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STRUCTURAL  
BAE/MAE

## OFFICE BUILDING-G



EASTERN UNITED STATES

Introduction  
Existing Building  
Problem  
Proposal  
**Structural Depth**  
    Loads  
    Framing  
    Lateral  
    Connections  
Mechanical Breadth  
Architectural Breadth  
Conclusions

Place Holder,:  
Plan view with section  
line

## Castellated Beams

Place Holder,:  
Castellated Beams Construction

Castellated Beam Primary force Diagrams for beam shown  
in section

Castellated Beam Secondary Force Diagram for beam  
shown in section

Place Holder,:  
Example Calculations

Introduction  
Existing Building  
Problem  
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Structural Depth  
**Mechanical Breadth**  
    Duct Layout  
    Fan Size  
Architectural Breadth  
Conclusions

Place Holder,  
Architectural plan view  
with section line

## Mechanical Ducts

Place Holder:  
Original Section showing duct location and size

New Section showing duct location and size

Place Holder:  
Original Duct Plan

Proposed Plan