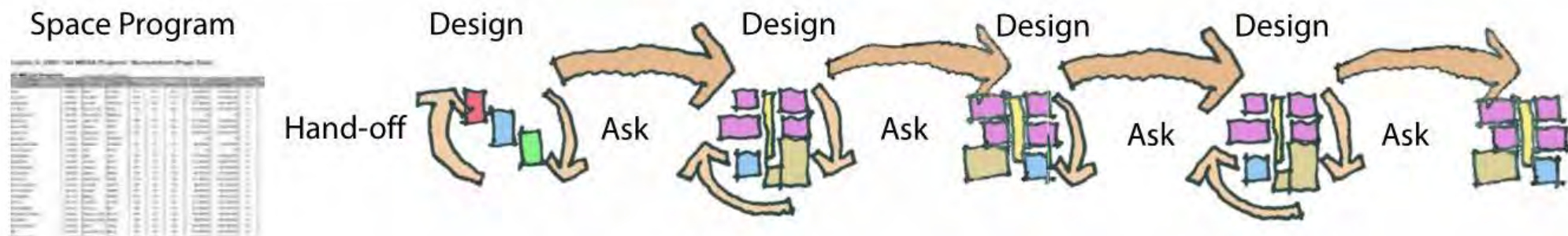


Applying Lean Process

Traditional Iterative Design (User-group Meeting Process)



Lean Based Design Process



Lean Design Process > 7 Shells

AMBULATORY CARE FACILITY
SHELL 01

Evaluation Criteria

- Building Energy Efficiency
- Energy Use Intensity
- Space Use Efficiency
- Flexibility for Future Use
- Material Use

Scheme Attributes

- Energy Use Intensity: average
- Space Use Efficiency: above
- Flexibility for Future Use: above

Scheme Pros

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Scheme Cons

- Lack of privacy between department offices and patient rooms causing building to appear less secure traffic
- Daylight and views
- Energy Use Intensity
- Space Use Efficiency

AMBULATORY CARE FACILITY
SHELL 02

Evaluation Criteria

- Building Energy Efficiency
- Energy Use Intensity
- Space Use Efficiency
- Flexibility for Future Use
- Material Use

Scheme Attributes

- Energy Use Intensity: average
- Space Use Efficiency: below
- Flexibility for Future Use: below

Scheme Pros

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Scheme Cons

- Lack of privacy between department offices and patient rooms causing building to appear less secure traffic
- Daylight and views
- Energy Use Intensity
- Space Use Efficiency

AMBULATORY CARE FACILITY
SHELL 03

Evaluation Criteria

- Building Energy Efficiency
- Energy Use Intensity
- Space Use Efficiency
- Flexibility for Future Use
- Material Use

Scheme Attributes

- Energy Use Intensity: average
- Space Use Efficiency: below
- Flexibility for Future Use: below

Scheme Pros

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Scheme Cons

- Lack of privacy between department offices and patient rooms causing building to appear less secure traffic
- Daylight and views
- Energy Use Intensity
- Space Use Efficiency

AMBULATORY CARE FACILITY
SHELL 04

Evaluation Criteria

- Building Energy Efficiency
- Energy Use Intensity
- Space Use Efficiency
- Flexibility for Future Use
- Material Use

Scheme Attributes

- Energy Use Intensity: average
- Space Use Efficiency: average
- Flexibility for Future Use: average

Scheme Pros

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Scheme Cons

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

AMBULATORY CARE FACILITY
SHELL 05

Evaluation Criteria

- Building Energy Efficiency
- Energy Use Intensity
- Space Use Efficiency
- Flexibility for Future Use
- Material Use

Scheme Attributes

- Energy Use Intensity: average
- Space Use Efficiency: average
- Flexibility for Future Use: average

Scheme Pros

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Scheme Cons

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

AMBULATORY CARE FACILITY
SHELL 06

Evaluation Criteria

- Building Energy Efficiency
- Energy Use Intensity
- Space Use Efficiency
- Flexibility for Future Use
- Material Use

Scheme Attributes

- Energy Use Intensity: average
- Space Use Efficiency: average
- Flexibility for Future Use: average

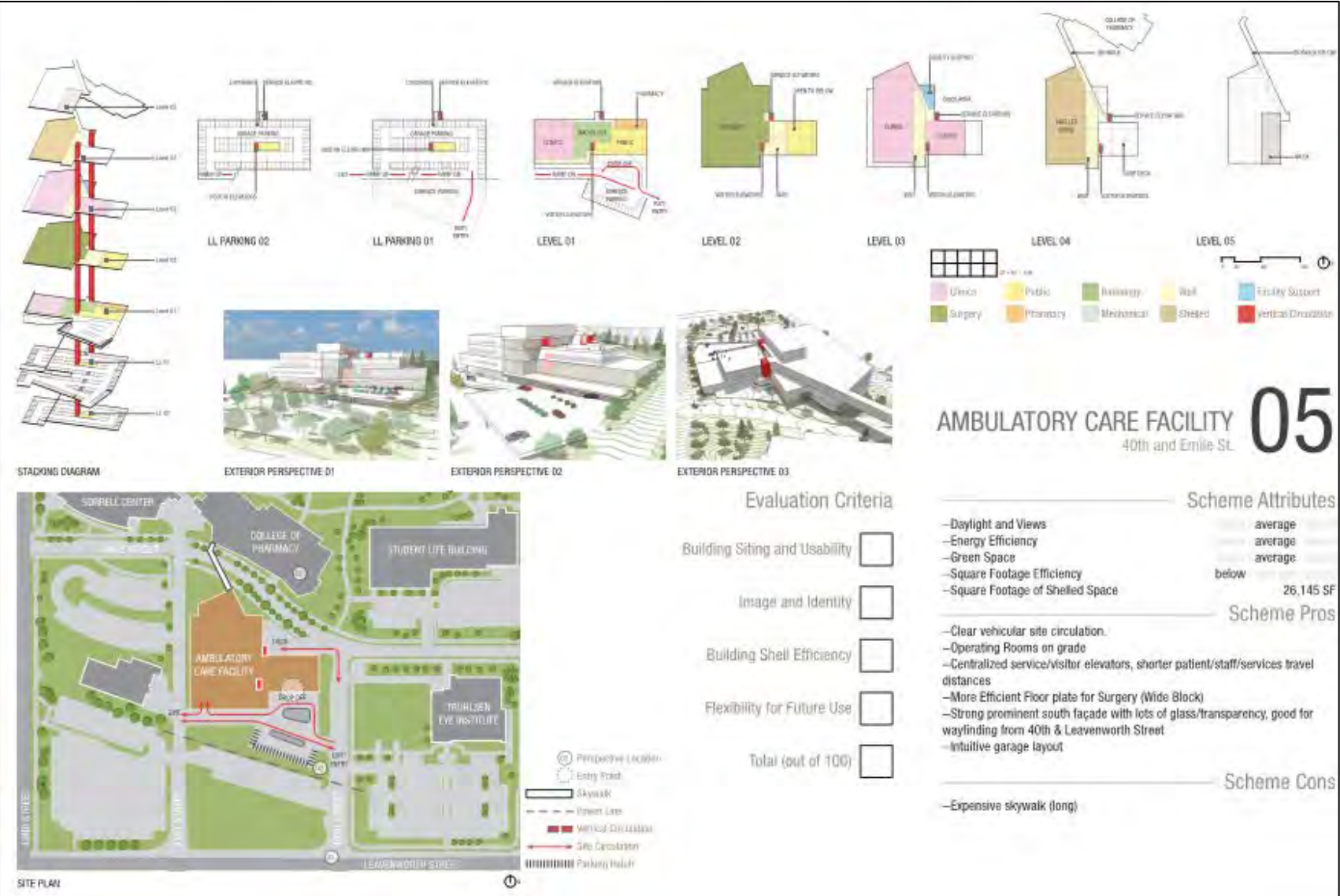
Scheme Pros

- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Scheme Cons

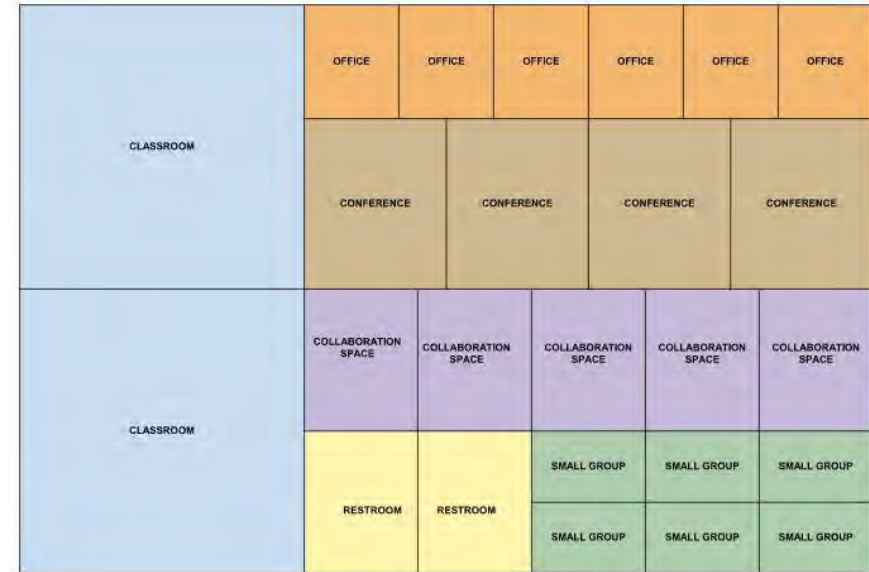
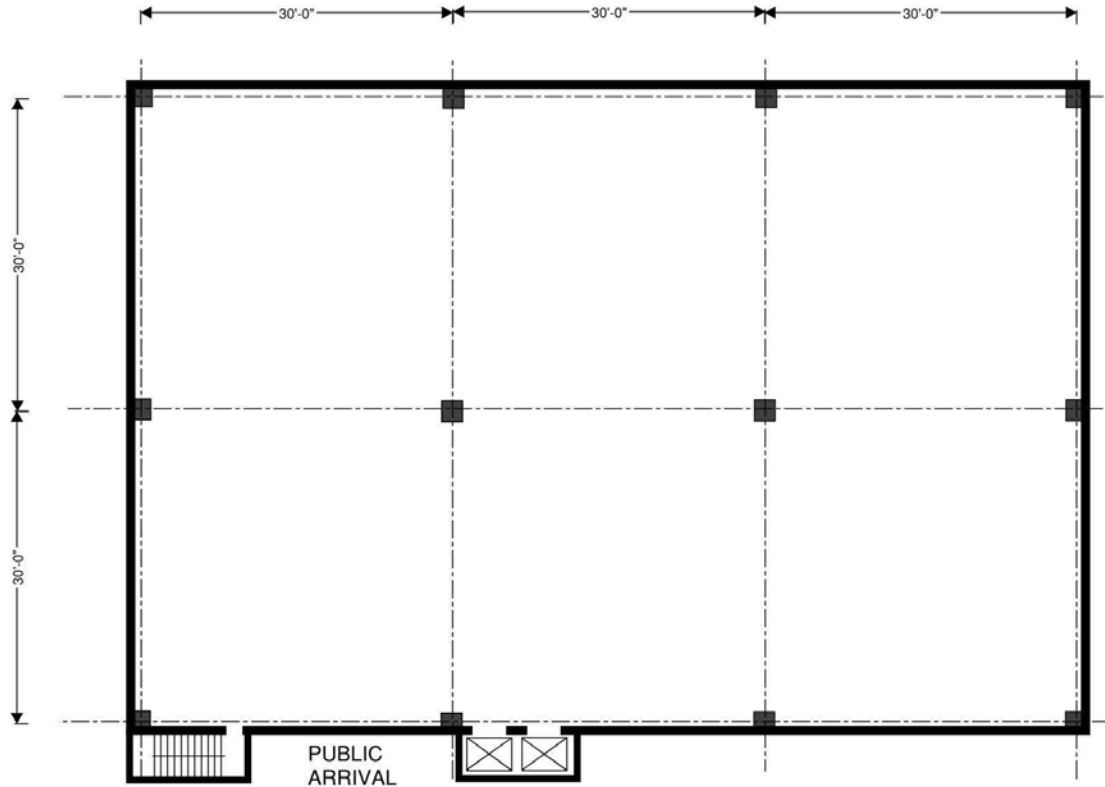
- Daylight and views
- Energy Efficiency
- Space Use Efficiency
- Space Use of Shared Space

Lean Design Process > Choose by Advantage



Activity – Simulate 3P

Step 1: Generate Plan Options



Activity – Simulate 3P

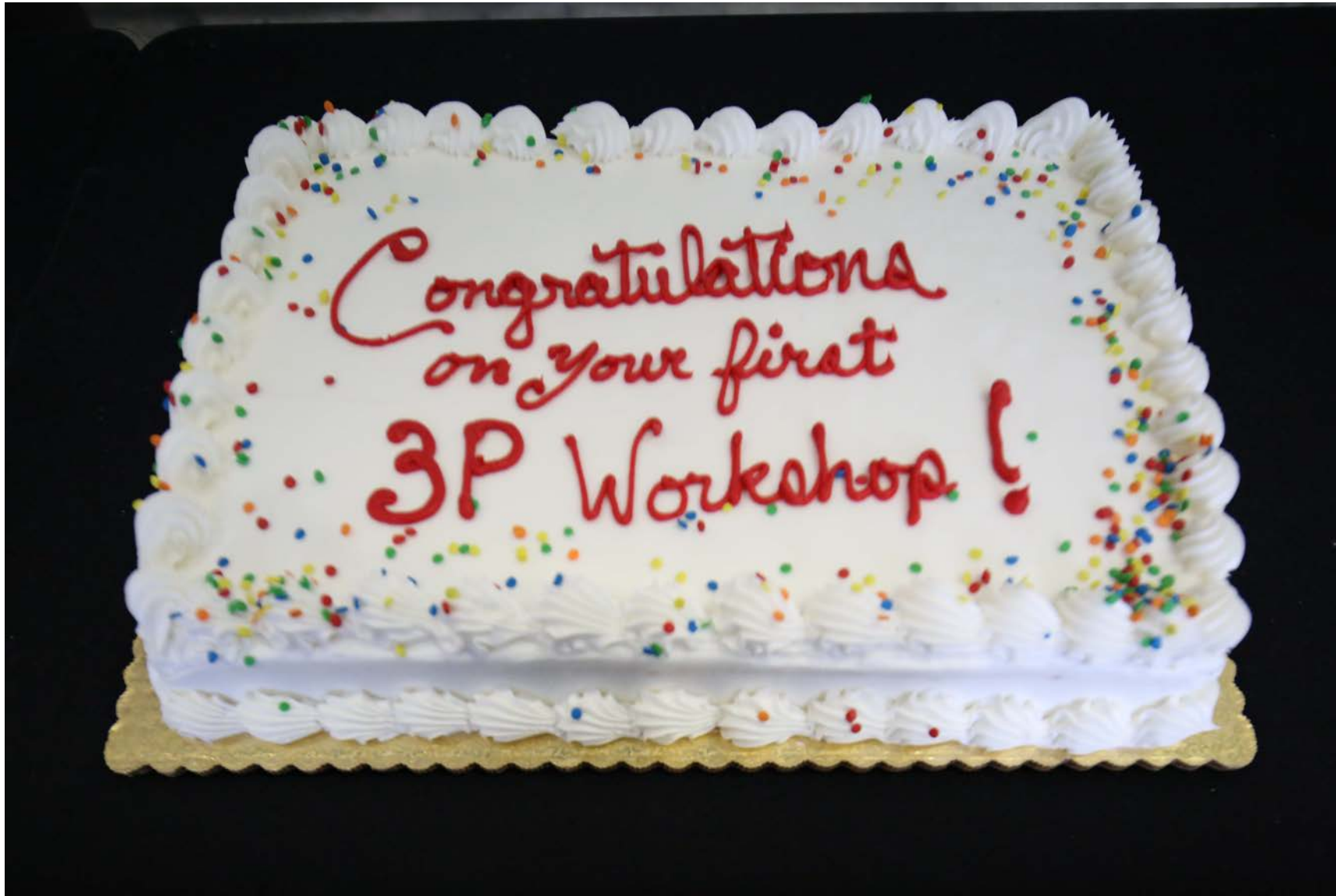
Step 1: Generate Plan Options

- Each tables will split into two groups
- Each Group to generate 1 option using provided plan and space kit
- Goal: Lay out simple clinic option
- Timeline: 4 minutes

Step 2: Choosing by Advantage

- Groups to combine and discuss plan
- Choose and select preferred option utilizing method described
- Timeline: 4 minutes





3P – Production Preparation Process

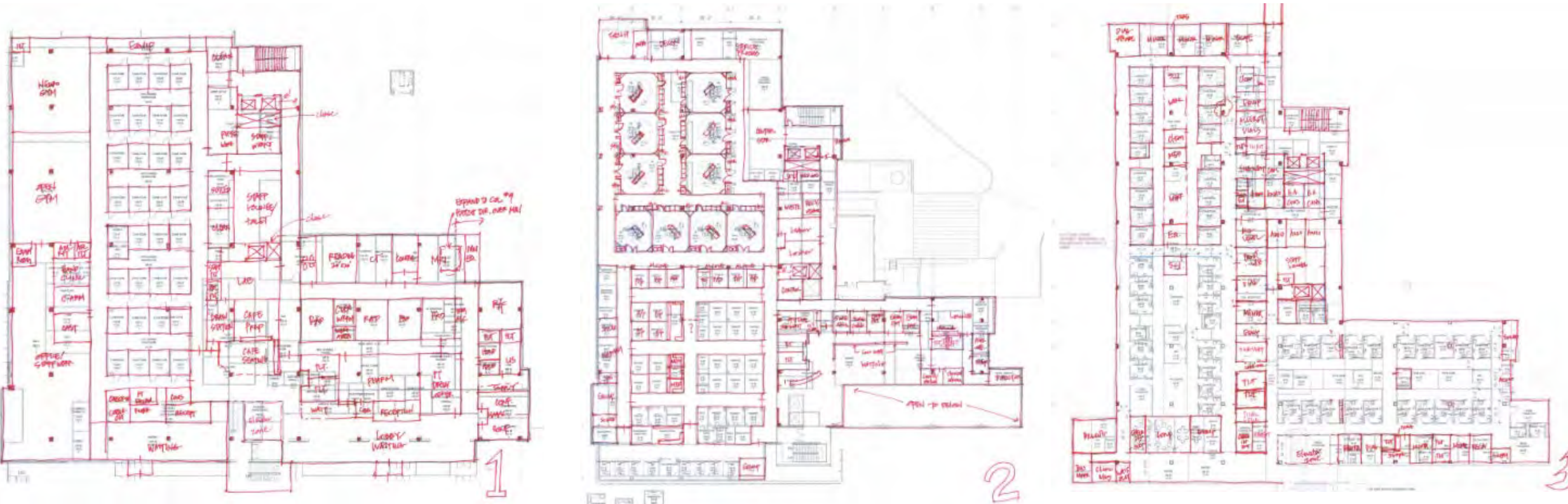


Lean Design Process > 3P Outcomes



**Replaces the traditional Schematic Design Process*

Lean Design Process > 30/60/90 Day Meetings



**Replaces the traditional Design Development Process*