Focus Question:
How can you design a building to improve people's lives in the 21st century?

Multi-use Building

should be → Energy efficient

type of → Organizer

designed using → *Engineering Design Process*

Energy efficient — concerns → **Thermal systems**

Energy efficient — consideration for → Location

has → Location

Engineering Design Process — influences → *Manufacturing Process*

criteria must combat → Urban sprawl

Location — factor in → **Structure**

Manufacturing Process — used to build → **Structure**

Urban sprawl

Structure — constrained by → **Zoning laws**

drawn to → Scale

undergoes → **Failure analysis**

carefully considers → **Failure analysis**

constraints may include → **Permit**

must have → **Permit**

constructed of → **Materials**

supports → **Load**

Failure analysis — tests → **Materials**

Materials — have → **Strengths**

Materials — have → Properties

Load — exerts → Force

Strengths — ability to withstand → Force

by: James Gorman