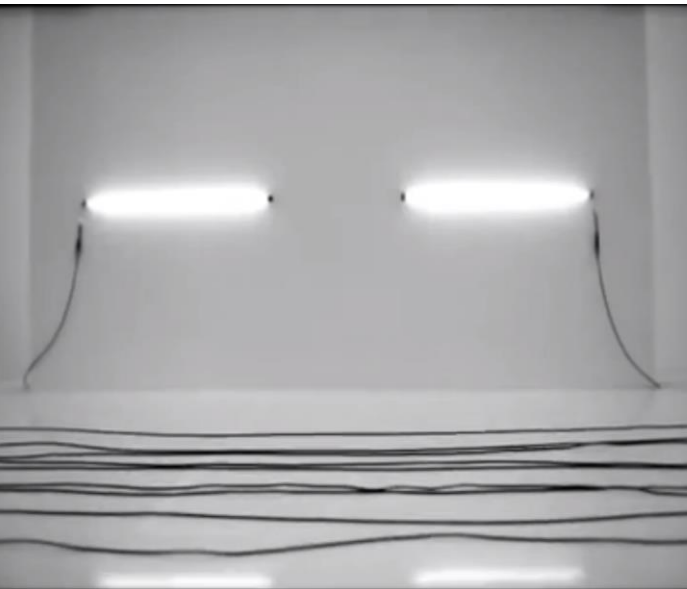


CMCE 1110 - Construction Drawings I  
Lesson 2: Linework  
Professor Anderson

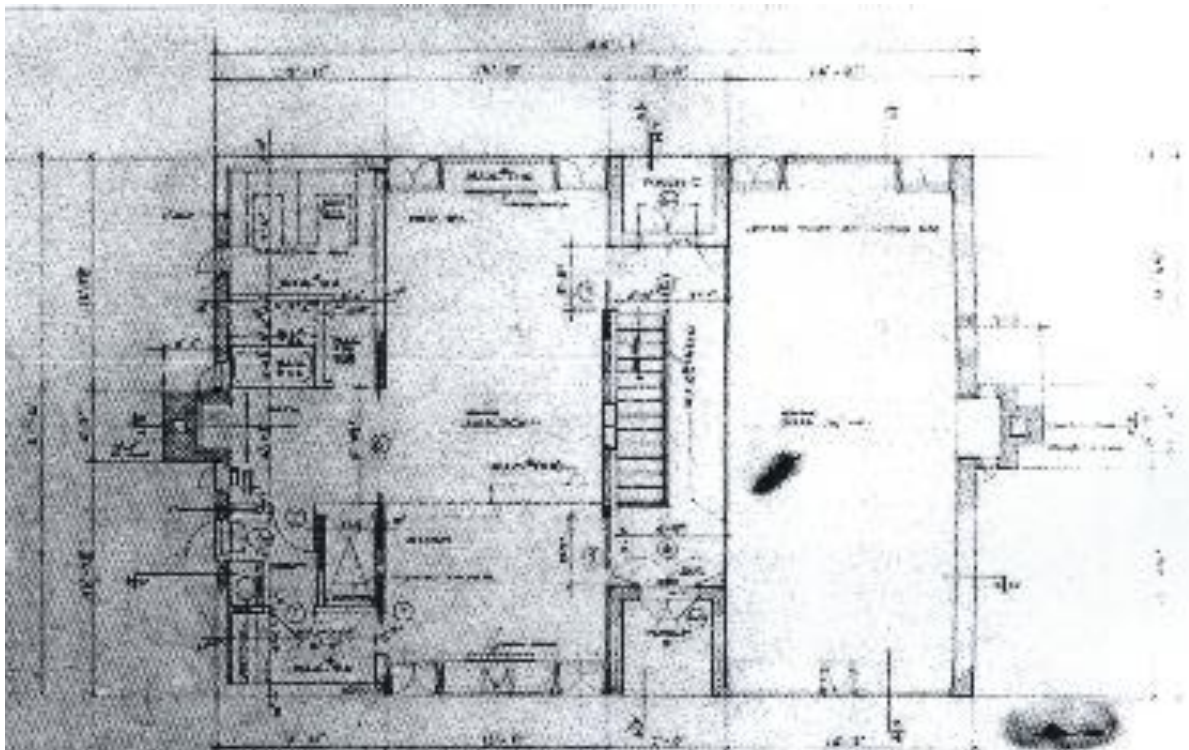




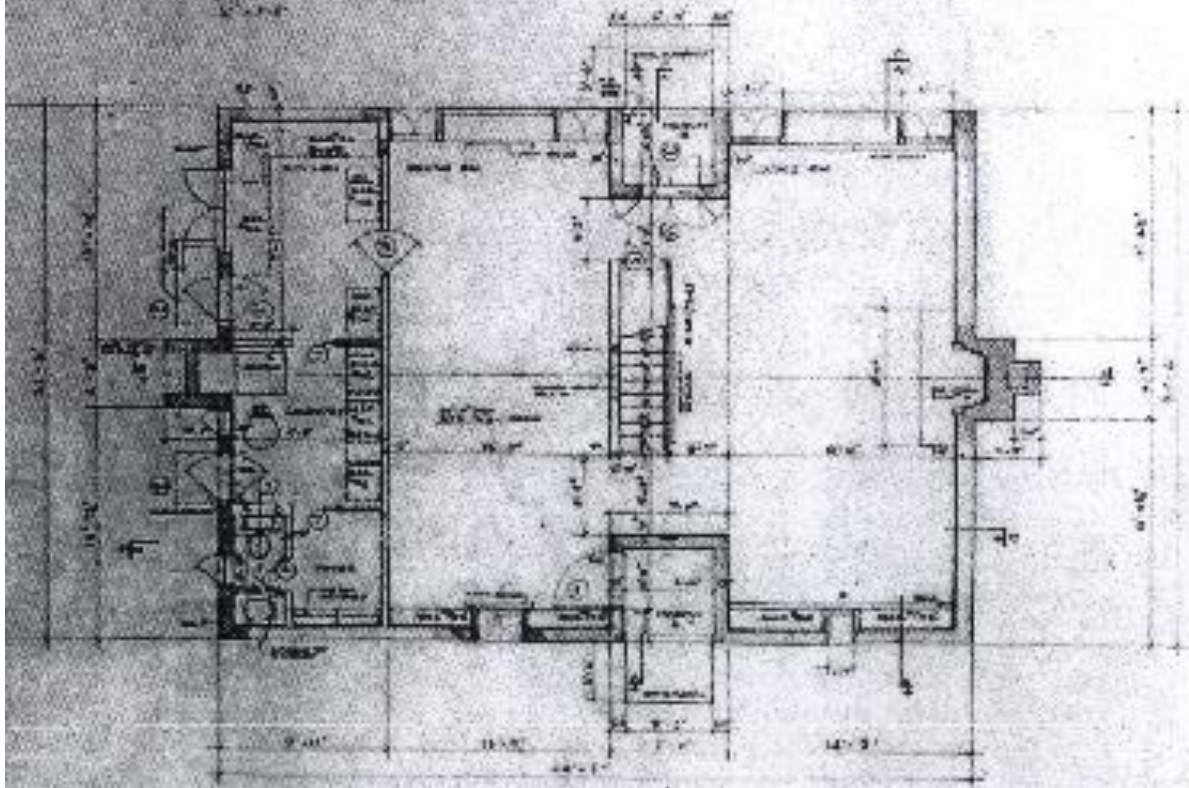
A Avanzo del Tempio di Minerva Medica. B *Faustica*  
posteriore al Tempio, la quale lo investiva  
all' intorno. Piranesi Archit. di. inc.

Giovanni Battista Piranesi, Temple of Minerva Medici, 1756

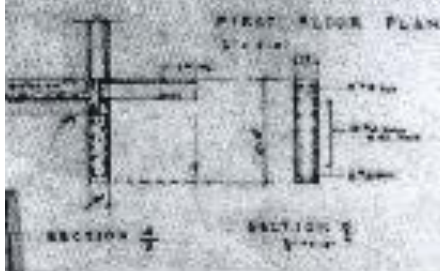




SECOND FLOOR PLAN  
1/2" = 1'-0"



FIRST FLOOR PLAN  
1/2" = 1'-0"



5254000  
FLOOR PLANS  
MARGARET ESMERICK HOUSE  
207 W. 10th Street, Minneapolis, Minn.  
LORNE KAHN ARCHITECT  
207 W. 10th Street, Minneapolis, Minn.



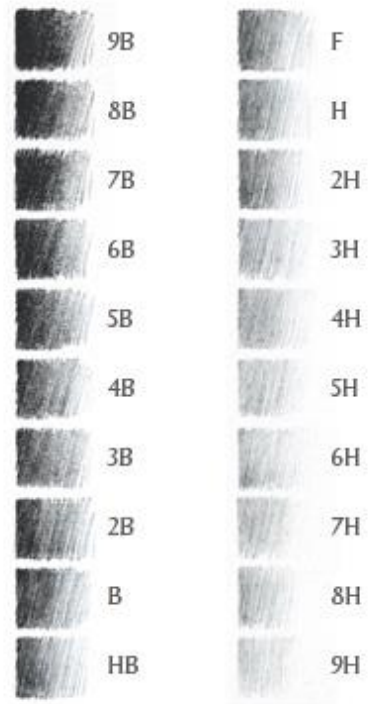
# FUNDAMENTAL PRINCIPLES OF LETTERING AND LINEWORK:

## UNIFORMITY OF:

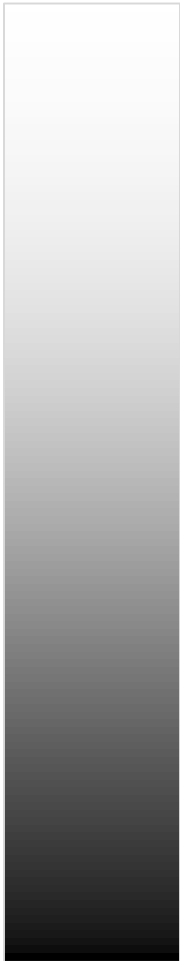
1. WEIGHT OF LINES
2. SHAPE OF LINES
3. STYLE OF LINES (TYPE)
4. SLOPE OF LINES (ACCURACY)
5. SIZE OF LINES (GUIDELINES)
6. SPACING OF LINES

UNIFORM VARIATION IS ESSENTIAL FOR LEGIBILITY OF DRAWINGS.

# PENCIL GRADE & USE:



HARD



SOFT

## **H: LIGHT, HARD LEAD**

- GUIDELINES, LIGHT HATCHES
- WILL PRODUCE UN-ERASABLE GROOVE IN PAPER IF TOO MUCH PRESSURE IS APPLIED

## **F: MEDIUM LIGHT, FINE POINT**

- SMALL LETTERING,

## **HB: MEDIUM DARK**

- TITLEBLOCK, LARGE LETTERING, OBJECT OUTLINES

## **B: DARK, SOFT LEAD**

- BORDERS, SECTION CUTS

# CONSTRUCTION LINES & GUIDELINES



DaVinci: Perspective

# LINETYPES

## THIN LINE:



- EDGES IN VIEW
- SURFACE FEATURES

## NORMAL LINE:



- WALLS IN PLAN
- PRINCIPAL ELEMENTS
- LEADERS
- DIMENSION LINES

## HEAVY LINE:



- FINISH GRADE
- ELEMENTS CUT IN SECTION

## CENTERLINE:



- BUILDING CONTROL LINES
- COLUMN CENTERLINES

## HIDDEN LINE:

(OBJECT NOT SEEN **IN FRONT OF** THE VISION PLANE)



- HIDDEN ELEMENTS
- FOOTINGS

## OVERHEAD LINE:

(OBJECT NOT SEEN **BEHIND** THE VISION PLANE)



- OVERHANGS
- CABINETS
- CEILING FEATURES

## PROPERTY LINE:



- PROPERTY LINES
- BUILDING CONTROL LINES

## MATCH LINE:

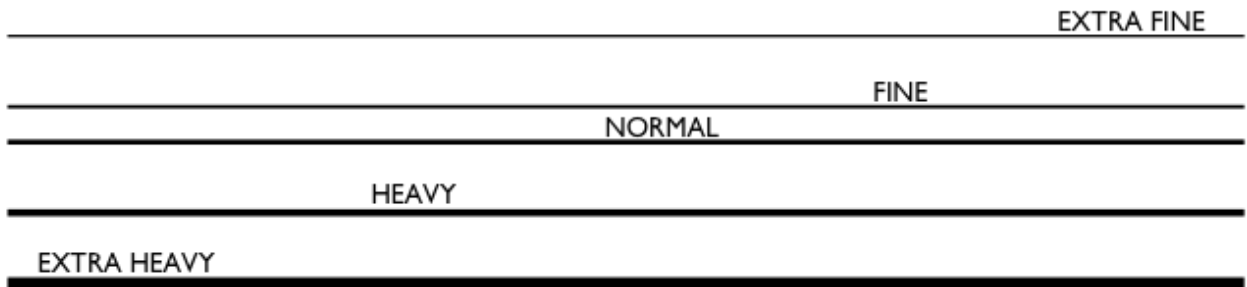


MATCH LINE - SEE SHEET A204

MATCH LINE - SEE SHEET A205

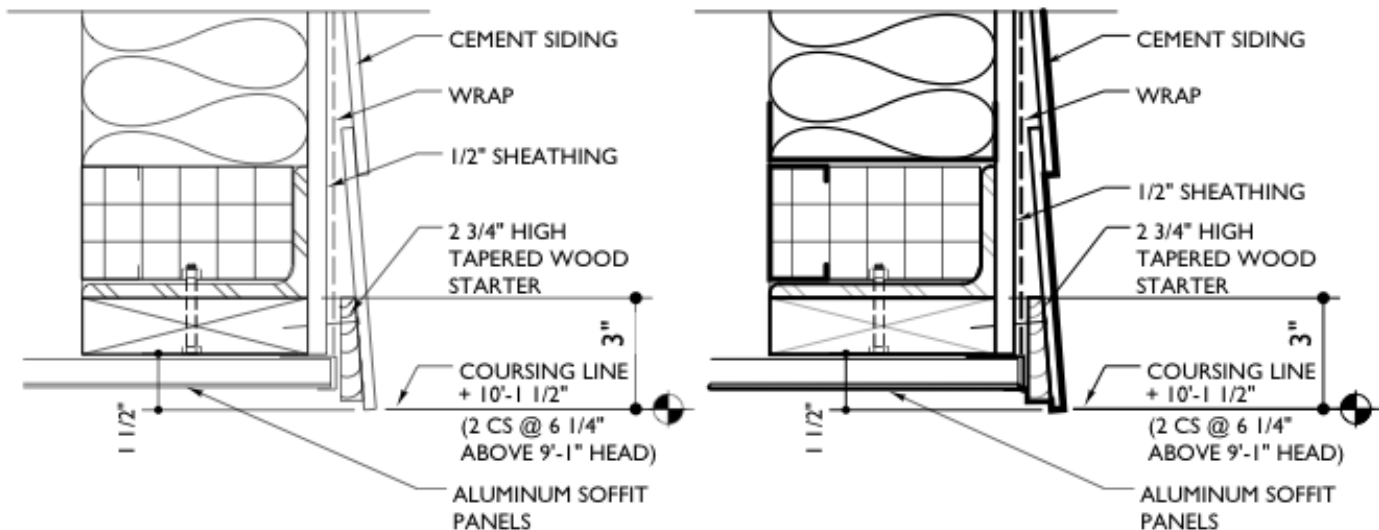
USED TO DIVIDE A DRAWING INTO AREAS  
WHEN DRAWING SIZE EXCEEDS SHEET SIZE

# LINEWEIGHTS



The viewer should be able to distinguish between your linetypes when viewing your drawing at arms length.

## WHAT DIFFERENCE DOES IT MAKE?





ESHERICK HOUSE  
204 SUNRISE LANE  
PHILADELPHIA, PA 19118  
LOUIS KAHN, 1961

NOTES:

NEW YORK CITY  
COLLEGE OF  
TECHNOLOGY

DRAWN BY:  
NAME

DATE:

SCALE:

SYMBOLS,  
MATERIALS &  
ABBREVIATIONS

A-001

SYMBOLS:

|  |                  |
|--|------------------|
|  | ROOM ID          |
|  | ELEVATION        |
|  | SECTION          |
|  | DOOR ID          |
|  | WINDOW ID        |
|  | ELEVATION HEIGHT |
|  | REVISION ID      |

ABBREVIATIONS:

|      |                       |
|------|-----------------------|
| ABV  | ABOVE                 |
| AFF  | ABOVE FINISH FLOOR    |
| BLDG | BUILDING              |
| CL   | CENTER LINE           |
| CLG  | CEILING               |
| CMU  | CONCRETE MASONRY UNIT |
| DEMO | DEMOLISH              |
| DTL  | DETAIL                |
| DWG  | DRAWING               |
| ELEV | ELEVATION             |
| EQ   | EQUAL                 |
| GWB  | GYPSON WALL BOARD     |
| MTD  | MOUNTED               |
| NTS  | NOT TO SCALE          |
| OC   | ON CENTER             |
| TYP  | TYPICAL               |
| VIF  | VERIFY IN FIELD       |
| W    | WITH                  |

MATERIALS & LINETYPES:

|  |  |                                     |  |
|--|--|-------------------------------------|--|
| <p>CMU<br/>F<br/>1/8" x 1/8"<br/>@ 45°</p> | <p>STEEL<br/>F<br/>1/4"<br/>1/8"<br/>@ 45°</p> | <p>OBJECT LINE<br/>HB<br/>45°</p>   | <p>HIDDEN LINE<br/>F<br/>1/8" DASH<br/>SPACED 1/16"</p>                                    |
| <p>CONCRETE<br/>F</p>                      | <p>BRICK<br/>F<br/>45°</p>                     | <p>DETAIL LINE<br/>F<br/>30°</p>    | <p>CENTER LINE<br/>H<br/>ALTERNATE<br/>LONG (3/4")<br/>? SHORT (1/8")<br/>SPACED 1/16"</p> |
| <p>GWB<br/>HB</p>                          | <p>RIGID INSULATION<br/>F<br/>1/8" x 1/8"</p>  | <p>DIMENSION LINE<br/>H<br/>60°</p> | <p>SECTION LINE<br/>B<br/>LONG (3/4")<br/>TWO SHORT<br/>(1/8")<br/>SPACED 1/16"</p>        |

1/2" φ

1/2" TYP.

10"

1/4"

EQ.

EQ.

3"

3"

EQ.

EQ.

EQ.

EQ.

1/4"