

IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE



Presented by:
Carmen Aguilar-Wedge
Namrata Hegde
Shuaib Hadi

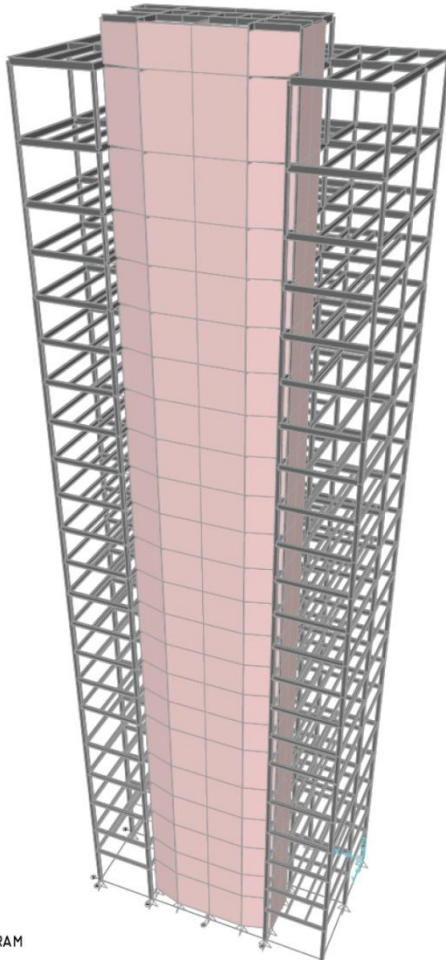
Instructors:
Jorge Cobo
J. Shen

Team Members:
Oladipo Animashaun
Alex Baur
Michael Cullen
Yoojee Kim
Steve Kuo
Christopher Lee
Yongdoo Lee
Karol Rybaltowski
Yousef Shadi



IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE



- PROJECT BACKGROUND INFORMATION & OVERVIEW
- TEAM ORGANIZATION
- PROJECT ORGANIZATION
- PROGRESS
- FUTURE GOALS



IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

BACKGROUND INFORMATION & OBJECTIVES

Spring 2009

Preliminary Design. Analysis found structural deficiencies.

Fall 2009

The 22 story hotel will be re-designed and analyzed. The team will be producing various design and structural drawings representative of the project and operation of the building.



IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

STRUCTURAL

ARCHITECTURAL

PHASE 1

- SAP2000 MODEL
- LOAD CASES
- PRELIMINARY STEEL DESIGN

- FLOOR PROGRAM
- FLOOR PLANS
- FINALIZE DESIGN

PHASE 2

- FINALIZE LOADS
- FINALIZE MODEL
- DESIGN STEEL
- FOUNDATION

- GREEN ROOF DESIGN
- FAÇADE DESIGN
- AESTHETIC DESIGN
- FINALIZE SCHEDULE

PHASE 3

- FINALIZE SCHEDULE
- FINILIZE PLANS

- SCALE MODEL

IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

O
R
G
A
N
I
Z
A
T
I
O
N

T
E
A
M

ARCHITECTURE
DESIGN GROUP

Namrata Hegde
Michael Cullen
Oladipo Animashaun
Steve Kuo
Dawveed Scully
Yoojee Kim

STRUCTURAL
GROUP

Steel structure
SAP Models
Foundations

Shuaib Hadi
Yongdoo Lee
Namrata Hegde

Christopher Lee
Carmen Aguilar
Yongdoo Lee

Karol Rybaltowski
Alex Bauer

ELECTRICAL

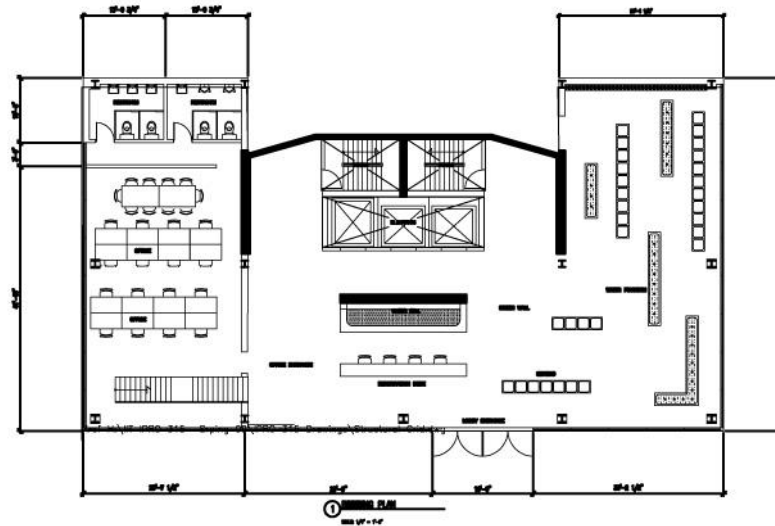
Shadi Yousef

IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

P
R
O
G
R
E
S
S

ARCHITECTURAL



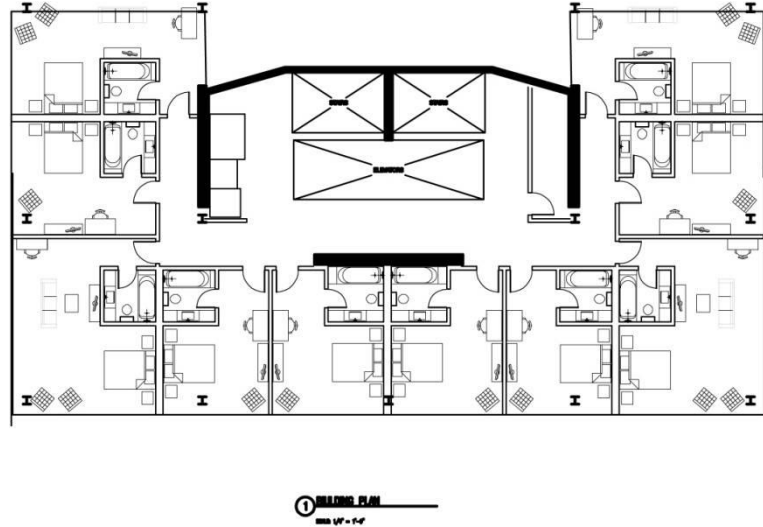
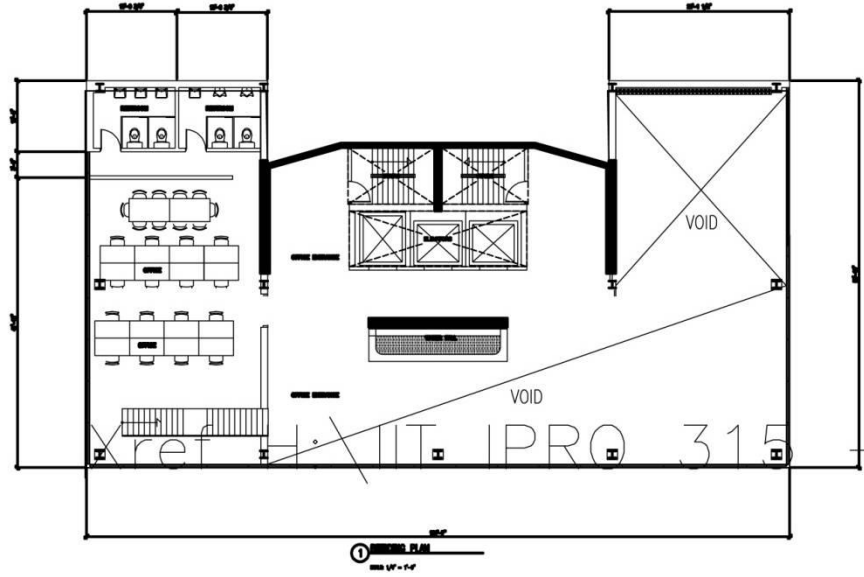
MOVED THE CORE IN ORDER TO
ACHIEVE BUILDING FLOOR
EFFICIENCY AND ALSO SOLVE THE
STRUCTURAL DEFICIENCIES

ROOF
ROOF
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
MECHANICAL
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
TYPICAL SUITES
SPA/GYM
CONFERENCE
CAFE
BALLROOM
RESTAURANT
OFFICES/BAR
LOBBY

BUILDING FLOORS



PLANS OF TYPICAL FLOORS





IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

P
R
O
G
R
E
S
S

STRUCTURAL

- Dead and live loads have been calculated
- SAP Modeling in Progress
- Structural calculations using Matcad were done to design a composite beam system
- Preliminary Design of Structural members is in progress
- CAD Drawings of each floor is in progress



IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

L
O
O
K
I
N
G

A
H
E
A
D

- Continued collaboration among team members to fix Structural deficiencies
- Design of Load bearing members
- Design of a foundation system
- Fix torsional problem if it may arise



IPRO 315

DESIGN OF A LARGE SCALE STRUCTURE

Q
U
E
S
T
I
O
N
S

