Architecture, Design & Materials Studio

Spring 2005, CMU, Arch #48-205, M/W/F 1:30-4:20 Class Website: www.andrew.cmu.edu/course/48-205

FINAL REQUIREMENTS -- PROJECT "2" -- Auto Expo

DUE: Sun. April 24, 2005, at 10:00pm, in MM308

MINIMUM REQUIREMENTS FOR ALL STUDIOS (Instructors may add more).

GENERAL

-- Review the original ASSIGNMENT and PROGRAM and be sure your design *intent* (why) and *solution* (how) offer an appropriate response to your charge to: "design a small, temporary exhibition space for a single automobile on a site near the convention center." Be sure all required elements have been included! -- All presentations must fit WITHIN the frame of ONE VERTICAL pinup board (44"wide x 88"tall). All sheets to be either 22" or 44" wide, and 22", 33" or greater multiples of 11" tall. With permission of coordinator, students may use 2 boards. -- Compose an effective, coherent layout to show your design (consider using a computer for composition)! FILL the pages for effective presentations, combine several drawings on one piece of paper, where effective!

-- Work to create a MEMORABLE PRESENTATION, with work that represents the culmination of the 2nd year studio experience. Use any appropriate medium approved by your instructor. Drawings must be CLEAR, BOLD, read well from 10ft, reproduce well, and distinguish between line weights!

-- Clearly and unobtrusively label all drawings with the drawing name only (North Elevation, Section A-A, etc.). For lettering, trace over mechanically produced type, use stencils, or computer generated text on sticky-back. Avoid handwriting! -- Scale versions of car and scale figures should be shown in ALL work.





1) BUILDING PLAN on SITE, 1/4"=1'-0"

-- The plan should evocatively weave together the SPACES in the building, the PROCESSION through the building, and the nature of the MASSES and MATERIALS that enclose the building.

-- Orient plan with North Arrow UP (Liberty Ave. at TOP of page)

- -- Draw your studio's entire SITE boundaries in order to locate your building footprint
- -- Include a realistic rendering of your CAR in plan (dotted if above ground)

-- Create accurate and evocative rendering of wall thickness, columns, bathroom fixtures, windows, door swings, built-in furniture, counters, stairs, glass, mullions, etc.

-- Clearly distinguish walls that are CUT vs. short walls or railing through line weight (cut = HEAVY).

-- Indicate important overhead features like skylights, prominent beams, double height spaces, roof overhangs, etc. with DOTTED lines.

-- Indicate section cuts with SIMPLE angled-arrow line (A←) outside of the plan of your building.

2) PRINCIPLE BUILDING SECTION, 1/2"=1'-0"

-- Choose section that best represent the SPATIAL EXPERIENCE of main exhibit space and your car. -- Work to construct a TECHNICALLY ACCURATE section, including realistic glazing systems, realistic wall & floor thicknesses, realistic cornice, parapet, and roof details (i.e. no "box-top" roofs), as well as all other important design features related to materials and assembly.

- -- All sections must include a SCALE FIGURE and a realistic rendering of your CAR
- -- Clearly distinguish elements that are CUT versus things in elevation through line weight
- -- Show interior elevations as appropriate behind your section in lighter line weight
- -- Show a HEAVY ground line on either end of your building extending out to STREET CURB.
- -- Show URBAN context, including all buildings "behind" your site

3) LIBERTY AVE. ELEVATION or HEAD-ON MONTAGE, 1/4"=1'-0

-- All students must create an elevation drawing or montage looking straight at the Liberty Ave. side of their building site. Other elevations are optional, dependent on design, site and studio req's.

-- The elevation is the building's public "face", its "facade," as well as the inter-face between interior and exterior. It should communicate the IMAGE of your building in the Liberty Avenue urban context, as well as the MATERIALITY and DEPTH of your facade in relation to interior spaces.

- -- Consider adding shading and color to give a sense of texture, materials, scale, light, and experience.
- -- Show the URBAN context of all buildings "behind" your site and neighboring Auto Expo buildings
- -- Include a HUMAN scale figure, and consider showing a car or bus for scale

4) INTERIOR PERSPECTIVE

-- Create a perspective to highlight the primary FUNCTION of your building ("to exhibit a single car"), to

- focus on the EXPERIENCE, the EXHIBIT concept, and the MATERIALITY of your interiors.
- -- All perspectives should include scale figures and a realistic rendering of your automobile.

5) PRESENTATION MODEL, 1/4"=1'-0"

-- The goal should be to create a well-crafted representation of the MATERIALITY and construction details of your design, to show how the physical presence of materials create specific experiences.

-- Models must ACCURATELY show all <u>structural systems</u>, wall, ceiling, and roof <u>thicknesses</u>, as well as other significant building components such as window mullions. Be sure to choose your model materials carefully so they are "<u>to scale</u>" and have a high <u>level of detail</u> that corresponds to the drawings and constructed building. Avoid large sheets of acrylic or plexi-glass to represent glazing systems, or simple sheets of cardboard as ceilings or walls. -- Model of building must sit on the ENTIRE SITE, and be linked to three "partner sites." Models will be displayed in one long 72" row to provide scale and context for your site. If any partner is digging below grade, ALL students in the group must raise their base to align ground levels.

-- Be sure roof comes off to display primary exhibit space

-- Include a realistic scale model of your car as well as scale figures.

6) EXPLODED AXONOMETRIC OF BUILDING

-- A drawing that clearly articulates the primary building elements, the construction and assembly methods of your Expo building.



7) DETAILED WALL SECTION (min. 1"=1'-0") or LARGE MATERIAL MOCK-UP

-- Vertical wall section should show principal floor-wall and wall-roof intersection, including detailing of structural system, exact building materials, precise openings, cornice, etc.

-- This requirement should demonstrate your research, expertise, and command of the M&A details of your building down to the smallest level of detail, to show how materials and assembly can augment or add to the power and enrich the experience of your design! Consult with Prof. Steve Lee for co-requirements for his class related to M&A

POSSIBLE STUDIO-SPECIFIC ADDITIONAL REQUIREMENTS INCLUDE:

8) ADDITIONAL BUILDING SECTION, 1/4"=1'-0"

- -- Construct another section to communicate the space (same requirements as above).
- -- Avoid duplicating or repeating information or ideas from other drawings, including the elevation.

9) EXTERIOR PERSPECTIVE(s) or MONTAGE(s)

- -- Create hand-constructed, computer generated, or Photoshop-improved 3D renderings of your building
- in its urban context to give a sense of approach, experience, materiality, scale, and image.
- -- Avoid excessively repetition of information from the "Liberty Ave. Elevation"

SUPPLEMENTARY CONTEXT and DESIGN PROCESS WORK:

Creatively combine the following drawings to maximize the contextual information about your design:

- 10) ORIGINAL "DESIGN SUMMARY"
- -- Every student must pin-up original or slightly improved "Design Summary" sheets
- 11) CONTEXT PLAN, minimum 1/50"=1'-0"
 - -- Every student should create a site plan at of the entire Expo site, including Liberty Ave., the large triangular space behind the sites, as well as all surrounding facades, with a ROOF PLAN of your building as well as of the "Partner" buildings drawn in the appropriate sites.
- 12) DIAGRAMS, SKETCHES, PROCESS WORK
 - -- Include helpful information to help communicate the design intent, especially for reviewers and critics that are NEW to the problem, site, car, etc.
- 13) CAR SUMMARY

-- Consider creating an 8.5"x11" Summary sheet about their car, including photos all the most important information that relates to you design

- 14) CONCEPT STATEMENT
 - -- Consider writing a 100 word "Concept Statement"
- **15) VERBAL PRESENTATION**

-- Carefully construct your verbal presentation to communicate effectively the main ideas about your building, without being overly descriptive or overly terse or concise.

PROJECT DOCUMENTATION: DUE Mon. May 1 in Kai's Mailbox & Blackboard dropbox

- Refer to instructions on "Documentation" under "Resources" on the studio webpage.
- Create documentation of your project for review, website and portfolio
- Because of the end-of-year deadlines, late presentations will be HEAVILY penalized!