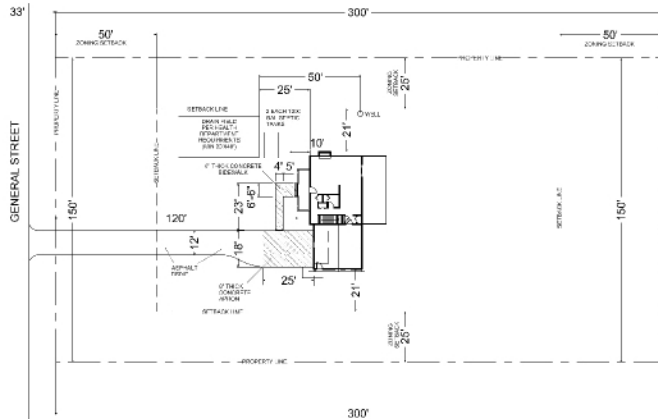


Plans, Specifications, and Estimating

Use with the Overview of Building Trades Course

Site Plan:

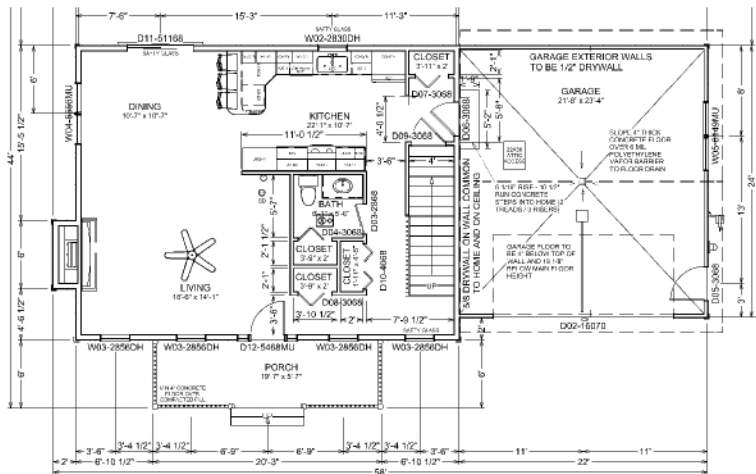
A site plan, or plot plan, shows the building lot with boundaries, contours, existing roads, utilities, building locations, driveway locations and other details such as existing trees and nearby buildings.



Floor Plan:

A drawing showing a horizontal plane view of each floor viewed from above the floor (top view). A floor plan shows the outside shape of the building; the arrangement, size, and shape of the rooms. In a house plan, there is a separate drawing for each floor. More detailed drawings can be referenced from the floor plan drawings. It is not possible to see the height of objects in a plan view. The floor plan may show the following features:

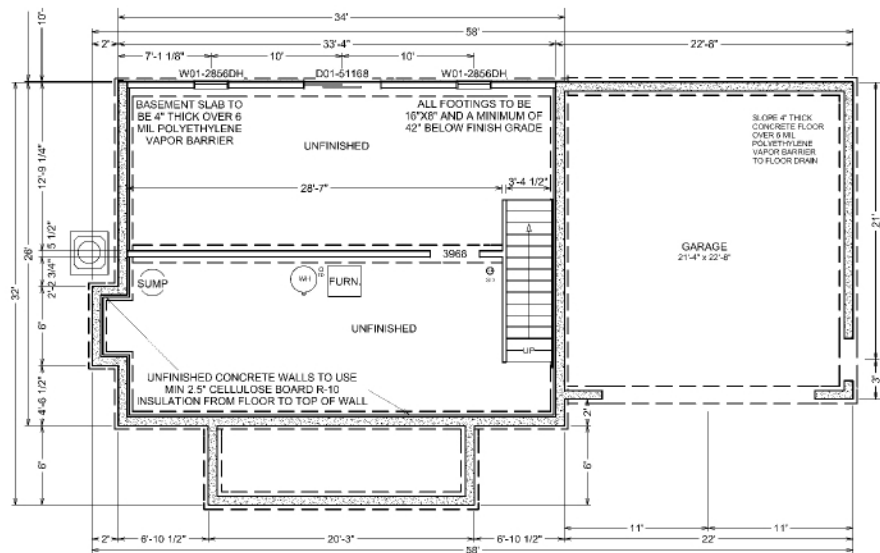
1. Wall locations, lengths and widths
2. Door locations, size, and type
3. Window locations, size, and type
4. Stairways locations and widths
5. Fireplaces locations and size
6. Cabinets locations and size
7. Mechanical equipment
8. Room names
9. Room dimensions



Foundation Plan:

A drawing showing a horizontal plane view of the foundation viewed from above the foundation. (top view) A foundation plan shows the outside shape of the buildings foundation; the arrangement, size, and shape of the rooms in the basement. It is not possible to see the height of objects in a plan view. The foundation plan may show the following features:

1. Footings, locations, lengths and widths
2. Foundation Walls, locations, lengths and widths
3. Materials used
4. Reinforcing Steel, location and size
5. Door and Window, locations, size, and type
6. Mechanical equipment locations



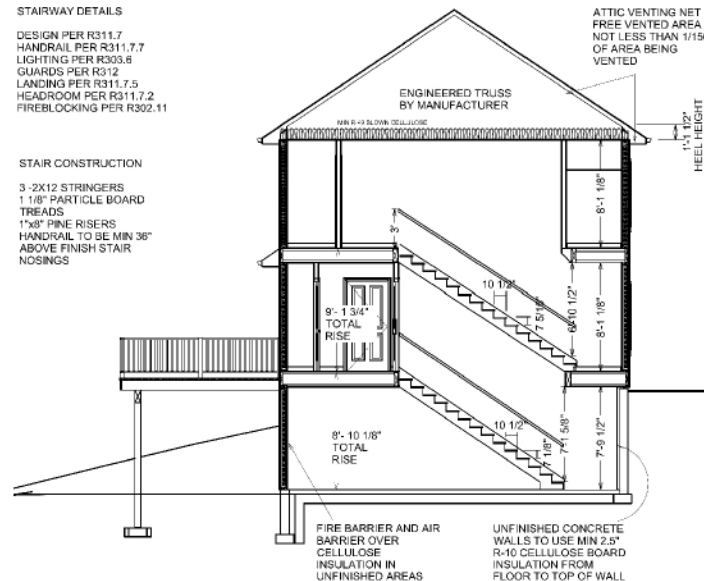
Elevation Drawings:

An elevation drawing is a side view that allows you to see the exterior features of a building, including the materials used, and height and width of objects. A minimum of four elevations are needed to show the design of all sides of the structure. Elevations of a building interior are sometimes called interior elevations.



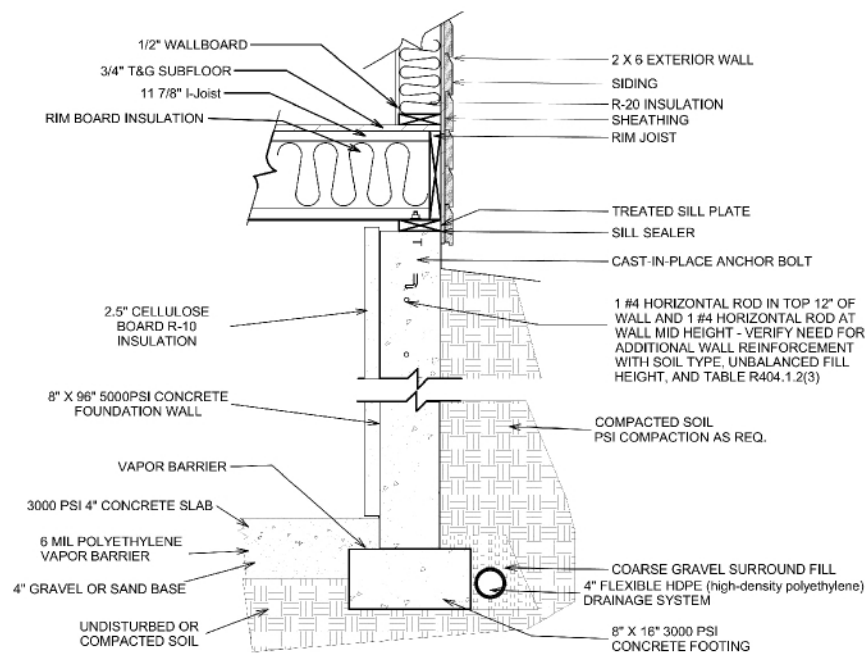
Section Drawings:

Section views provide important information about materials, fastening, and support systems, and concealed features. They show how an object looks when "cut" vertically by an imaginary cutting plane. Section views are similar to elevation views because they allow you to see the actual shape of objects as shown from one side. Section views are where you should look to find the height of objects.



Detail Drawings:

When precise information is needed about a small or complex portion of the building, a detail drawing is made. Such drawings are used whenever the information given in elevations, floor plans, foundation plans, and sections is not clear enough to communicate the desired results. The construction materials and techniques to be used in the building are often given in detail drawings.



BASEMENT FOUNDATION DETAIL

Schedules:

A schedule is a list or a chart. A door or window schedule gives the number and size of all doors and windows in the building. Units listed in the schedules are referenced to the plan views with a letter or number. Some designers provide the rough opening sizes in the schedules to speed construction and ensure a correct fit. Any information that could be organized into a list or chart might be shown in a schedule.

DOOR SCHEDULE						
NUMBER	QTY	FLOOR	SIZE	R/O	DESCRIPTION	HEADER
D01	1	0	51168 R EX	71 1/4"X80"	EXT. SLIDER-GLASS - COLOR - WHITE	2X10X74 1/4" (2)
D02	1	1	16070 R	195"X85 1/2"	GARAGE 4-PANEL (LONG) - COLOR - WHITE	2X12X204" (2)
D03	1	1	2868 L IN	34"X82 1/2"	HINGED 2 PANEL - COLOR - WHITE	2X10X37" (2)
D04	1	1	3068 L	38"X82 1/2"	2 DR. BIFOLD-SLAB	2X10X41" (2)
D05	1	1	3068 L EX	38"X82 1/2"	EXT. HINGED 4 PANEL - COLOR - WHITE	2X10X41" (2)
D06	1	1	3068 L EX	38"X82 1/2"	EXT. HINGED 4 PANEL - COLOR - WHITE	2X10X41" (2)
D07	1	1	3068 R	38"X82 1/2"	2 DR. BIFOLD 2-PANEL - COLOR - WHITE	2X10X41" (2)
D08	1	1	3068 R	38"X82 1/2"	2 DR. BIFOLD 2-PANEL - COLOR - WHITE	2X10X41" (2)
D09	1	1	3068 R IN	38"X82 1/2"	HINGED 2 PANEL - COLOR - WHITE	2X10X41" (2)
D10	1	1	4068	50"X82 1/2"	4 DR. BIFOLD-SLAB	2X10X53" (2)
D11	1	1	51168 R EX	71 1/4"X80"	EXT. SLIDER-GLASS - COLOR - WHITE	2X10X74 1/4" (2)
D12	1	1	5468	66"X82 1/2"	MULLED UNIT	2X10X69" (2)
D13	1	2	2668 R IN	32"X82 1/2"	HINGED 2 PANEL - COLOR - WHITE	2X10X35" (2)
D14	4	2	2868 L IN	34"X82 1/2"	HINGED 2 PANEL - COLOR - WHITE	2X10X37" (2)
D15	3	2	2868 R IN	34"X82 1/2"	HINGED 2 PANEL - COLOR - WHITE	2X10X37" (2)
D16	1	2	3068 R EX	38"X82 1/2"	EXT. HINGED-GLASS - COLOR - WHITE	2X10X41" (2)
D17	1	2	6068 IN	74"X82 1/2"	DOUBLE HINGED 2 PANEL - COLOR - WHITE	2X10X80" (2)

Specifications:

Specifications or notes are written notes that may be arranged in list form. They give instructions about specific materials and construction techniques to be used. Specifications or notes may also give information on building code compliance requirements.

General Notes:

Local Design Criteria Assumptions

1. Ground Snow Load: 50 psf per figure R301.2(5)
2. Wind Speed: 90 mph per figure R301.2(4)
3. Wind Exposure Category: B per R301.2.1.4
4. Seismic Category: A per figure R301.2(2)
5. Weathering: Severe per figure R301.2(3)
6. Frost Line Depth: 42" per R403.1.4
7. Termites: Slight to Moderate per figure R301.2(6)
8. Winter Design Temp.: 0°F per figure R301.2(1)
9. Ice Shield Under-Layment: Yes per R905.2.7.1
10. Flood Hazards: N/A
11. Air Freezing Index: 1000 – 1500 per figure R403.3(2)
12. Mean Annual Air Temp.: 50°F per www.ncdc.noaa.gov/psf.html
13. Site Soil Group & Class: Group 1 & Class SP/SM per table R405.1
14. Soil Bearing Capacity: 2000 lbs/sqft per table R401.4.1
15. Climate Zone: 5A

Site Address

1. Premise to be identified per R319

Public Utilities

1. Natural gas, 220V/200A electricity, 4 line telephone, and cable TV are to be underground and installed per the site plan/Main floor, floor plan

Windows

1. All windows must comply with R303, R308, R310, R612, 2009 MUEC 303.1.3, 2009 MUEC 402.3
2. All windows shall meet the following:
 - a. Construction: Wood frame and sash
 - b. Exterior cladding: Vinyl or Aluminum
 - c. Glass: Dual pane, High Performance, Low-E, insulated
 - d. Exterior color: White
 - e. Interior color: Pre-finished White
 - f. Style: Double hung, Tilt wash
 - g. Size and swing: Per plan and schedule
 - h. Hardware: Include, color: white
 - i. Screens: Include, color: white
 - j. Extension jambs: Include, Pre-finished White
3. Top of all windows are to be 80" from floor
4. Extension jambs (if needed) are to be factory applied 6 9/16" jamb width

5. All garage doors shall meet the following:

- a. Construction: Insulated steel
- b. Style: Raised panel (no glass)
- c. Exterior appearance: Textured surface
- d. Size: Per plan and schedule
- e. Factory finish: Pre-finished white
- f. Field finish: None
- g. Opener: Screw drive, 1/2 HP

Interior doors

1. All doors must comply with Section R311
2. All interior passage doors shall meet the following:
 - a. Construction: Molded, solid core
 - b. Style: 2 Panel
 - c. Appearance: Smooth surfaces
 - d. Hardware finish: Brushed Nickel
 - e. Size and swing: Per plan and schedule
 - f. Factory finish: Pre-primed
 - g. Field finish: White Acrylic Latex paint, semi-gloss
 - h. Handles: Schlage Georgian Brushed Nickel

3. All interior bi-fold doors shall meet the following:

- a. Construction: Molded, hollow core
- b. Style: 2 Panel
- c. Appearance: Smooth surfaces
- d. Hardware finish: Brushed Nickel
- e. Size and swing: Per plan and schedule
- f. Factory finish: Pre-primed
- g. Field finish: White Acrylic Latex paint, semi-gloss
- h. Handles: Schlage Georgian Brushed Nickel

Exterior Coverings

1. All siding is to be vinyl double 6" exposure. The siding must comply with R703.1, R703.1.1, and table R702.3.7
2. All siding shall meet the following:
 - a. Type: Lap
 - b. Exterior appearance: Cedar wood siding
 - c. Exposure: 6"
3. Weather resistive barrier shall be installed per R703, all joints must be taped and all penetration must be sealed to prevent water intrusion and air leakage
4. Flashing shall be installed per R708.3 to prevent water intrusion

Exterior Trim

1. All exterior trim is to be a composite wood material resistant to decay.