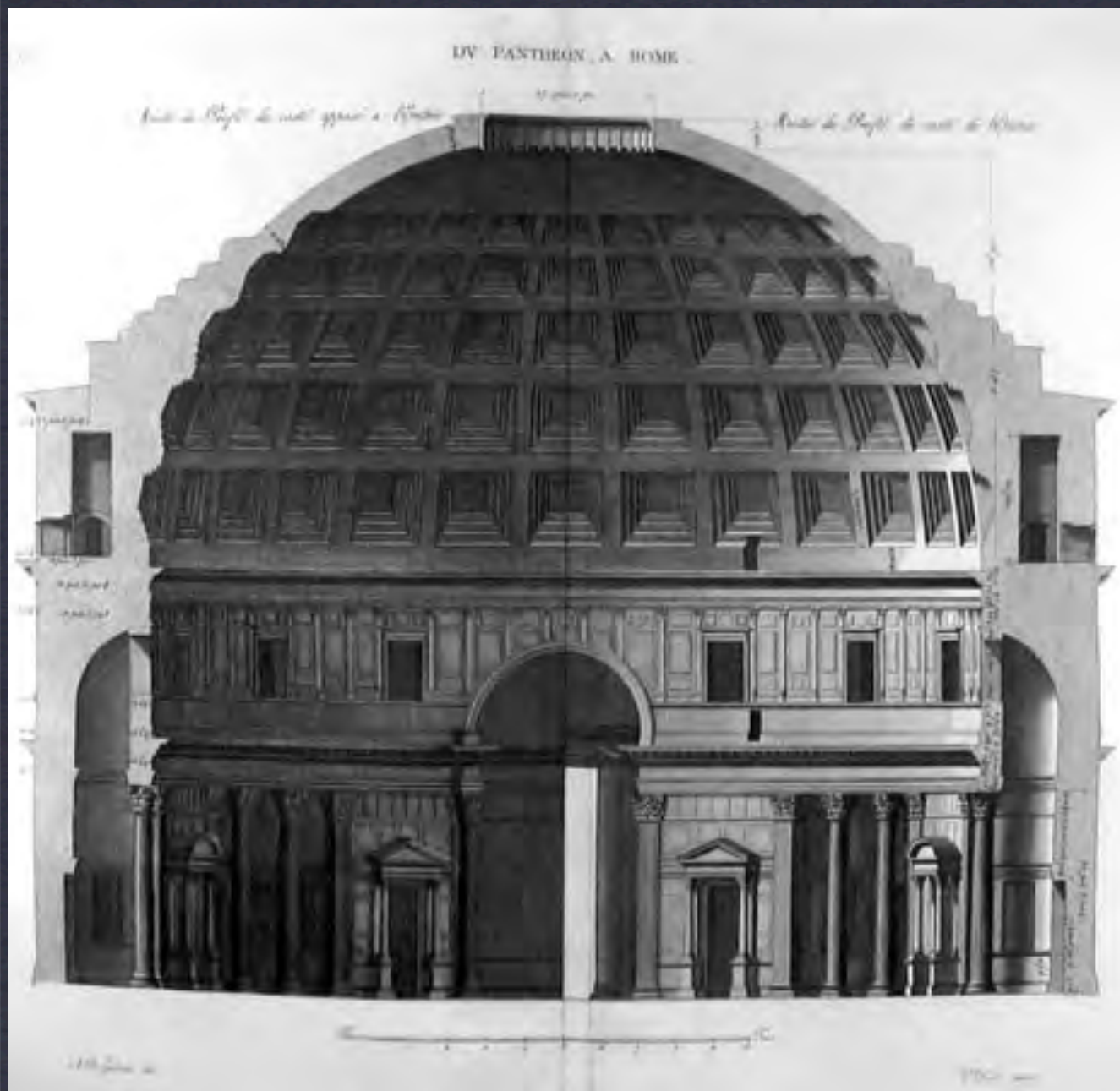
## objective:

understand the role of  
drawing in architectural  
practice



- \* stuff of architecture
- \* the sketchbook
- \* measuring things
- \* design + drawing
- \* communicating design
- \* building + drawing
- \* tools





**STUFF OF ARCHITECTURE**

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**sculpting space**

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# STUFF OF ARCHITECTURE

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# surface and mass

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# STUFF OF ARCHITECTURE

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# public space

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**stage craft**  
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# STUFF OF ARCHITECTURE

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hierarchy

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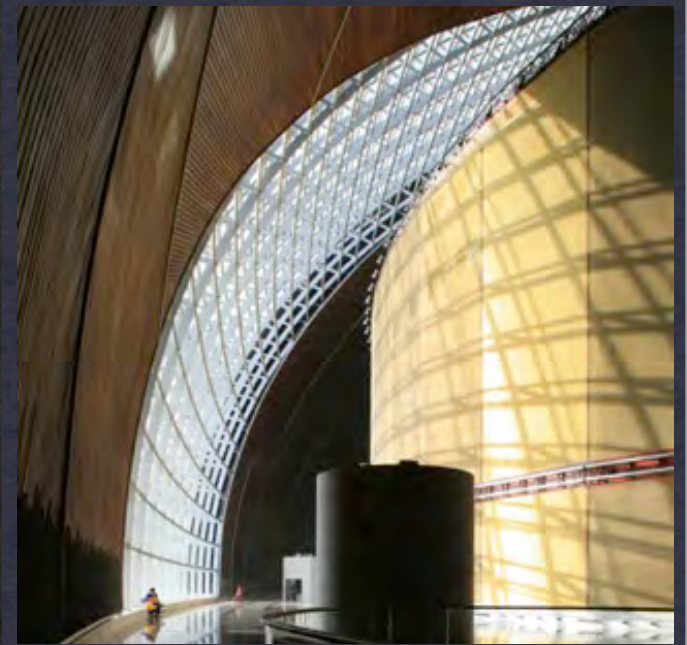
# STUFF OF ARCHITECTURE

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crafted from the land

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# STUFF OF ARCHITECTURE

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# light marrying form

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# STUFF OF ARCHITECTURE

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# environmental intelligence

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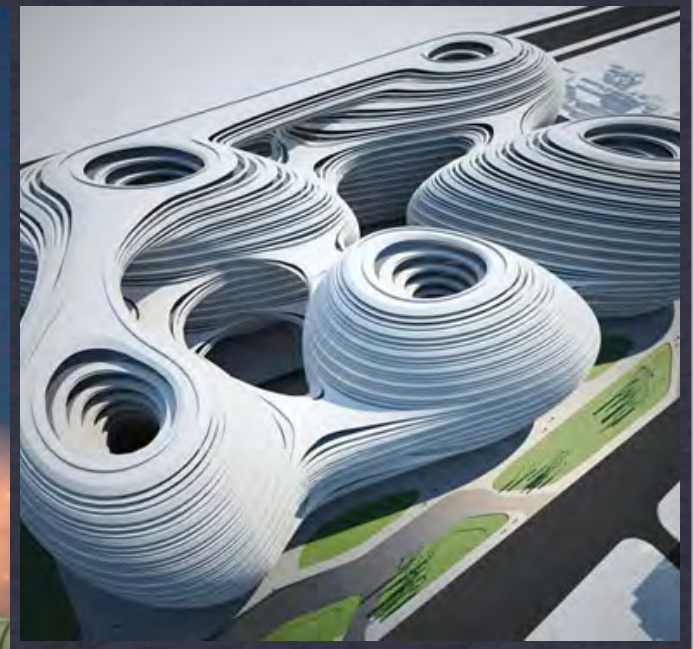
# STUFF OF ARCHITECTURE

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**built to last**

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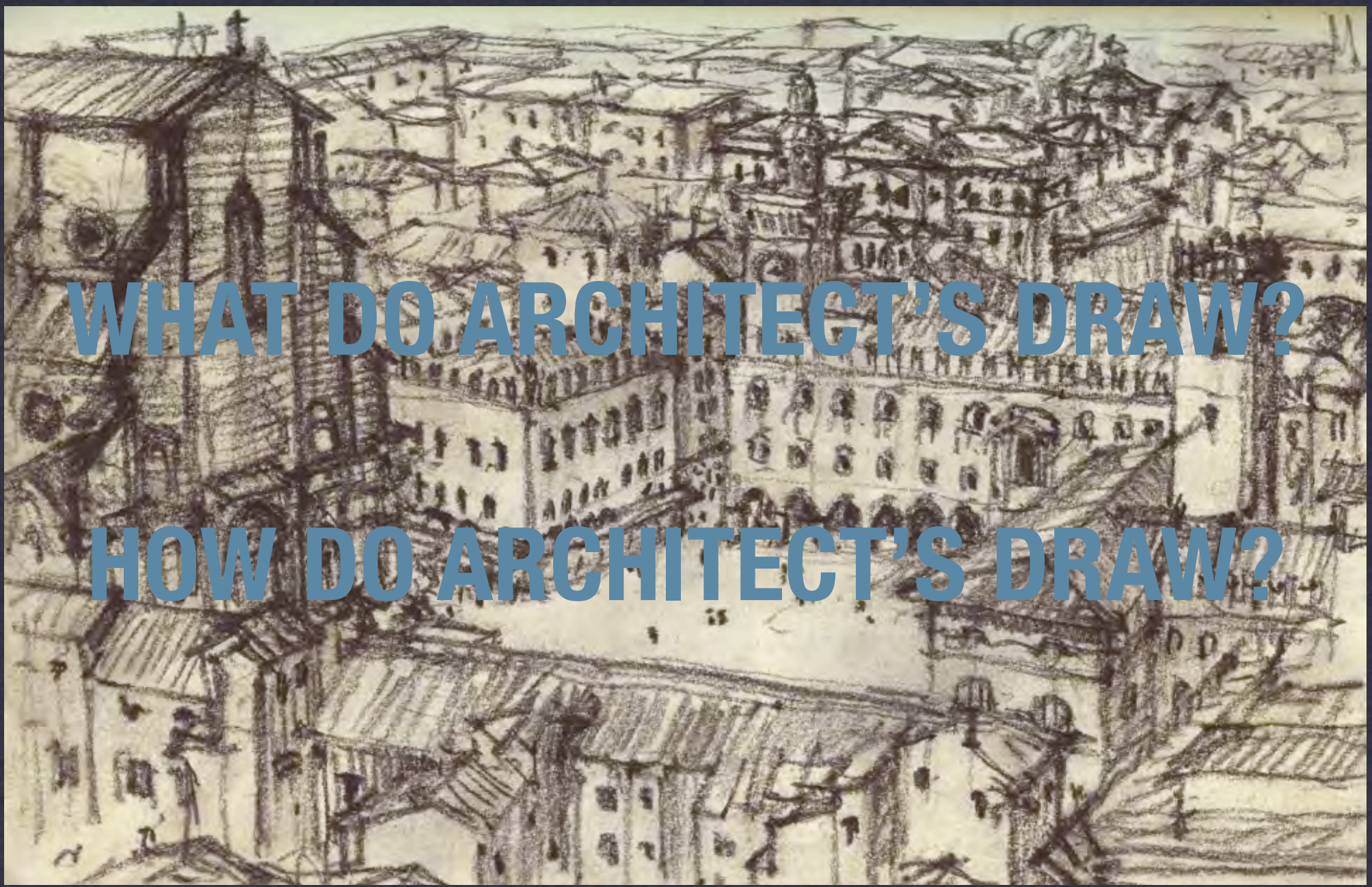
# STUFF OF ARCHITECTURE

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vitality

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**WHAT DO ARCHITECT'S DRAW?**

**HOW DO ARCHITECT'S DRAW?**

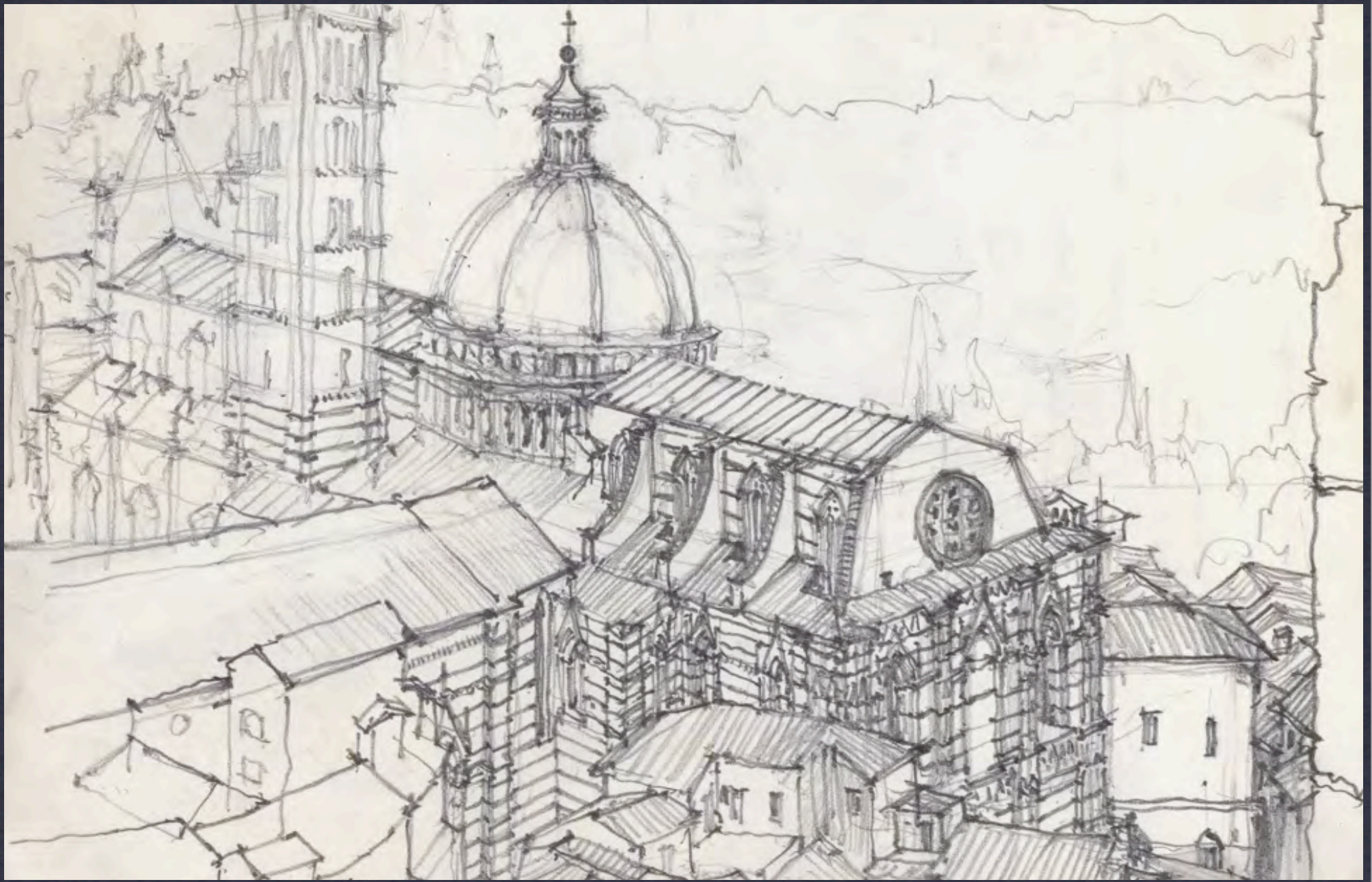
**THE SKETCHBOOK**

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observing the world around us

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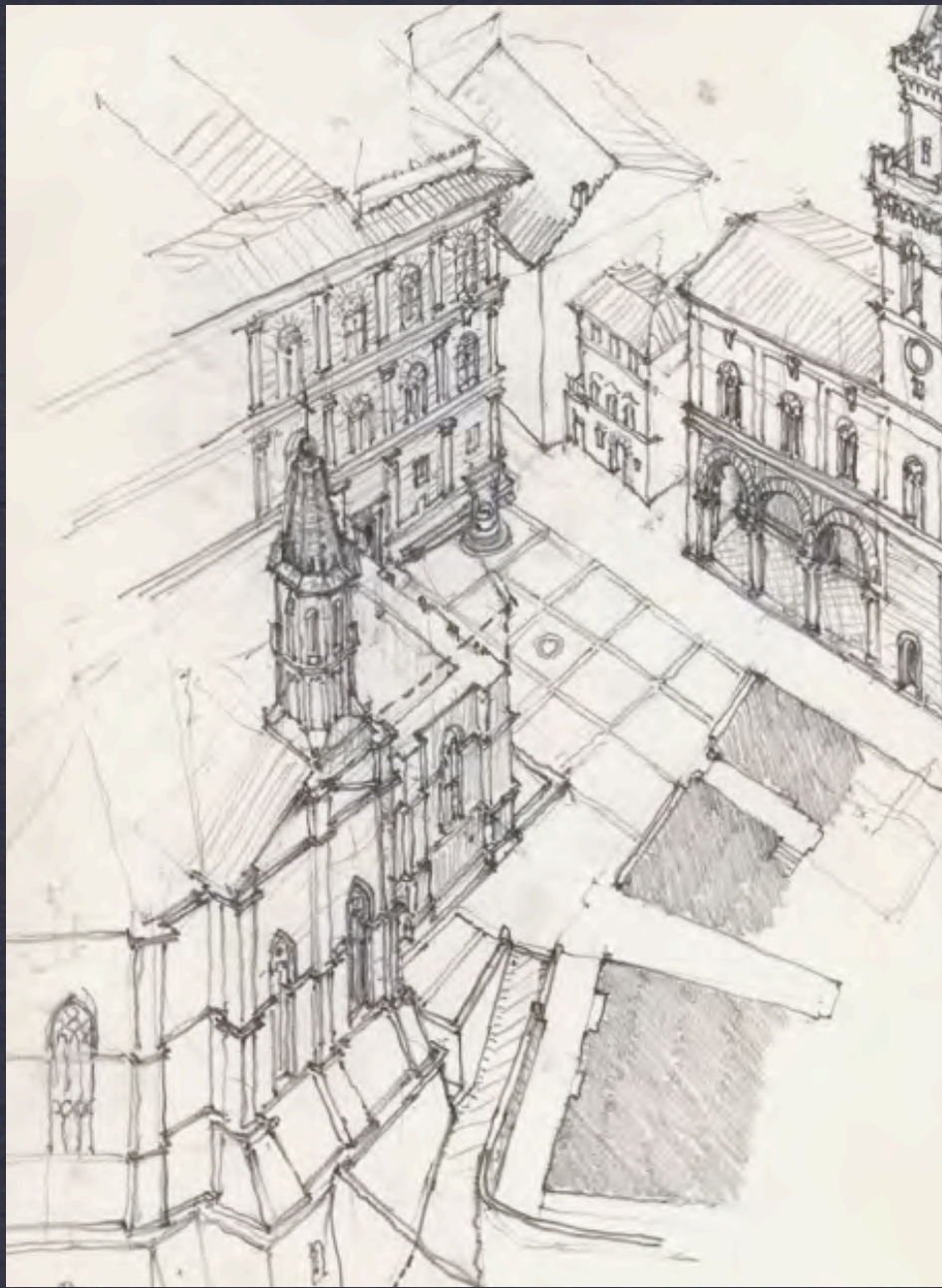
# THE SKETCHBOOK

professor Montgomery

observing the world around us

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# THE SKETCHBOOK

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analyzing the world around us

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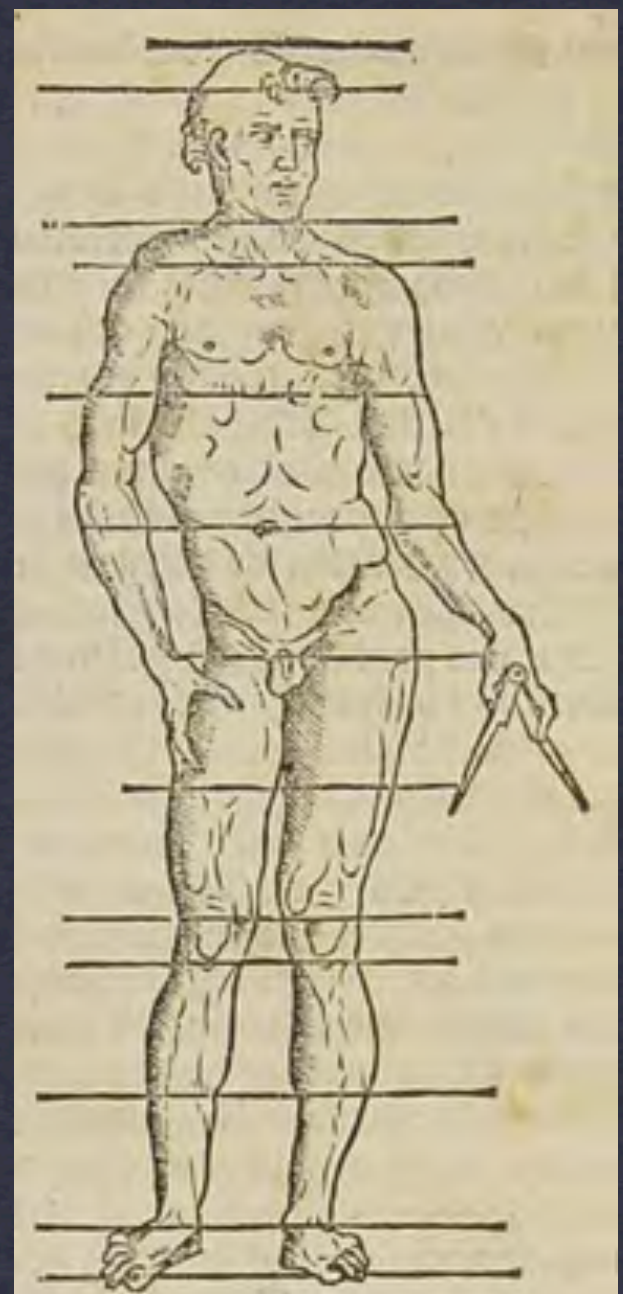
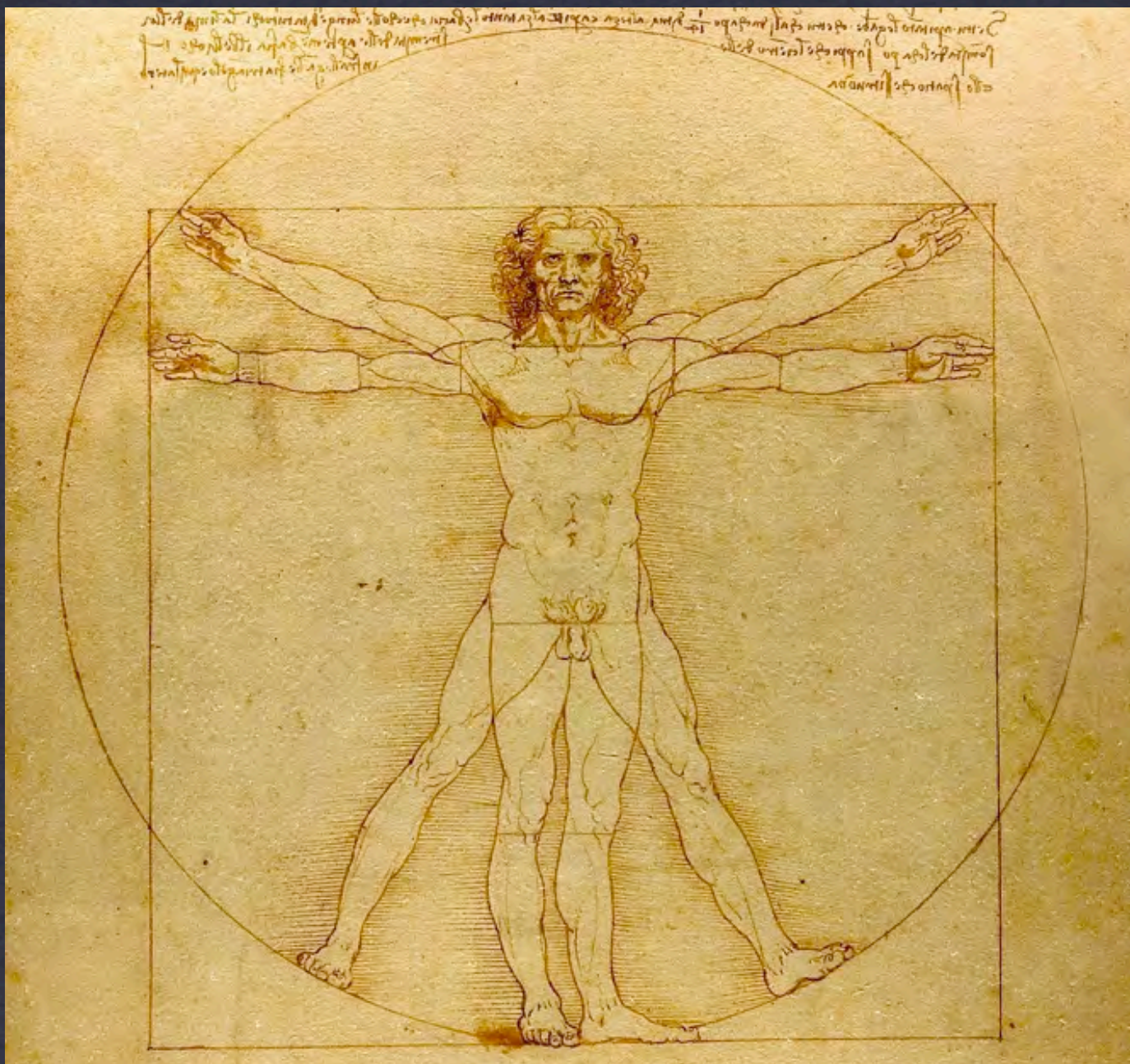
# THE SKETCHBOOK

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observing the world around us

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# MEASURING THINGS

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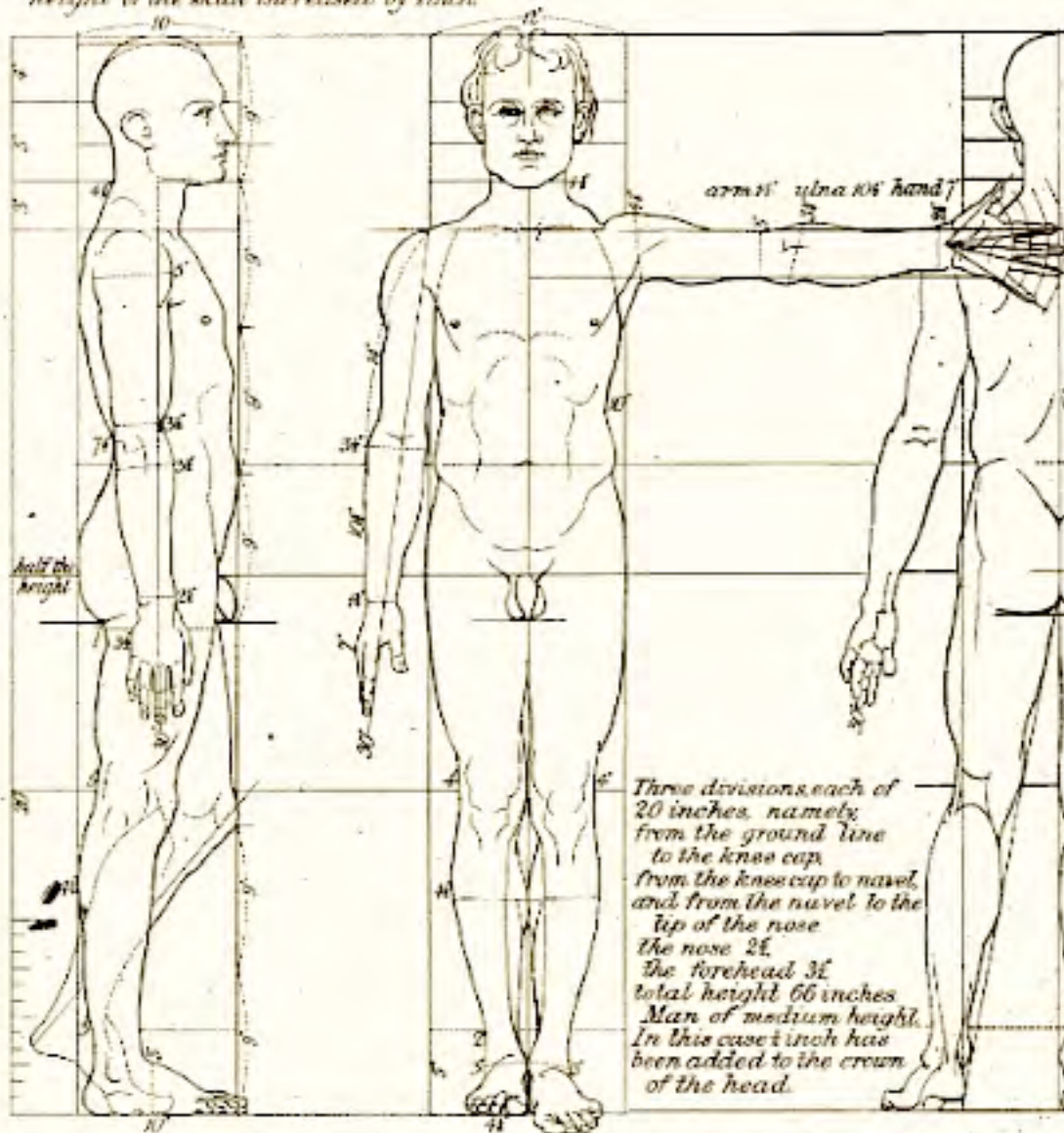
# human dimensions and proportions

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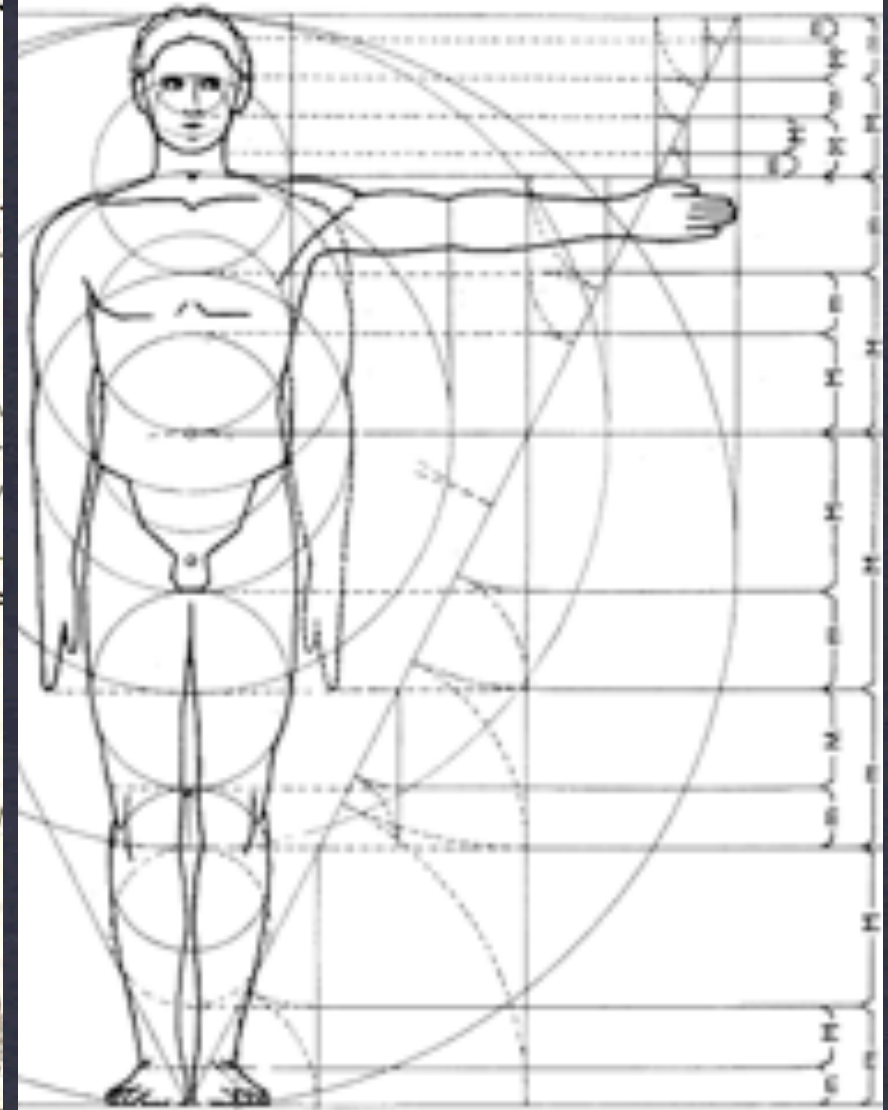


PLATE XIV

Medium height, 5 feet 6 inches  
height of the skull increased by 1 inch.



DER MENSCH  
DAS MASS ALLER DINGE

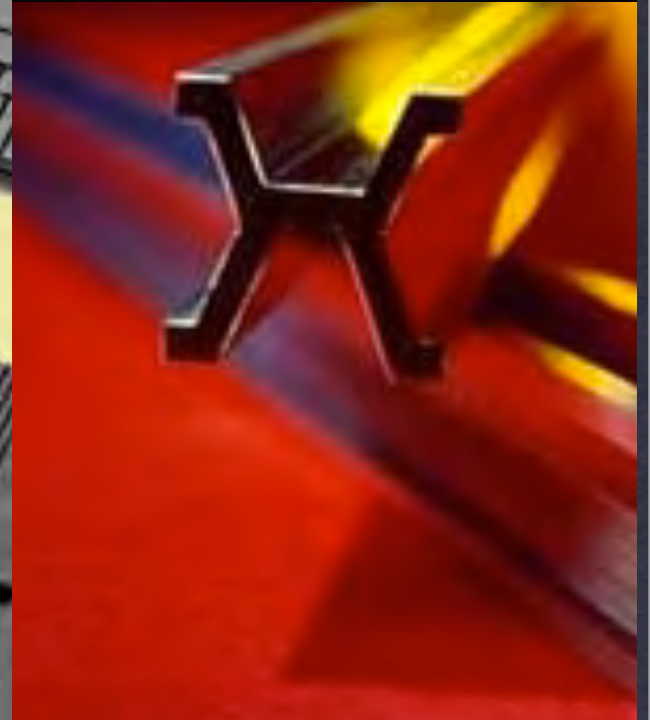
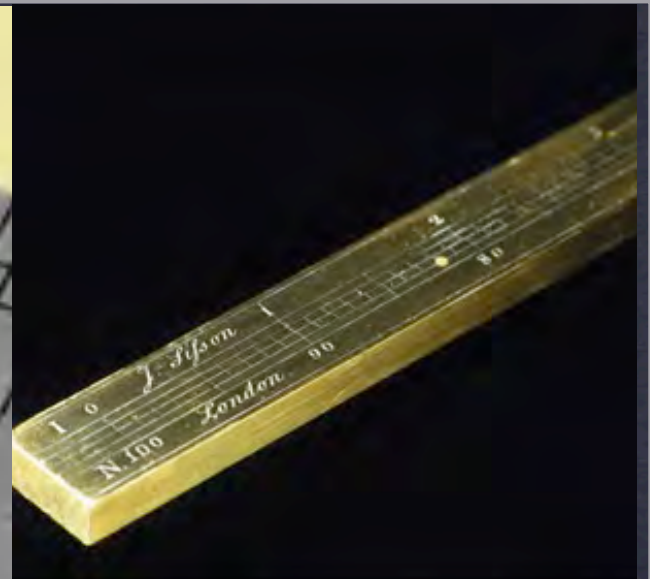
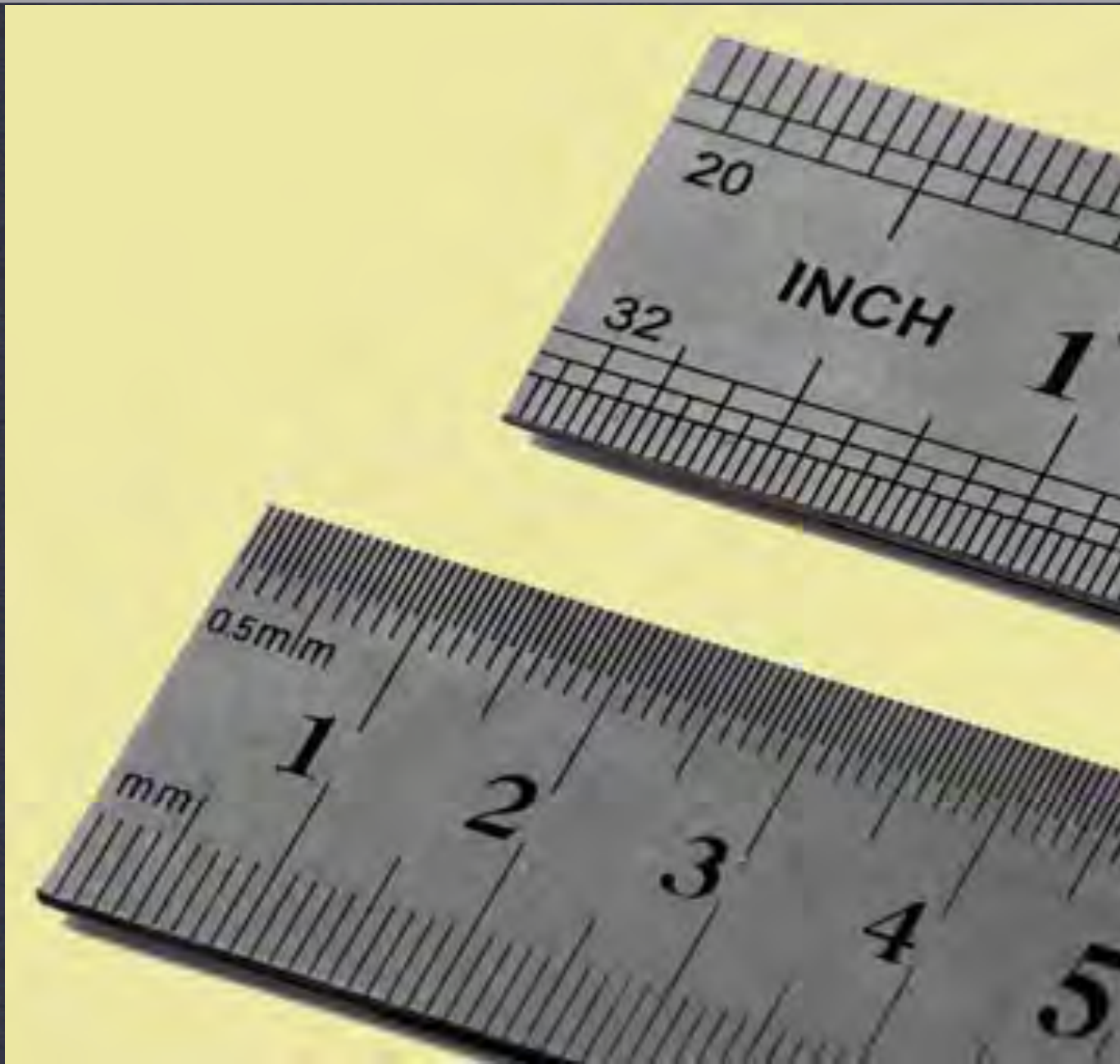


# MEASURING THINGS human dimensions and proportions

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# MEASURING THINGS

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# imperial and metric systems

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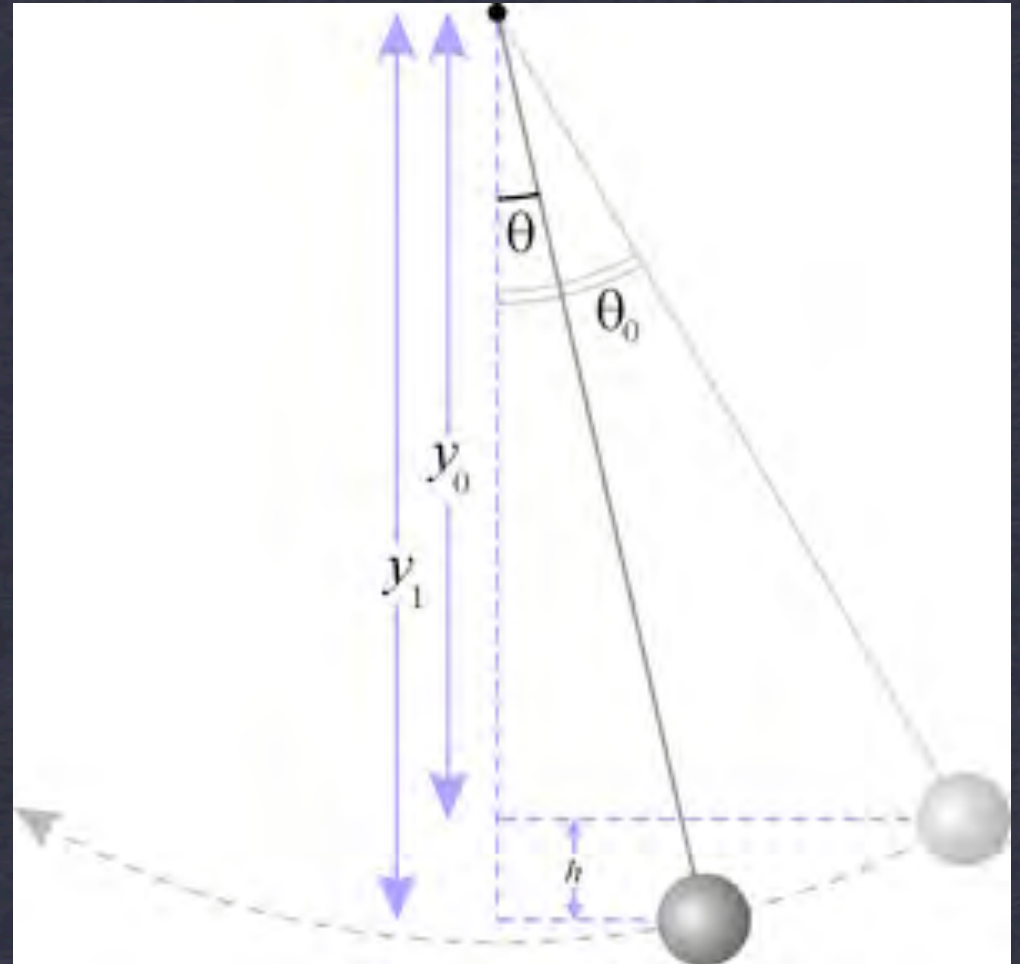
# MEASURING THINGS

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# imperial and metric systems

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Since 1983, one meter is defined as the distance travelled by light in vacuum in  $\frac{1}{299,792,458}$  of a second.

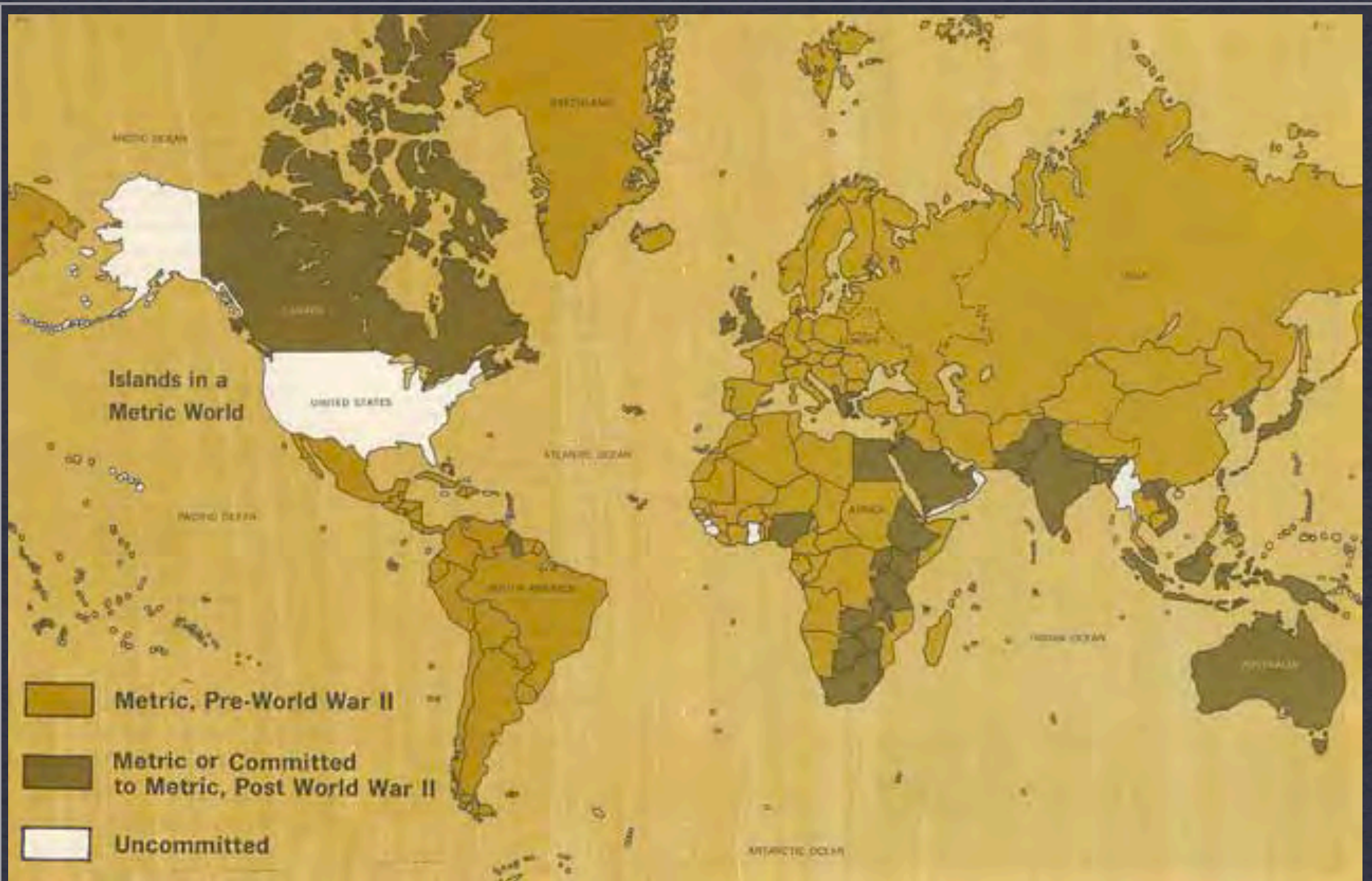
## MEASURING THINGS

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imperial and metric systems

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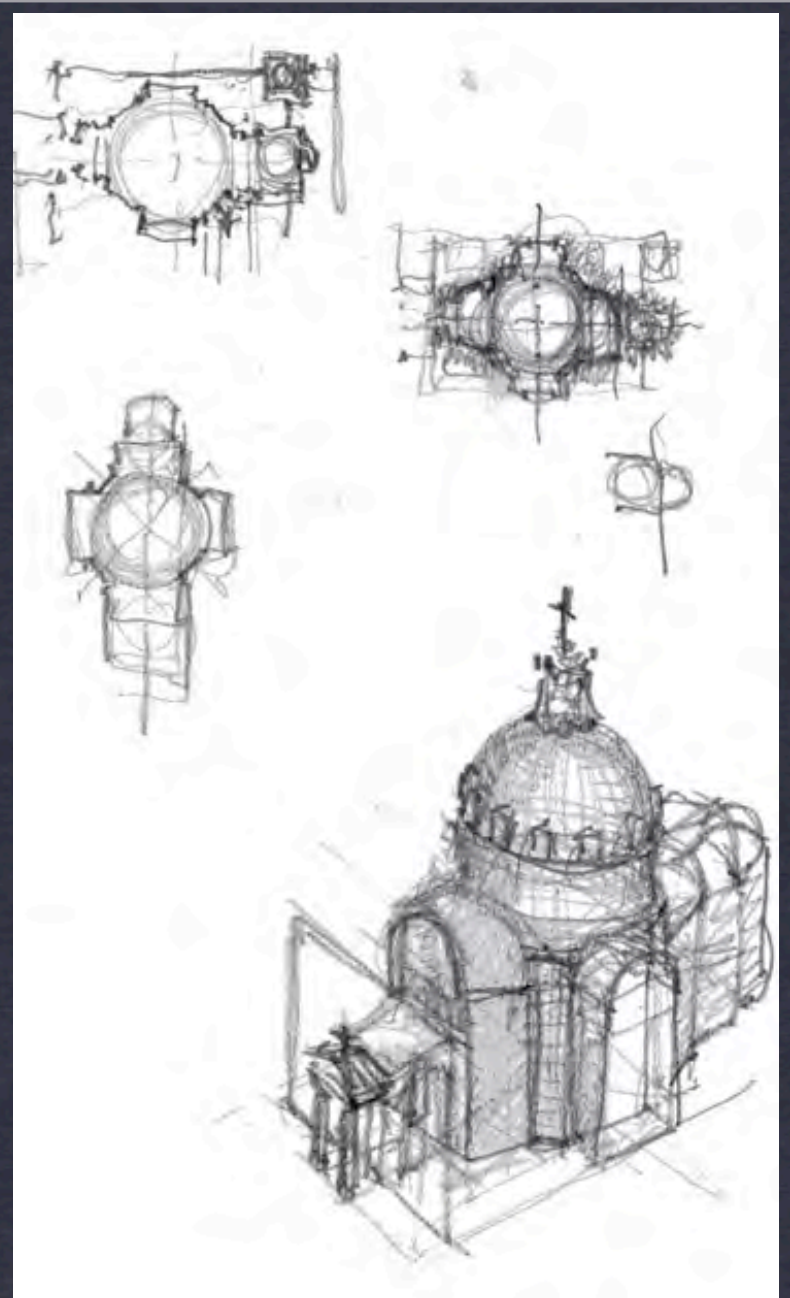
# MEASURING THINGS

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# imperial and metric systems

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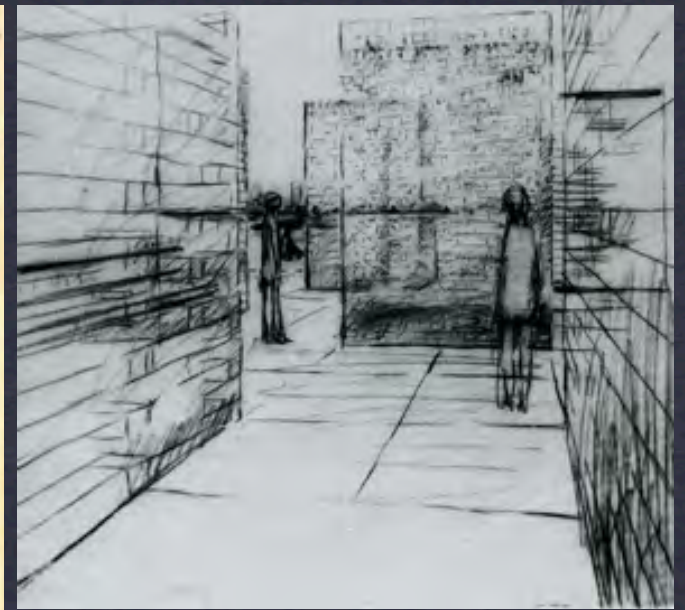
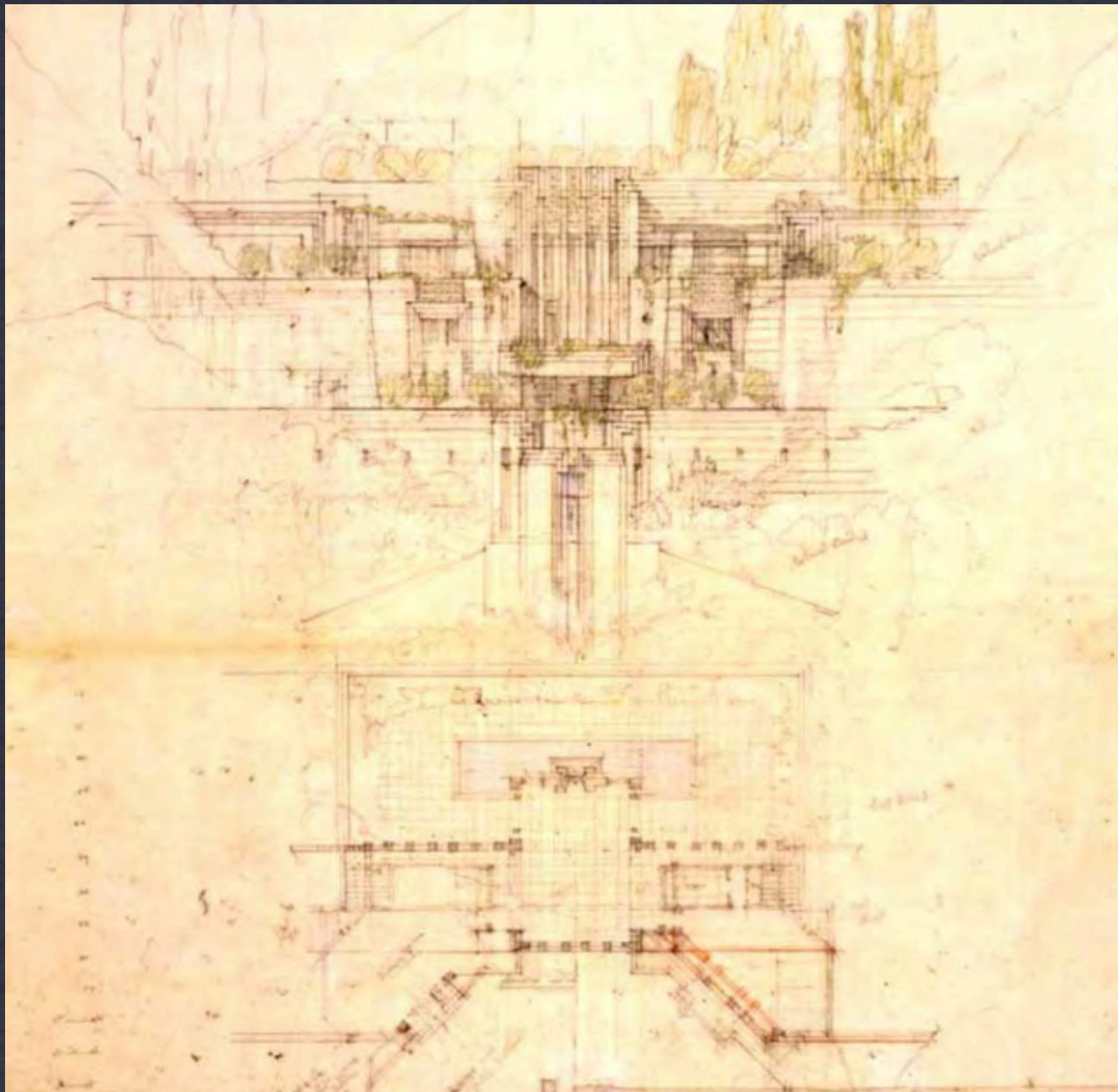
# DESIGN AND DRAWING

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# “idea” sketching - the parti

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# DESIGN AND DRAWING

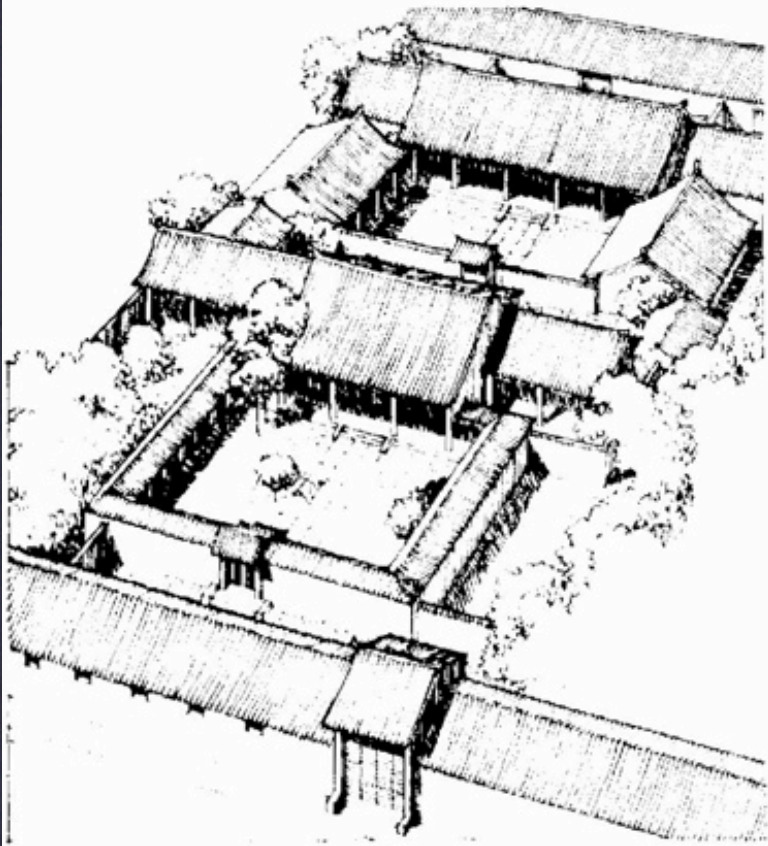
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crafting ideas

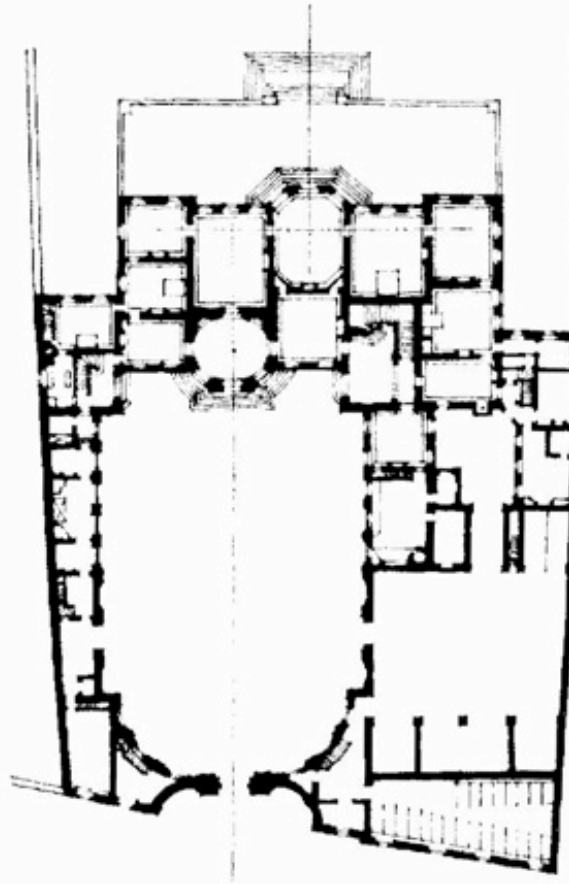
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# AXIS



CHINESE COURTYARD HOUSE: Peking, China



HOTEL DE MAITLAND: Paris, 1721. J. Courtonne



W.A. GLASNER HOUSE: Glenview, Illinois, 1905  
Frank Lloyd Wright

**DESIGN AND DRAWING**

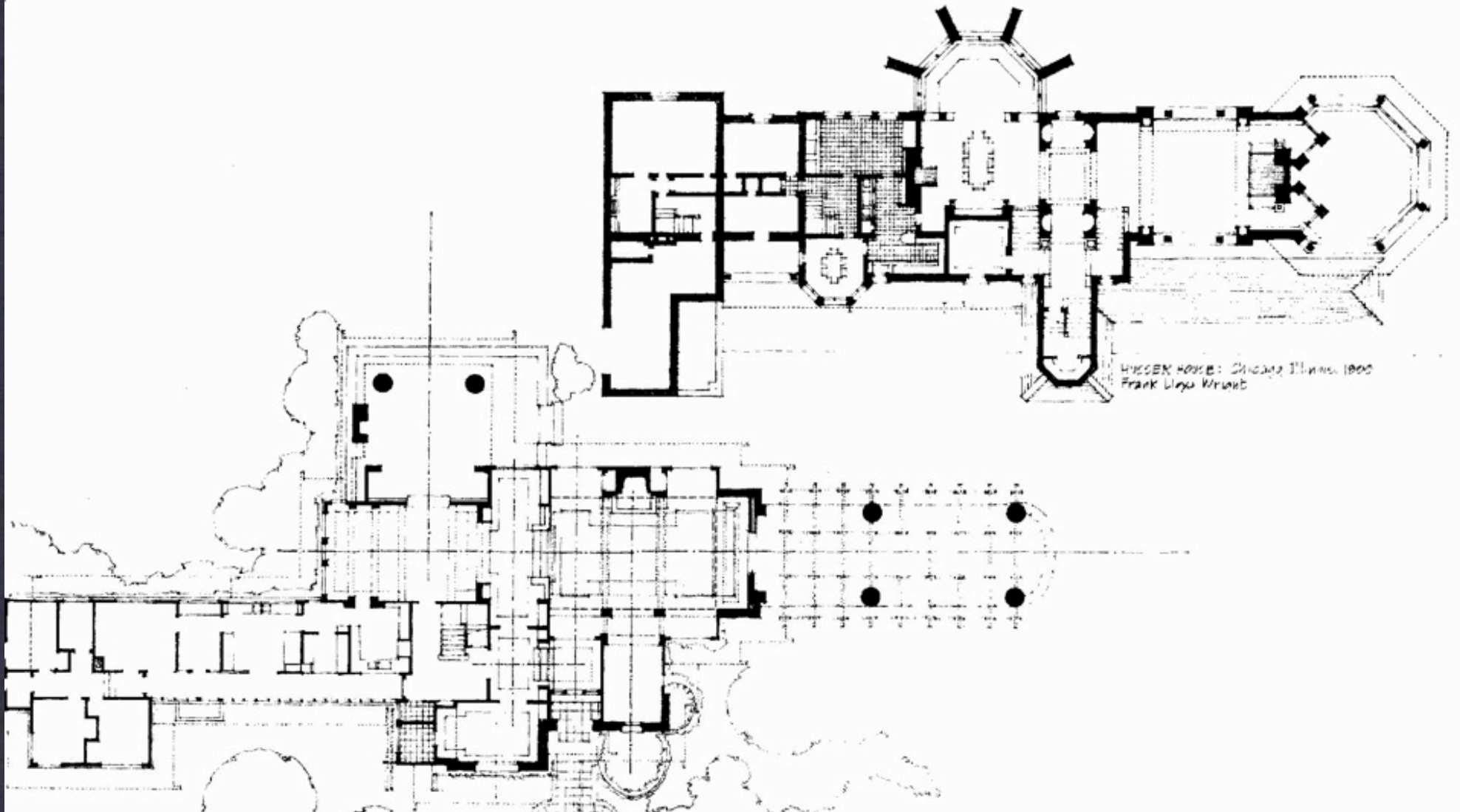
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**plans reveal organization**

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# SYMMETRY



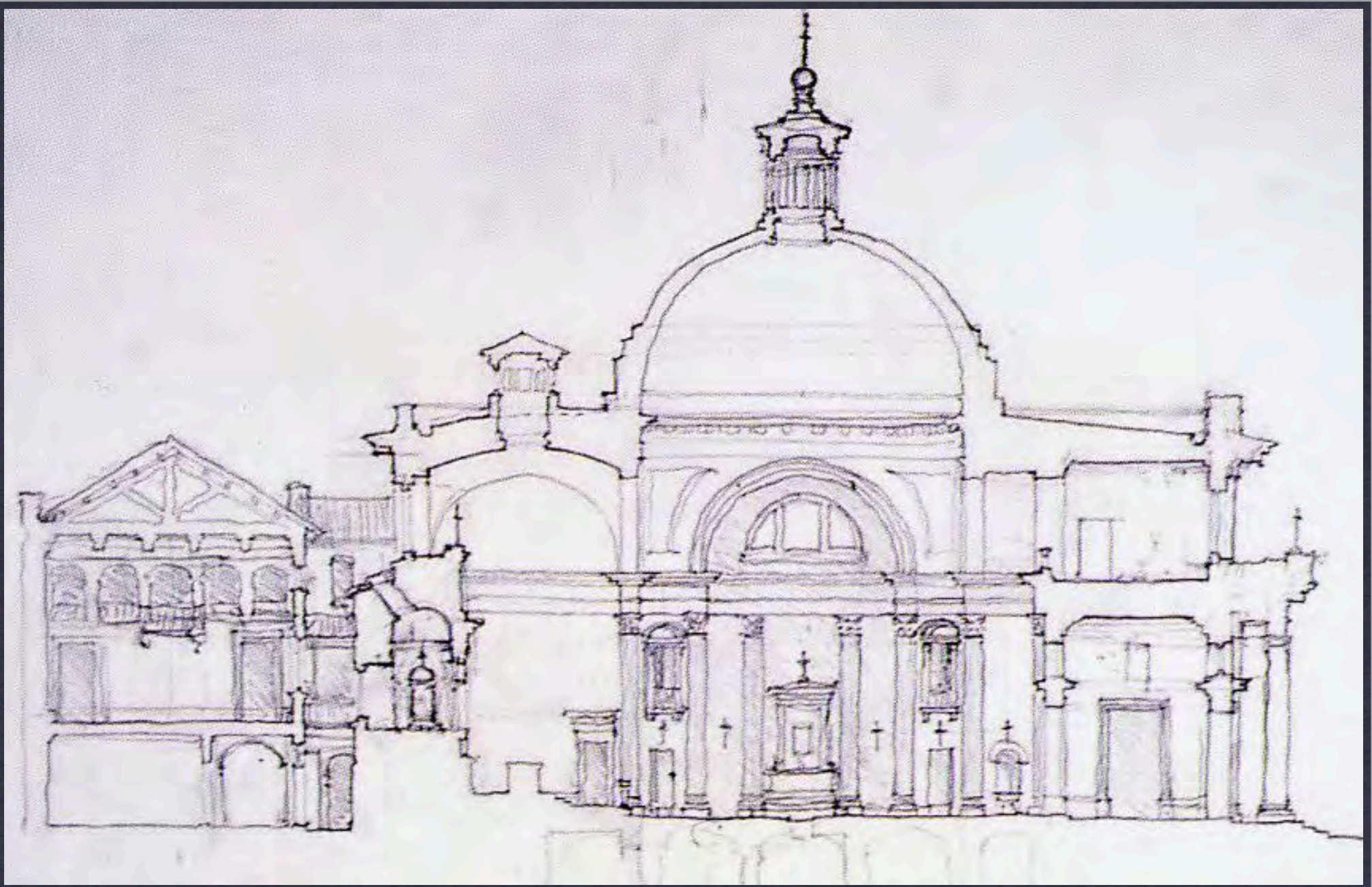
**DESIGN AND DRAWING**

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**plans reveal organization**

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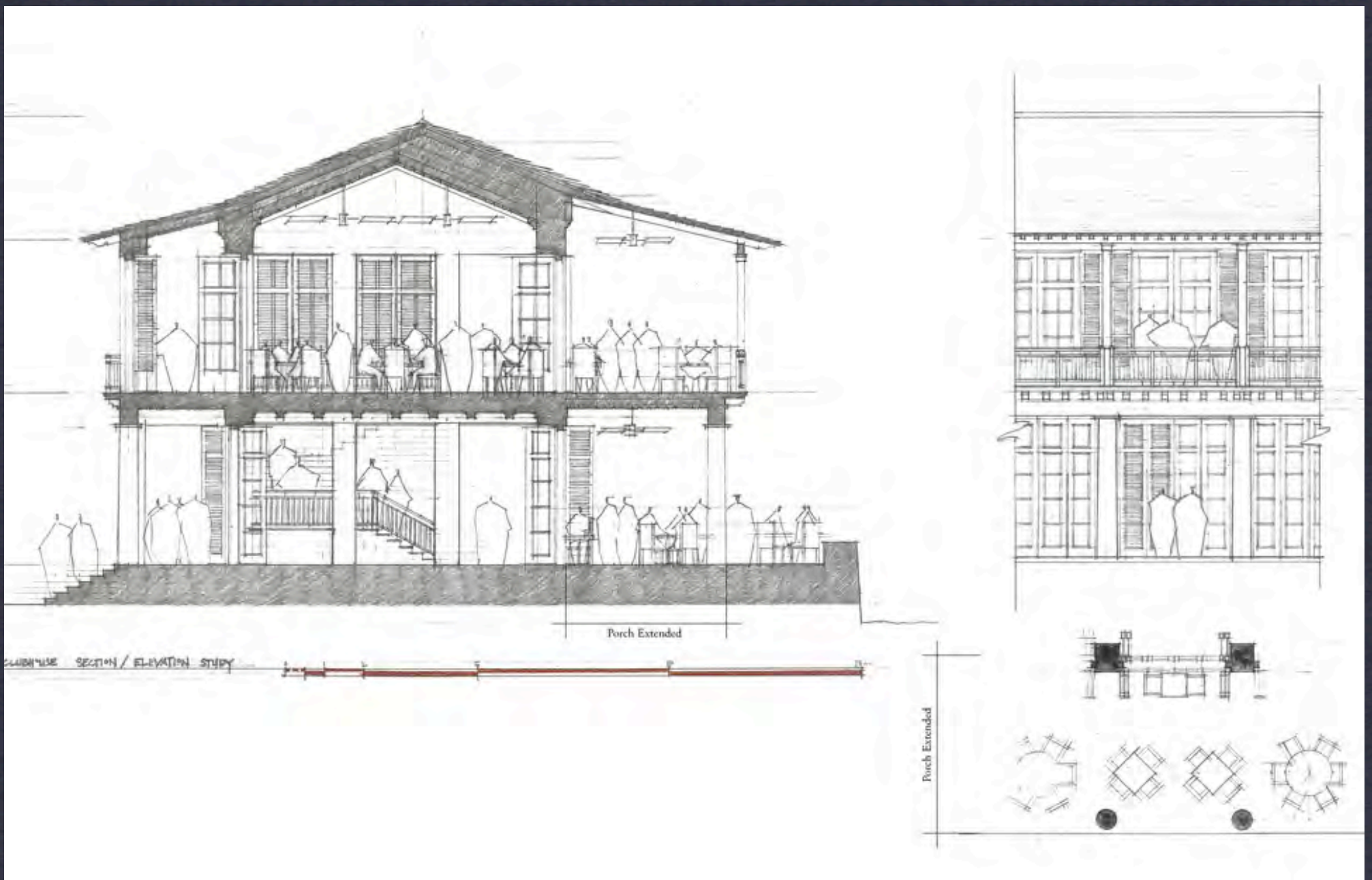
**DESIGN AND DRAWING**

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**sections space structure**

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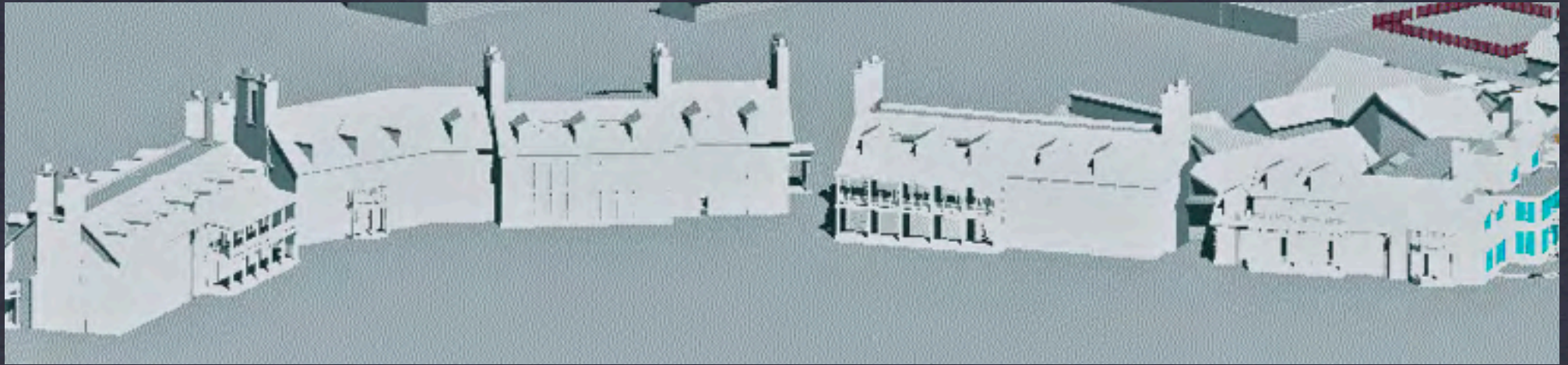
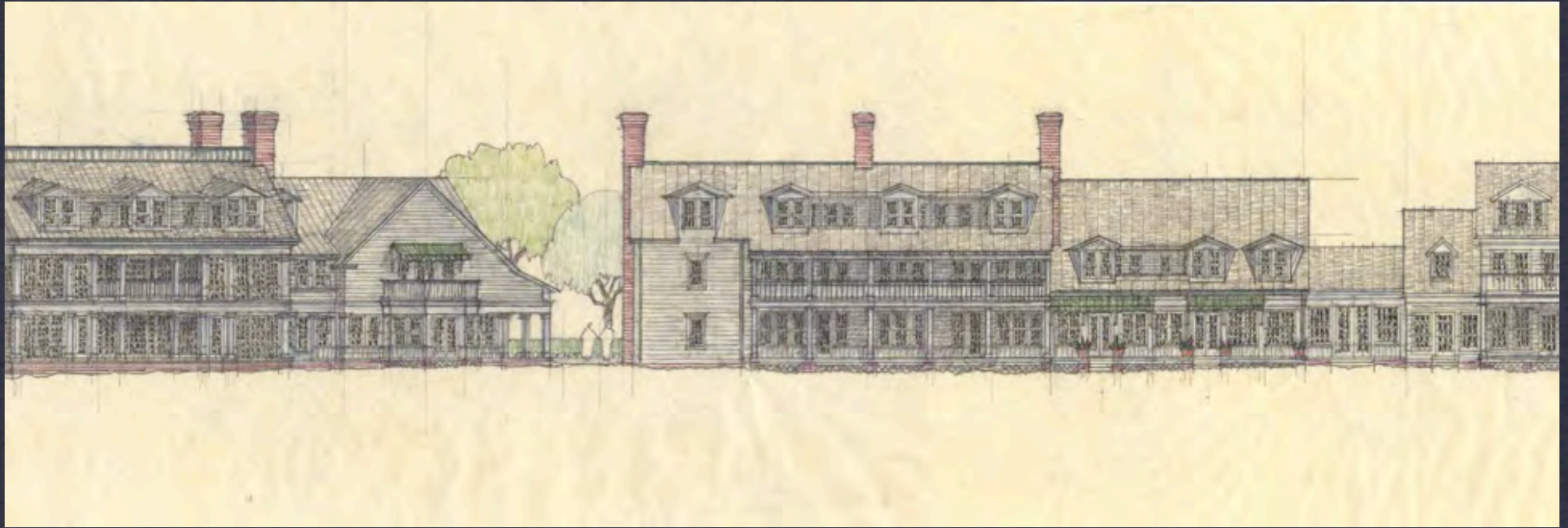
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**sections space structure**

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**DESIGN AND DRAWING**

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**sketch drafting and modeling**

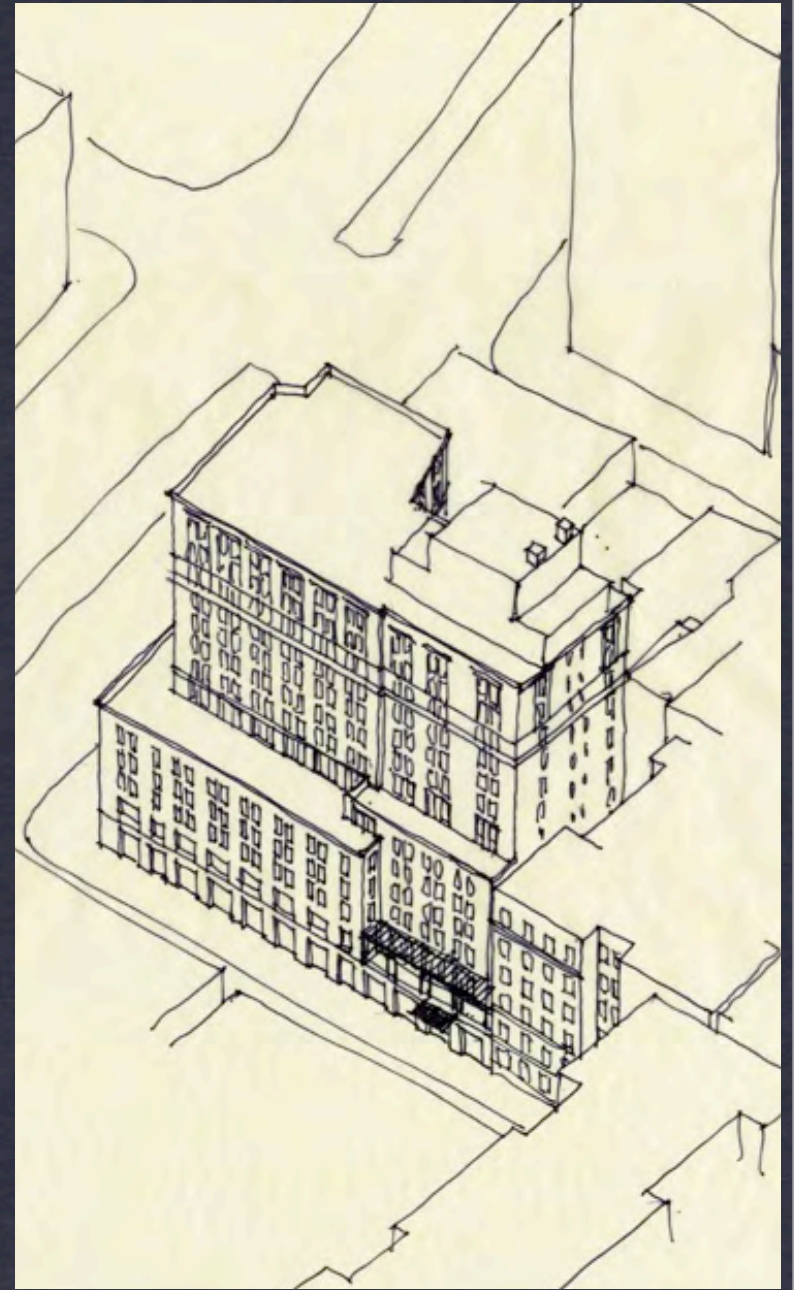
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# DESIGN AND DRAWING

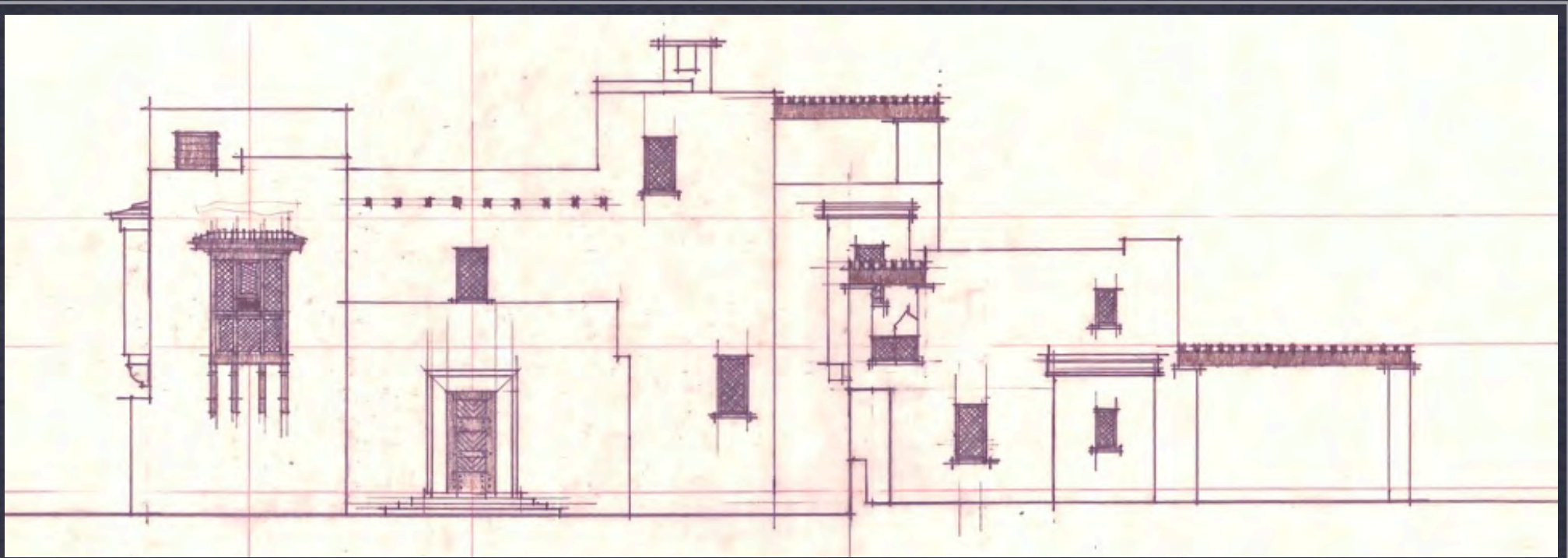
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working in context

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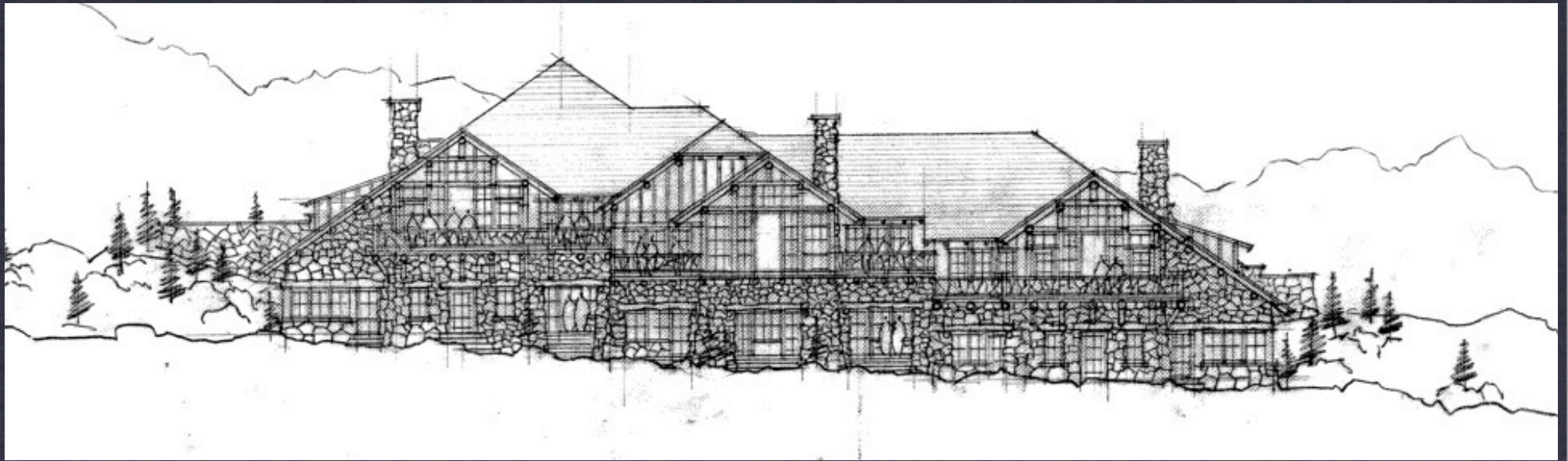
**DESIGN AND DRAWING**

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**drafting and modeling**

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**DESIGN AND DRAWING**

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**site elevations**

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**DESIGN AND DRAWING**

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**perspectives**

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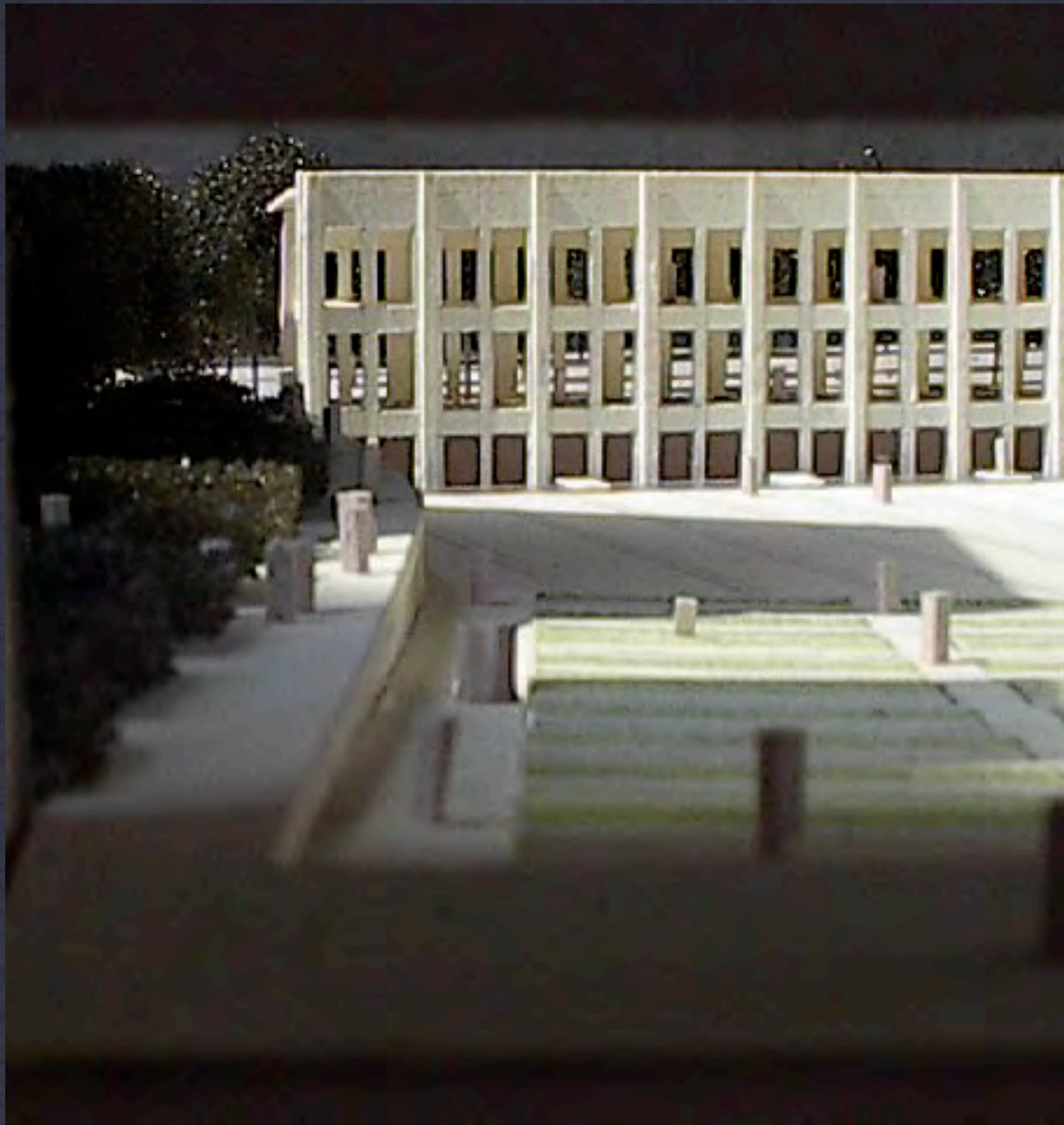
**DESIGN AND DRAWING**

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**site sections**

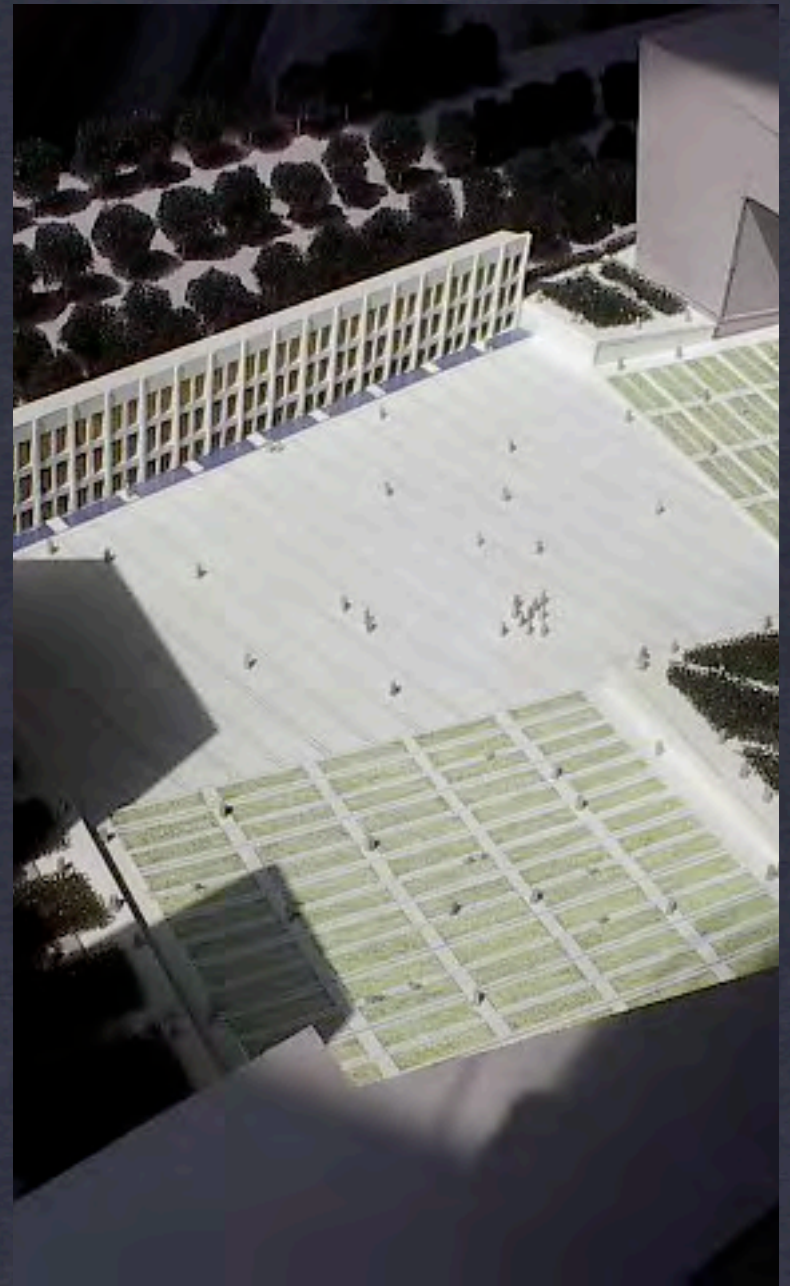
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# DESIGN AND DRAWING

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# modeling for success

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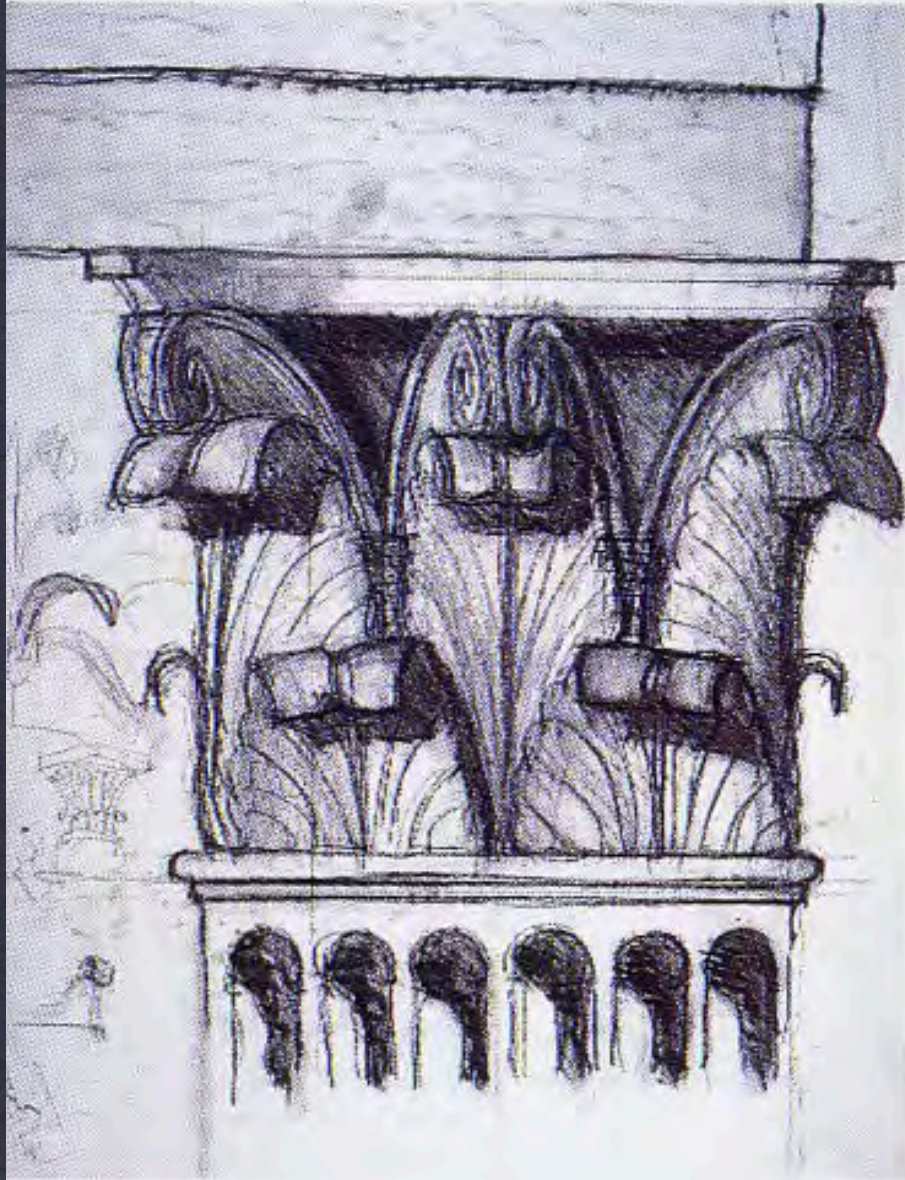
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**modeling for success**

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# DESIGN AND DRAWING

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crafting the details

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**DESIGN AND DRAWING**

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**decisive design**

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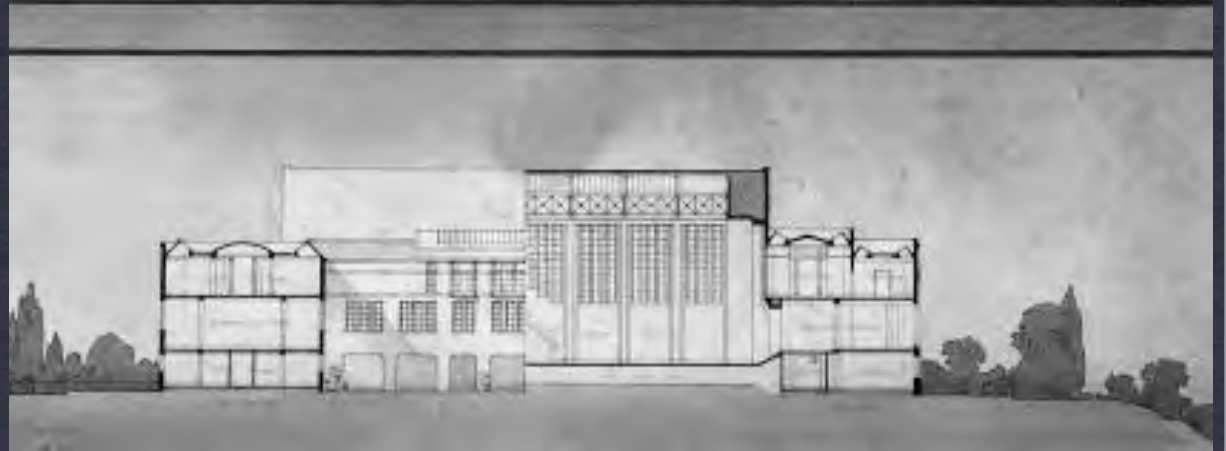
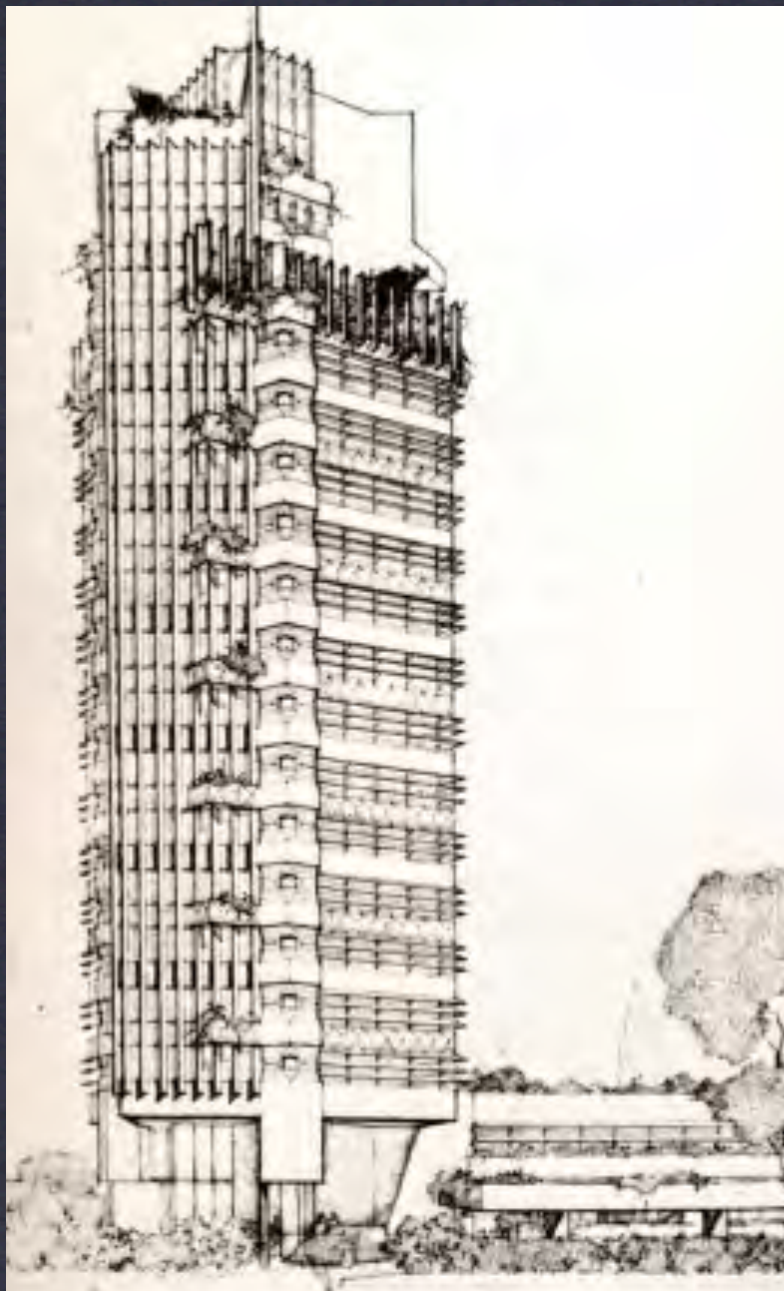
**COMMUNICATING DESIGN**

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**rendering to sell the idea**

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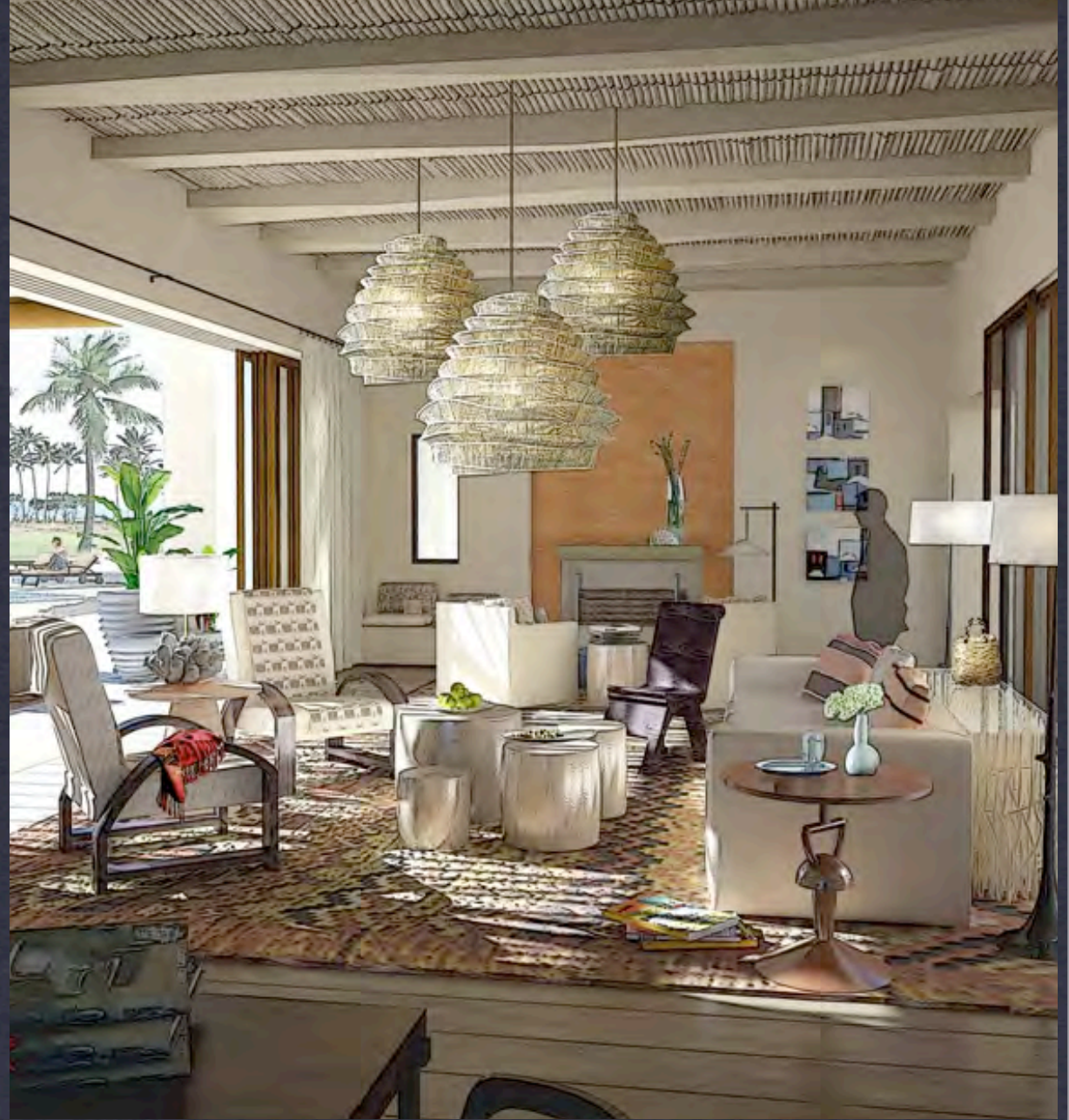
**COMMUNICATING DESIGN**

professor Montgomery

**rendering to sell the idea**

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**COMMUNICATING DESIGN**

professor Montgomery

**rendering to sell the idea**

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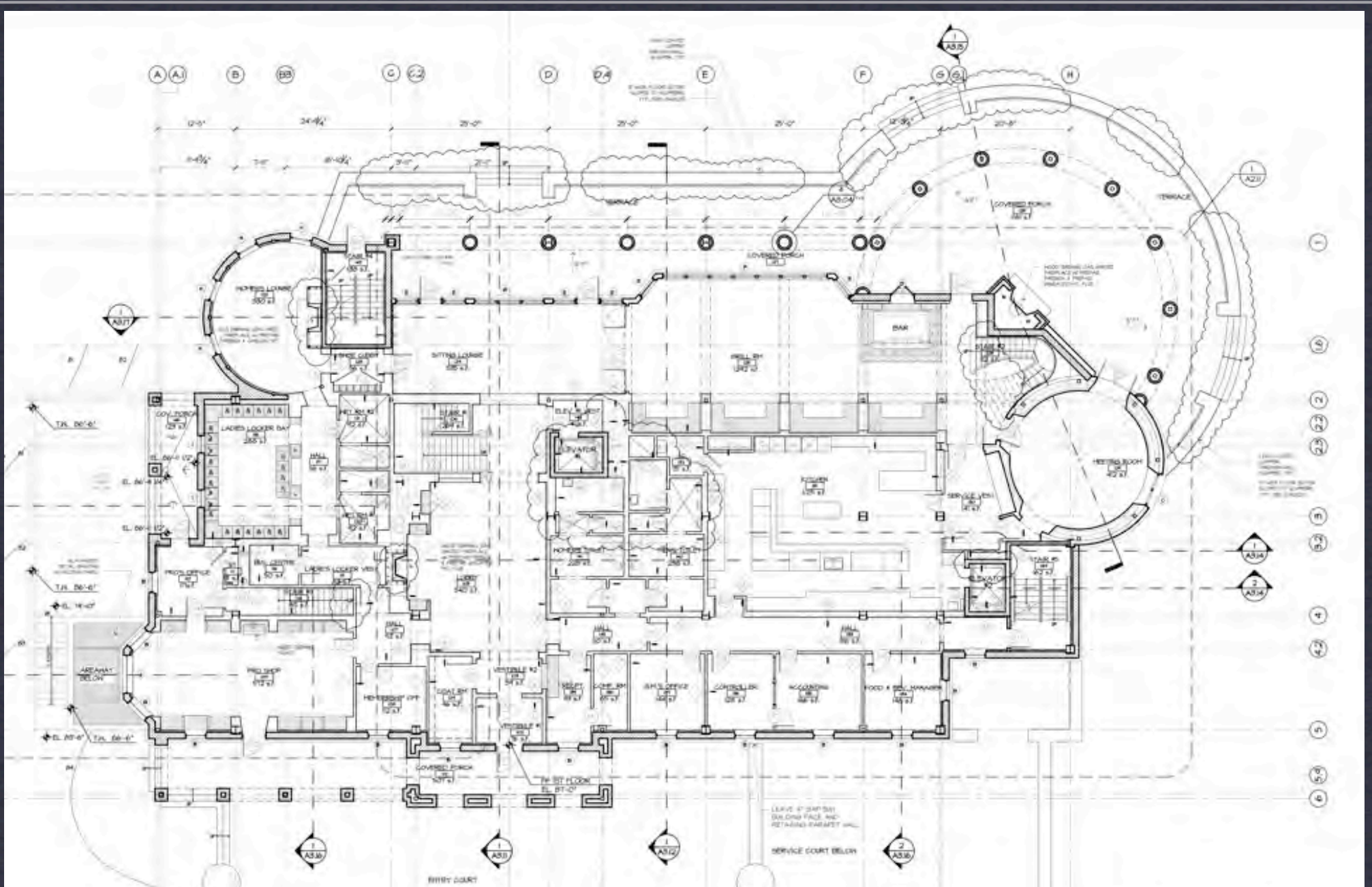
**BUILDING + DRAWING**

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translating concept to construction

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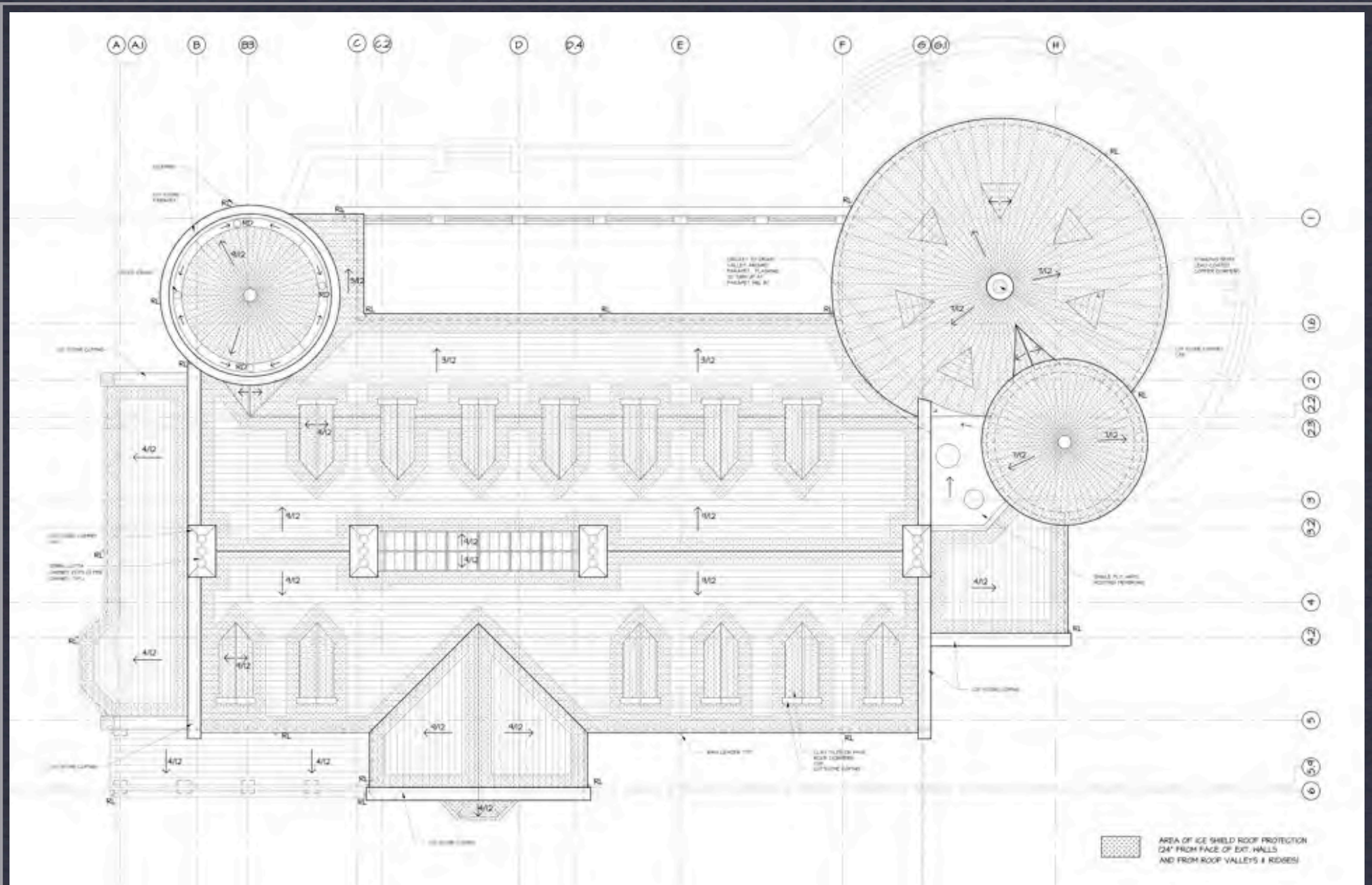
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**construction documents**

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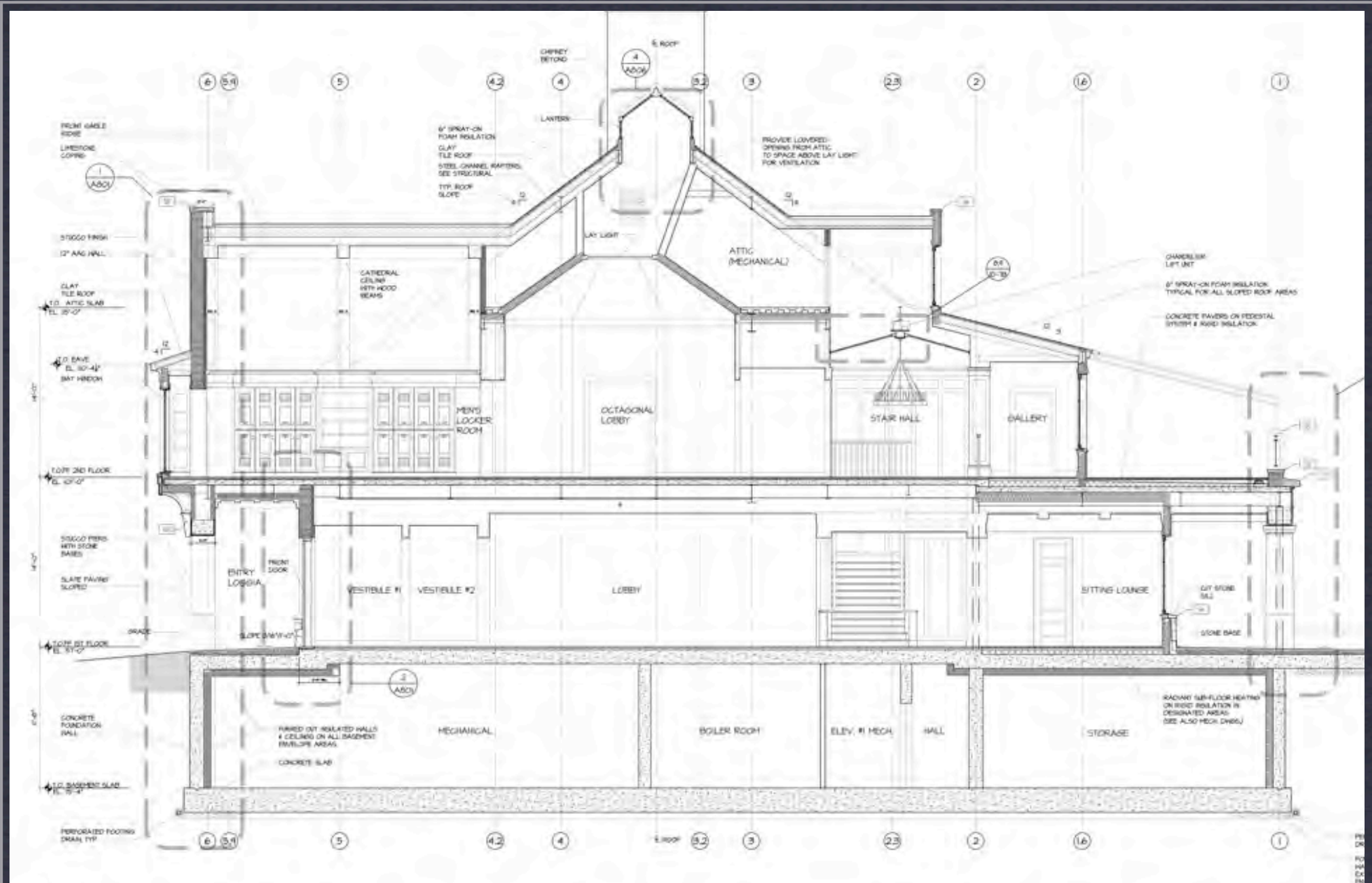
# BUILDING + DRAWING

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# construction documents

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**construction documents**

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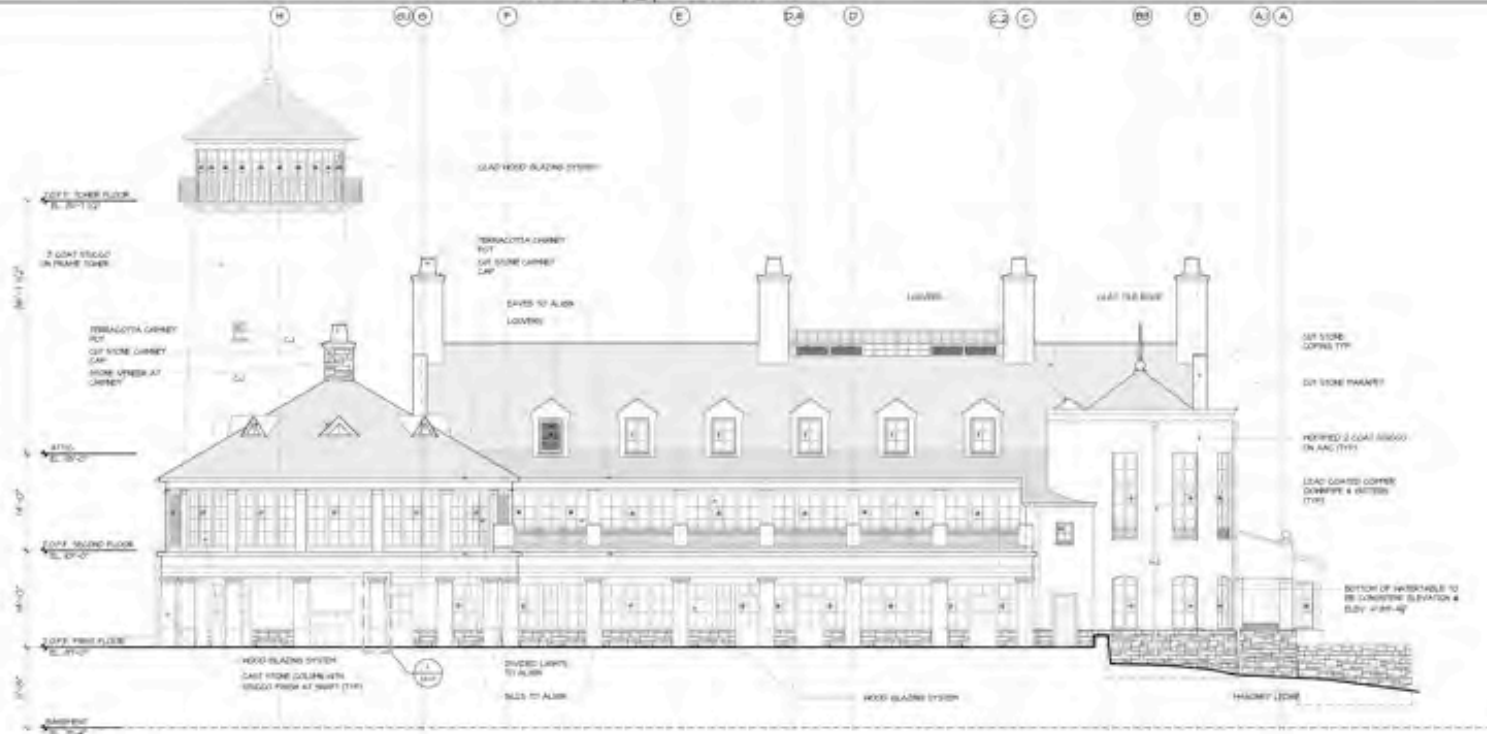


3 FIREPLACE

3/16" = 1'-0"

2 GRILL ROOM WINDOWS

3/16" = 1'-0"

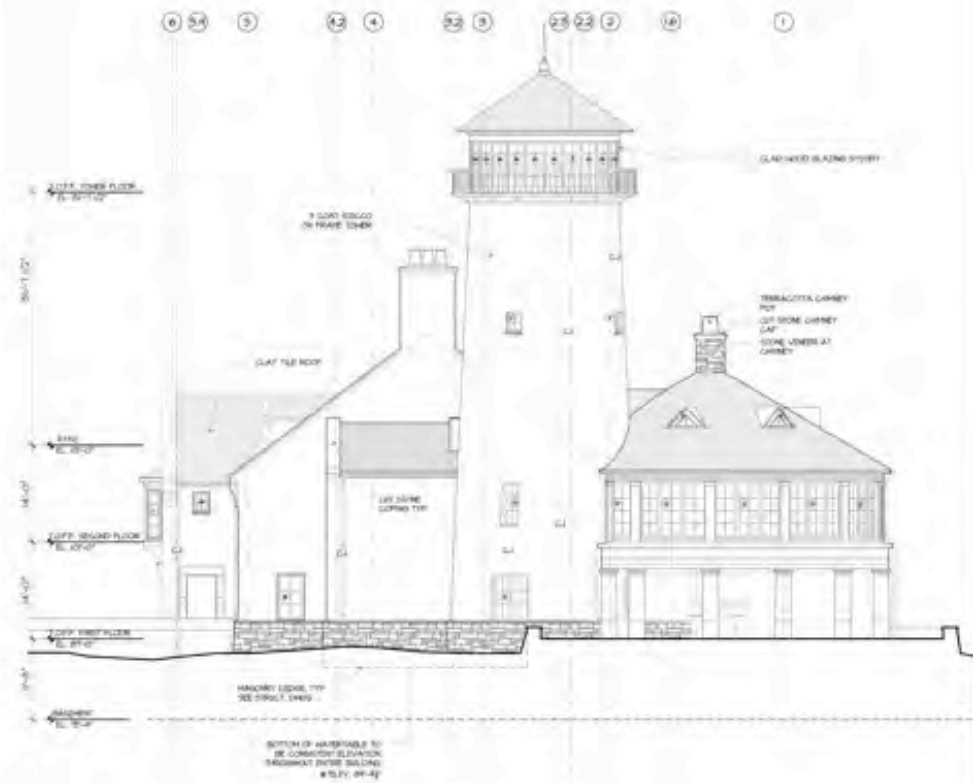
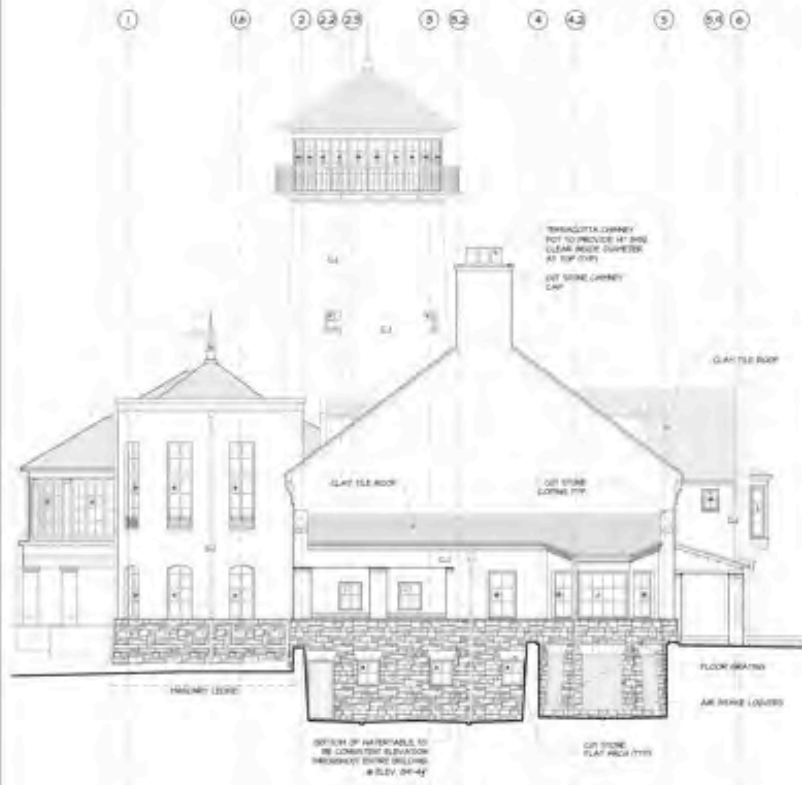


1 REAR ELEVATION

1/4" = 1'-0"

|   |   |                             |                    |  |                  |             |           |             |                              |                     |
|---|---|-----------------------------|--------------------|--|------------------|-------------|-----------|-------------|------------------------------|---------------------|
| <p>HART FIDVERTSON<br/>ARCHITECTURE</p> | <p>ARCHITECTURE<br/>DESIGN + CONSTRUCTION</p> | <p>PROJECT NO.<br/>DATE</p> | <p>BY<br/>DATE</p> | <p><b>BAYONNE GOLF CLUB<br/>GOLF CLUBHOUSE</b><br/>Bayonne, New Jersey</p> | <p>REVISIONS</p> | <p>DATE</p> | <p>BY</p> | <p>DATE</p> | <p><b>REAR ELEVATION</b></p> | <p><b>A3.02</b></p> |
|---|---|-----------------------------|--------------------|--|------------------|-------------|-----------|-------------|------------------------------|---------------------|





**MARK HILVERTON**  
 ARCHITECTURE  
 1000 10th Ave  
 New York, NY 10018  
 Tel: 212 691 1000  
 Fax: 212 691 1001  
 www.mharch.com

PROJECT NO. 1000  
 DRAWING NO. A3.03  
 DATE 10/10/10

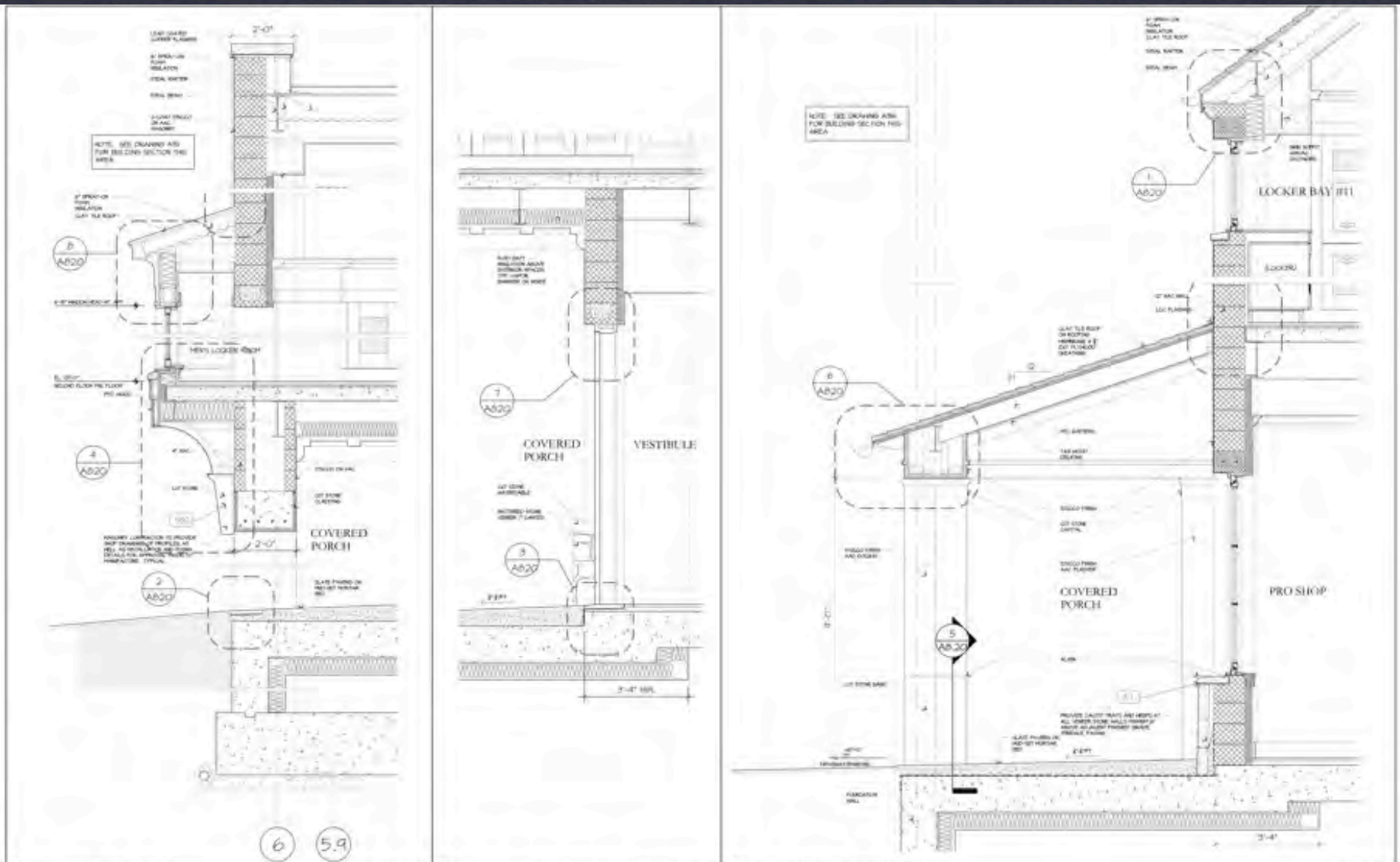
**BAYONNE GOLF CLUB**  
**GOLF CLUBHOUSE**  
 Bayonne, New Jersey

SHEET NO. A3.03  
 TOTAL SHEETS 10

**SIDE ELEVATIONS**

**A3.03**





1 WALL SECTION: FRONT GABLE 3/4" = 1'-0" 2 WALL SECTION: MAIN ENTRANCE 3/4" = 1'-0" 3 WALL SECTION: PRO SHOP PORCH 3/4" = 1'-0"

|   |  |  |                   |                  |   |                             |   |                             |
|---|--|--|-------------------|------------------|---|-----------------------------|---|-----------------------------|
| <b>H&amp;M</b><br>HARTMANN & MONTGOMERY<br>ARCHITECTURE<br>1000 WEST 17TH AVENUE<br>DENVER, CO 80202<br>TEL: 303.733.1100<br>WWW.HMARCHITECTURE.COM | PROJECT NO. 1000000000<br>DRAWING NO. A8.01<br>DATE 01/15/11 | <b>BAYONNE GOLF CLUB</b><br><b>GOLF CLUBHOUSE</b><br>Bayonne, New Jersey |                   | ARCHITECT<br>H&M | ARCHITECT<br>H&M  | DATE<br>01/15/11            | PROJECT TYPE<br>WALL SECTIONS: FRONT GABLE & PRO SHOP PORCH | DRAWING NO.<br><b>A8.01</b> |
|   |  | CONTRACTOR<br>H&M  | CONTRACTOR<br>H&M | DATE<br>01/15/11 | PROJECT TYPE<br>WALL SECTIONS: FRONT GABLE & PRO SHOP PORCH | DRAWING NO.<br><b>A8.01</b> |   |                             |

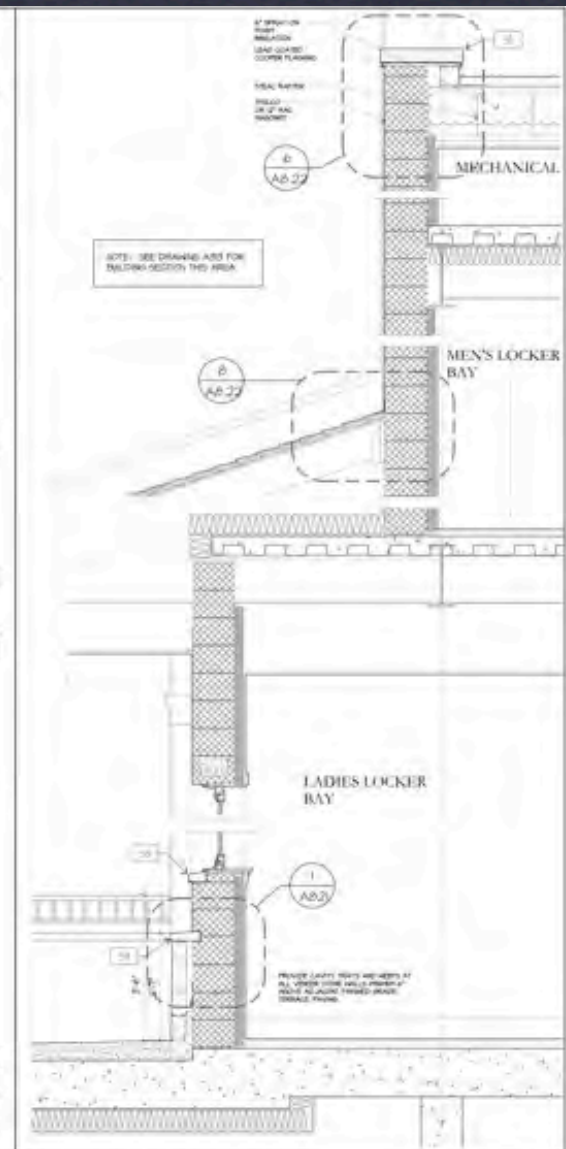
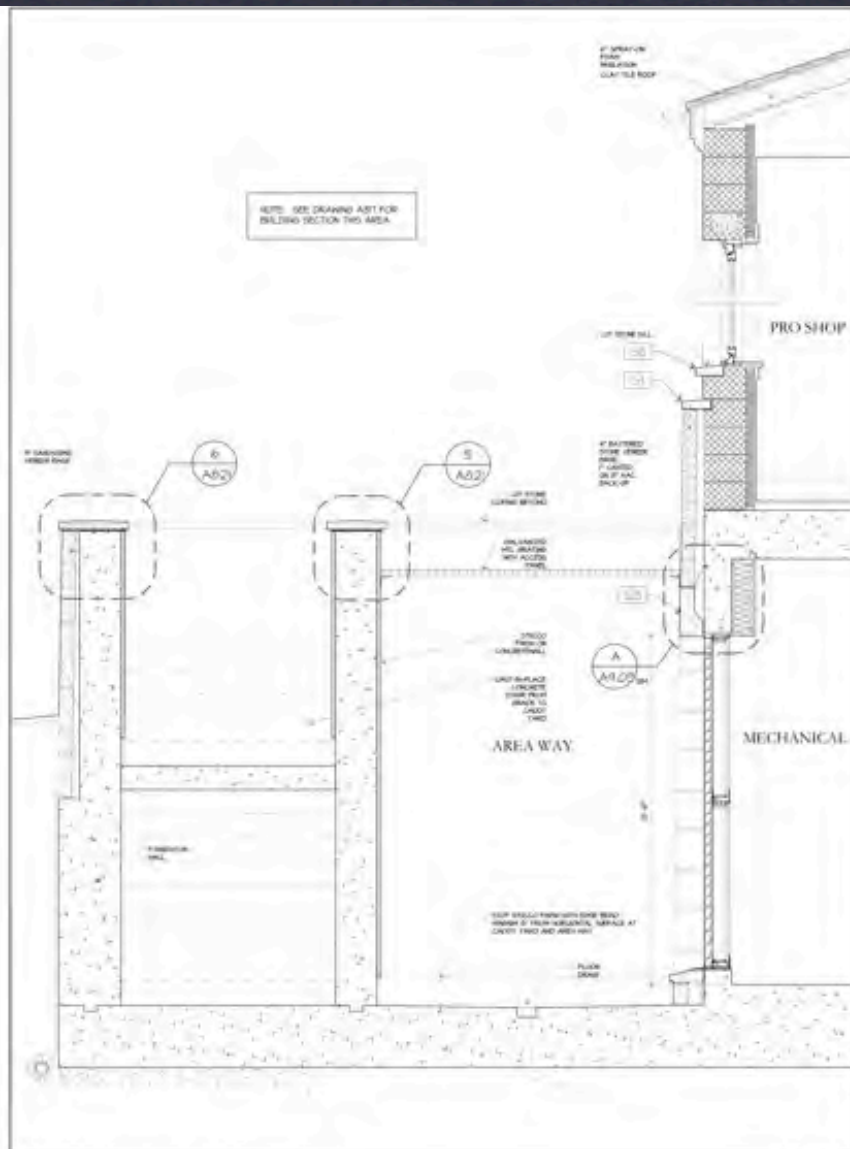
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1 WALL SECTION: END GABLE AT AREA WAY

3/4" = 1'-0" 2 WALL SECTION: END GABLE AT CADDY ROOM

3 WALL SECTION: END GABLE AT LADIES LOCKER BAY 3/4" = 1'-0"

|   |   |   |   |  |   |  |  |
|---|---|---|---|--|---|--|--|
| <b>MATT HOWEY</b><br>ARCHITECTURE<br>1000 BAYVIEW AVENUE<br>SUITE 100<br>BAYONNE, NJ 07002<br>TEL: 201.462.1000<br>FAX: 201.462.1001<br>WWW.MATTHOWEY.COM | <b>ARCHITECTURE</b><br>1000 BAYVIEW AVENUE<br>SUITE 100<br>BAYONNE, NJ 07002<br>TEL: 201.462.1000<br>FAX: 201.462.1001<br>WWW.MATTHOWEY.COM | SERVICE: A<br>SCALE: AS SHOWN<br>DRAWN BY: [REDACTED]<br>CHECKED BY: [REDACTED] | DATE: 10/10/10<br>PROJECT: BAYONNE GOLF CLUB GOLF CLUBHOUSE<br>SHEET: A8.02 | REVISIONS:<br>NO. DATE DESCRIPTION<br>1 10/10/10 ISSUED FOR PERMIT | QUANTITY:<br>NO. OF SHEETS: 1<br>NO. OF SETS: 1 | PREPARED BY:<br>NAME: [REDACTED]<br>TITLE: ARCHITECT | DRAWING NO.:<br><b>WALL SECTIONS:<br/>         AREA WAY<br/>         END GABLE</b><br><b>A8.02</b> |
|   |   | <b>BAYONNE GOLF CLUB</b><br><b>GOLF CLUBHOUSE</b><br>Bayonne, New Jersey        |   |  |   |  |  |

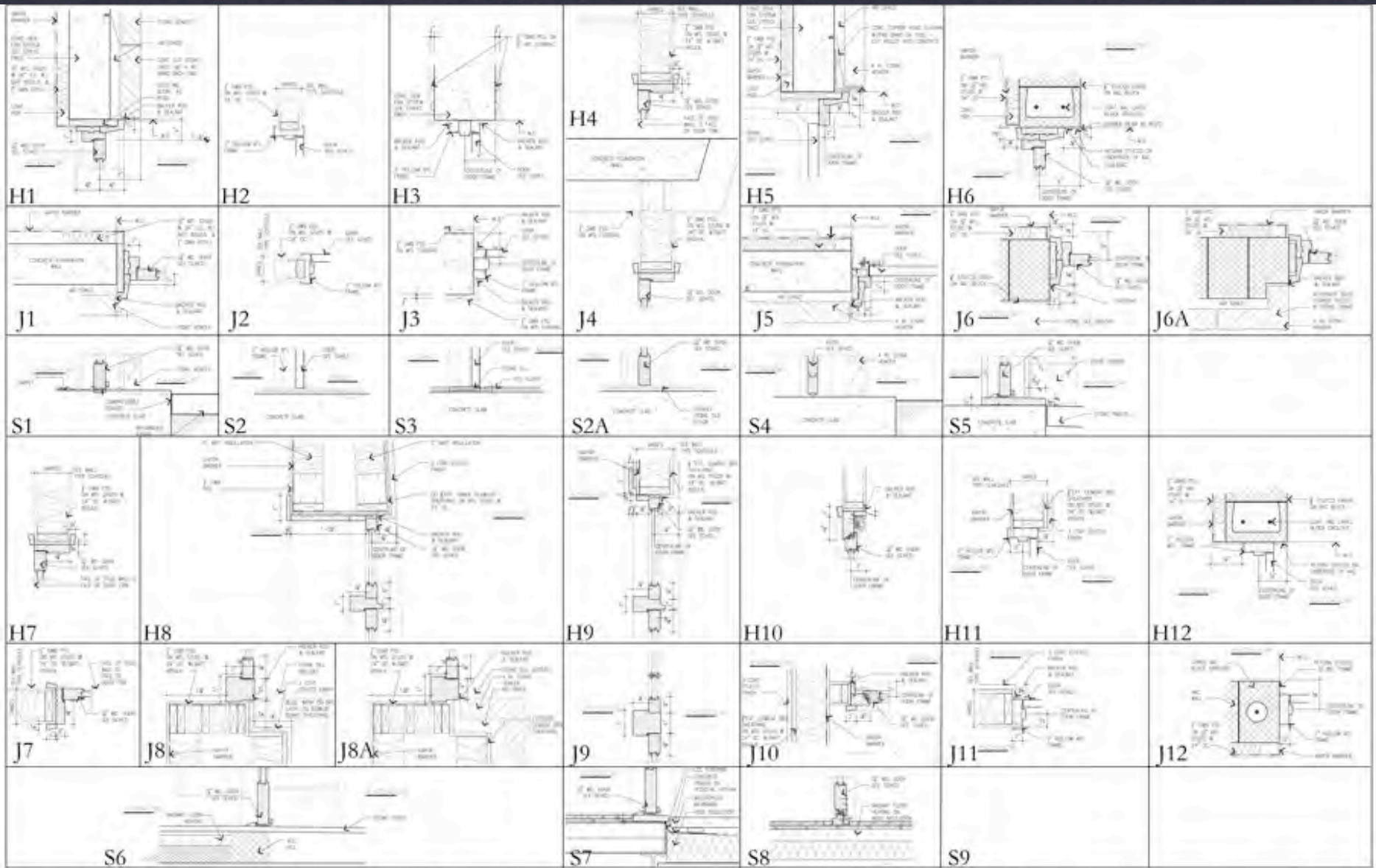












|                                       |                     |                               |                       |   |                       |                       |                       |   |              |
|---------------------------------------|---------------------|-------------------------------|-----------------------|---|-----------------------|-----------------------|-----------------------|---|--------------|
| <p>MARKS SILVERSTEIN ARCHITECTURE</p> | <p>ARCHITECTURE</p> | <p>PROJECT NO. 1000000000</p> | <p>DATE: 10/10/10</p> | <p>BAYONNE GOLF CLUB<br/>GOLF CLUBHOUSE<br/>Bayonne, New Jersey</p> | <p>DATE: 10/10/10</p> | <p>DATE: 10/10/10</p> | <p>DATE: 10/10/10</p> | <p>Door Head, Jamb and Sill Details</p> | <p>A9.02</p> |
|---------------------------------------|---------------------|-------------------------------|-----------------------|---|-----------------------|-----------------------|-----------------------|---|--------------|

**BUILDING + DRAWING**

professor Montgomery

**construction documents**

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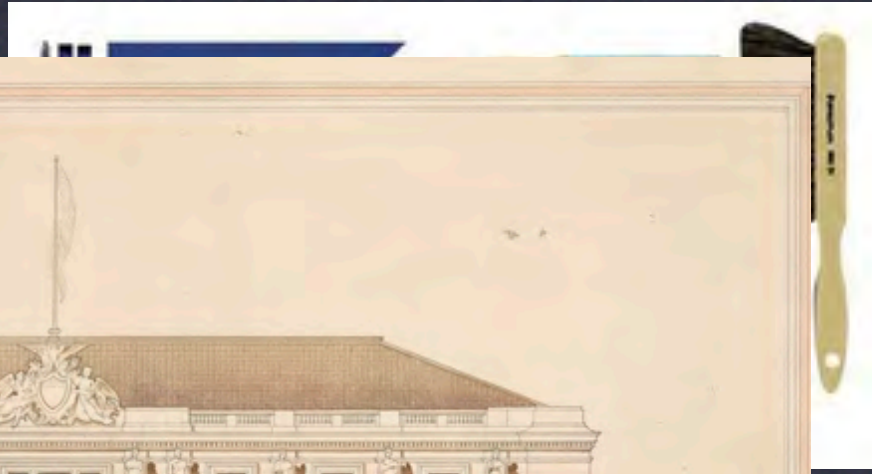


# ARCHITECT'S TOOLS

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drafting by hand  
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U. S. Dept. of War,  
NEW YORK, N. Y.  
Drawing G- No. 5

BOWLING GREEN ELEVATION  
SCALE: 1/8" = 1' 0"

V-S-CUSTOM HOVSE NEW YORK  
CASS GILBERT ARCHITECT  
3011 FIFTH AVE., NEW YORK AND 100 COTT BLDG. ST. PAUL, MINN.

*Approved: James D. ...*  
SUPERVISING ARCHITECT  
Inventory Department

# ARCHITECT'S TOOLS

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# drafting by hand

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# ARCHITECT'S TOOLS

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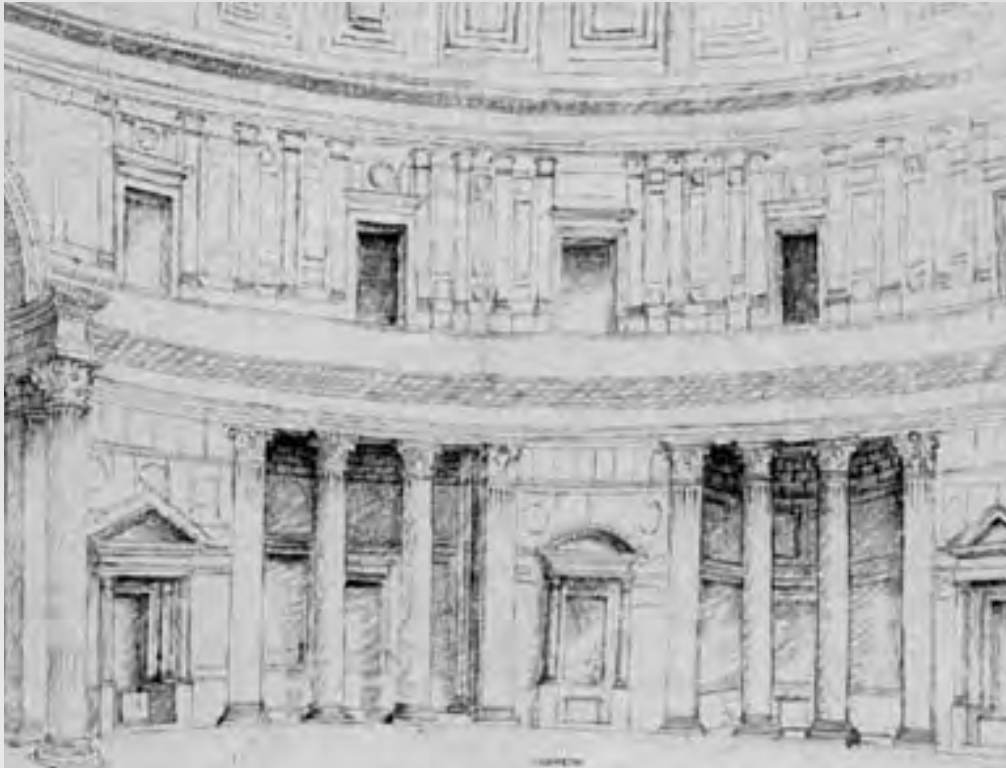
digital tools

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# wrap up

**DRAWING ALLOWS ARCHITECTS TO TEST IDEAS, TO DEFINE THE SCOPE OF WORK, TO SELL THE IDEA TO THE CLIENT + THE PUBLIC**



- \* drawing + thinking freely - lines are schematic
- \* precision - when drawings are legal and contractual
- \* must determine the purpose of the drawing
- \* good drawings start with careful observation
- \* artistic versus mechanical