

BASIC SUMMARY OF PROJECT: Students will research and redesign the Canal District of Worcester by creating a proposal, scaled sketch, and three-dimensional model that meet standard zoning laws and environmental “Green” regulations.

This project is not “extra” work, the following skills come directly from the curriculum we all must teach this year. Upon the completion of this project, students will be able to...

Science

SIS1 Make observations, raise questions, and formulate hypotheses.
 SIS2 Design and conduct scientific investigations.
 SIS3 Analyze and interpret results of science investigations.
 6.4 Explain how water, carbon, and nitrogen cycle between abiotic resources and organic matter in an ecosystem, and how oxygen cycles through photosynthesis and respiration.

History

WHII.6 Summarize the social and economic impact of the Industrial Revolution (population & urban growth)
 WHII.20 D. Describe the influence of Keynesian economics
 7. Show connections, casual and otherwise, between particular historical events and ideas and larger social, economic, and political trends and developments.
 (H,G,C,E)

English

Eng #23 Organize ideas in writing in a way that makes sense for their purpose.

Math

10.N1 Students engage in problem solving, communicating, reasoning, connecting, and representing.
 10.G1 Students will sketch a blueprint to scale of their architectural design using appropriate dimensions within the constraints of the project.
 10.G.9 Draw the results, and interpret transformations on figures in the coordinate plane, translations, reflections, rotations, scale factors.

Technology

1.3 Produce and analyze multi-view drawings (orthographic projections) and pictorial drawings (isometric, oblique, perspective), using various techniques
 2.6 Recognize the purposes of zoning laws and building codes in the design and use of structures.
 1.4 Interpret and apply scale and proportion to orthographic projections and pictorial drawings (e.g., 1/4" = 1'0", 1cm = 1m).

Zoning Definitions

Residential – houses, apartments, condominium, off campus housing, shelters (Riggs)

Commercial – businesses/services (stores, pharmacy, banks), malls, restaurants, night life, coffee café’s, hotels/motels (Micozzi)

Industrial – manufacturing (factories), warehouses, hospitals (Cochran)

Cultural – museums, schools, colleges/campus, community centers, libraries, theaters (Simmarano)

Recreational – parks, memorials, skate parks, botanical gardens, sports complex (Garcia)

DUE DATES

Mar. 28 th	Field Trip – Blackstone River & Canal State Park/Harding Street		
Apr. 3 rd	Advisory – Introduction to the Cross Curriculum Project		
Apr. 9 th	Building Proposals for approval due	Met deadline?	___ yes ___ no
Apr. 11 th & 13 th	Complete Math drawings/ Field Trip WAM	Met deadline?	___ yes ___ no
Apr. 13 th	Researched dates for the history timeline completed	Met deadline?	___ yes ___ no
Apr. 23 rd	Advisory – Progress Check		
Apr. 24 th	English editorial completed with rough draft attached	Met deadline?	___ yes ___ no
Apr. 30 th	Environmental key for science completed	Met deadline?	___ yes ___ no
May 1 st	History timeline completed	Met deadline?	___ yes ___ no
May 7 th	Construction of three-dimensional model completed	Met deadline?	___ yes ___ no
May 7 th	Poster board completed for Learning Fair	Met deadline?	___ yes ___ no
Apr. 23 rd	Advisory – Learning Fair Prep		
May 9 th	Learning Fair		

**MEET YOUR DEADLINES, DO NOT FALL BEHIND
 PUNCH 3 HOLES IN THIS SHEET AND STORE IN YOUR NOTEBOOK**

Vocabulary

Ratio -

Proportion -

Area -

Volume -

Scale -

Industrial Revolution -

Interval -

Timeline -

Economic Development -

Keynesian Economics -

Editorial -

Proposal -

Ecosystem -

Renewable Energy -

Recycle -

Environmental Friendly -

Carbon Footprint -

Design -

Building Zones -

Building Codes -

Plot Size -

R Value -

Solar Panel -

Wind Turbine -