Unit 04: Seeing the Big Picture - Creating a Site Plan

Content Area: **Technology**
Course(s): **Architecture**
Time Period: **December**
Length: **6 Blocks**
Status: **Published**

Transfer Skills

The development of an architectural site is the most critical step within the architectural and structural design process.

Enduring Understandings

1. The development of an architectural site is the most critical step within the architectural and structural design process.

2. Before a home can be positioned on a site it must be properly orientated according to local codes and setbacks.

3. Architectural site development requires the understanding of survey, plat, and plot plans.

4. Not all sites are suitable for residential construction due to the location of water, extreme changes in elevation, and soil that will not support a foundation.

Essential Questions

1. What characteristics of a site must be analyzed before a structure can be placed on it How much of a factor should the lot shape and size have on the design of a house?

2. How does the slope and overall geography of a lot affect the design of a house?

3. What characteristics of a site must be analyzed before a structure can be placed on it?

4. How is a lot valued?

Content

Vocabulary:

contour lines, slope, lot, building footprint, surveying, property line, easement, plot, variance, apron, setback, sidewalk, lot number, acreage

Skills

1. Analyze a residential site to determine is appropriateness for house construction.

2. Create a site plan drawing for a residential development using correct symbols and scale.

3. Create a site plan for a residential lot that a custom house will be built on.

4. Create a contour line plan for a residential lot.

Resources

11x17 Paper / Drawing Boards / T Square / Pencil / Erasers / Rendering Markers

Standards

NJ: Grade 9 - 12

9.3 CTE: B. Architecture & Construction Career Cluster

Academic Foundations:

9.3.12.AC-DES.5 Identify the diversity of needs, values and social patterns in project design, including

accessibility standards.

Communication Skills:

9.3.12.AC-DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.

9.3.12.AC-DES.7 Employ appropriate representational media to communicate concepts and project design.

9.3.12.AC-DES.1 Justify design solutions through the use of research documentation and analysis of data.

Problem-Solving and Critical Thinking:

9.3.12.AC-DES.8 Apply standards, applications and restrictions pertaining to the selection and use of construction materials, components and assemblies in the project design.

9.3.12.AC.4 Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy.

9.3.12.AC.6 Read, interpret and use technical drawings, documents and specifications to plan a project.

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