ASC Region 8 International Student Competition Design-Build Track

Pre-Work Task: Henry Cotton Redevelopment Project

Introduction:

The heart of Liverpool stands the Henry Cotton Building - a structure with immense potential yet burdened by its current challenges. You are presented with the invigorating task of reimagining and reshaping its future.

Overview:

Familiarise yourselves with the Henry Cotton Building. What is its background, present use, and the main challenges associated with it? Why is there a need for redevelopment and refurbishment?

Task 1: Architectural Design Transformation for the Henry Cotton Building

Aesthetic Revamp: How would you reimagine the current façade to make the Henry Cotton Building more inviting, complementing its central location and the proximity to the *Castle Street Conservation Area.*



Figure 1. Castle street conversation area

Addressing Layout Challenges: What specific layout issues have you identified? Propose design solutions that improve flow, accessibility, and space utilisation.

Creating Vibrant Spaces: Think about the demographic of the university and the broader Liverpool community. How can your design transform the building to serve diverse needs and interests, promoting collaboration, learning, and social interaction?

Integration with the Surroundings: How does your design respect and possibly draw inspiration from the nearby Castle Street Conversation Area?

Sustainable Vision: Propose construction techniques, materials, and energy-efficient building services that support the university's commitment to carbon neutrality. Additionally, provide insights into passive design measures that can further enhance the structure's environmental sustainability.

Maximising Functionality: With an expected increase in floor area, design spaces that are functional, flexible, and cater to the university's evolving needs.

Incorporating Modern Amenities: Ensure the building is equipped with state-of-the-art facilities and technologies to support academic and administrative activities.

Task 2: Procurement Strategy for the Redevelopment

Procurement Method Selection: Which procurement method aligns best with the project's unique requirements and challenges?

Stakeholder Involvement: Devise strategies to engage and manage stakeholders effectively, ensuring timely and quality project delivery.

Value for Money: Justify how your chosen procurement method offers the client the best value for money.

Contract Type Recommendation: Given the project's complexity, which contract type aligns with its risk profile and objectives, taking into consideration time, cost, quality, and sustainability measures.

Supplier and Contractor Selection: Detail the criteria for selecting suppliers and contractors, ensuring they're equipped to handle the project's unique challenges.

Risk Management within Procurement: Outline potential risks in your procurement strategy and your mitigation plans.

Task 3: Construction Planning and Programming

Alignment with Design Proposals: Develop a construction sequence that aligns with your design proposals. Which design elements have the most significant implications for the construction timeline?

Milestones & Key Activities: Identify the main construction milestones based on your design. Remember, sequencing is crucial; the order in which activities occur can profoundly impact the project's timeline and costs.

Scheduling Techniques: Visualise the project timeline using a Gantt Chart or a Precedence Diagram.

Risk Management: Highlight potential construction risks arising from your design choices and propose contingency measures.

Task 4: Site Management and Logistics

Site Analysis: Considering the building's location and its proximity to the Castle Street Conservation Area, identify site-specific challenges and conduct a detailed site analysis.

Logistics Plan: Formulate a logistics plan that addresses efficient transportation, storage, and deployment of resources, keeping in mind the site's constraints.

Health & Safety: Propose safety measures and protocols that cater to the site's unique challenges.

Stakeholder Notifications & Communication: Design a communication strategy to keep stakeholders informed and address concerns.

Environmental Protection: Propose strategies that ensure construction activities respect the cultural, historical, and aesthetic values.

Task 5: Cost Planning and Control for the Redevelopment

Establishing a Budget: Present a realistic, research-backed budget estimate that accounts for design details and construction methods.

Cost Breakdown Structure (CBS): Offer a CBS, shedding light on major cost areas.

Contingencies and Unforeseen Costs: How have you prepared for unforeseen costs in your budget?

Cost Monitoring and Control: Describe your strategy and tools for monitoring and controlling project costs.

Value Management: Implement value management practices to ensure quality outcomes without excessive costs.

Closing Note:

Your creativity, insights, and diligence are pivotal. As you shape the future of the Henry Cotton Building, remember you're also paving the way for a more innovative and sustainable approach to redevelopment.

Best of luck!