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Adjudication Activities Co-Location Facility

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Project Information

- 150,000 SF
- 3 Story Office Building
- Architectural and Structural were done in Revit.
- Other Disciplines were done in AutoCAD 2006 with backgrounds exported from Revit.

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STAIR
UP
DIR
CONF
OFFICE
WRK RM
JOINT STAFF
FILES
DOHA
BREAK
UPS
PUMP
ELEC
MECH
BLDG MANAGEMENT
WS
WOMEN'S
MEN'S
ELEV MACH
ELEV LOBBY
JAN
COMM
SECR CLS
ELEC
MAIL RM
RECEIVING
CENTRAL BURN BAG RM
VESTIBULE
LOBBY
EXEC BRIEFING
TRAINING
INTERVIEW CONF
SEC SYS
BLDG SUP
SERVER
DISCO
SEMI-PRIVATE
WORK ROOM
COFFEE/ WRK RM

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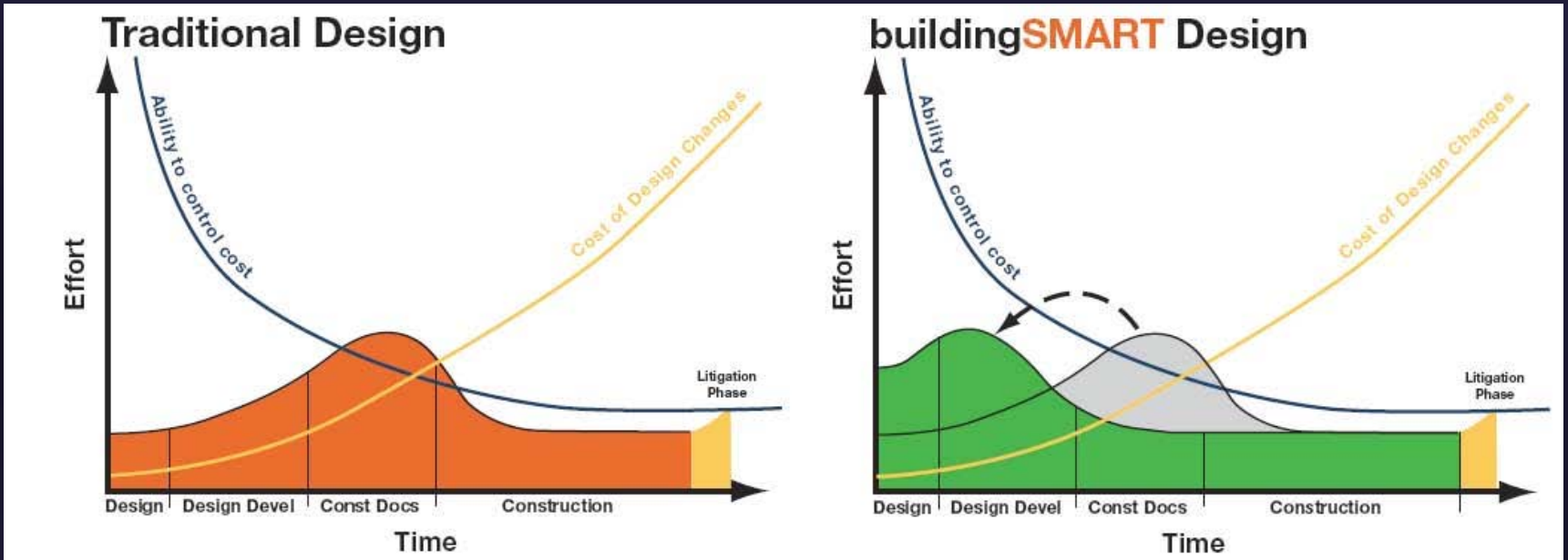
1
A101 A200 **NORTH ELEVATION**
SCALE: 1/16" = 1'-0"

Project Planning



"Earlier Decision Making Improves Ability To Control Costs" – Graphs courtesy of Patrick MacLeamy, President of HOK and IAI International

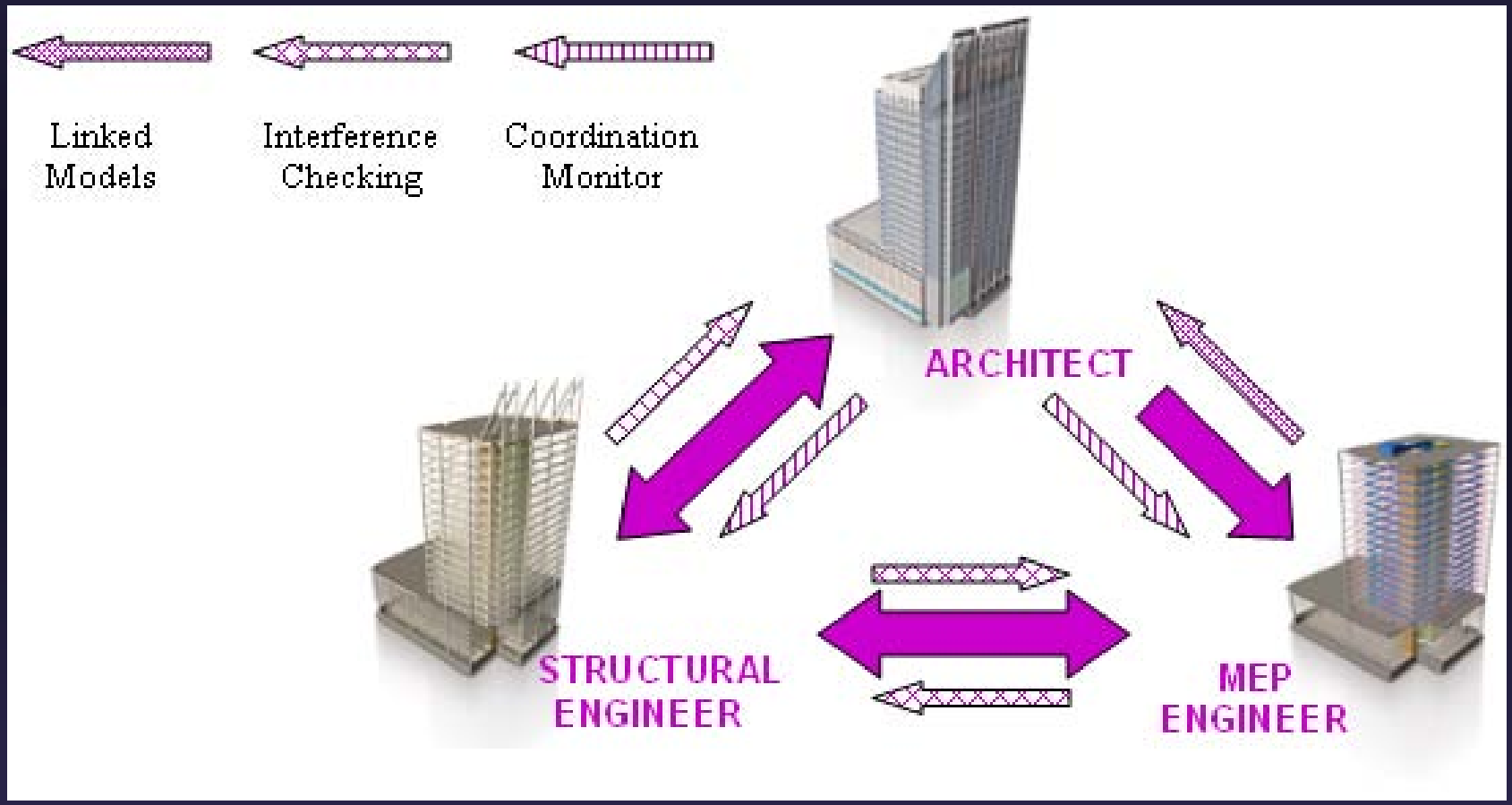
image source: http://construction.ecnext.com/mcgraw_hill/includes/SMRI.pdf

- Plan for multiple people working on the model (Revit – worksets).

Team Coordination

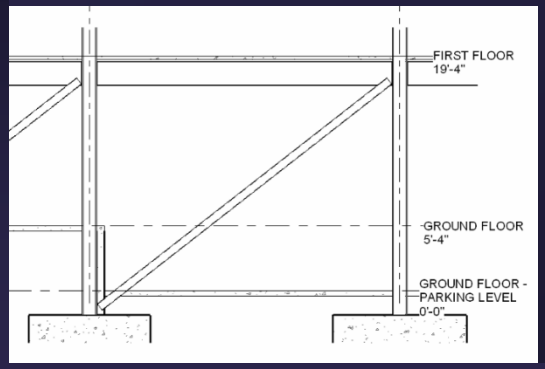
- Architectural and Structural in Revit with Linked Models.
- Linked models were regularly checked for interferences and coordination.
- MEP in AutoCAD with backgrounds exported from Revit.

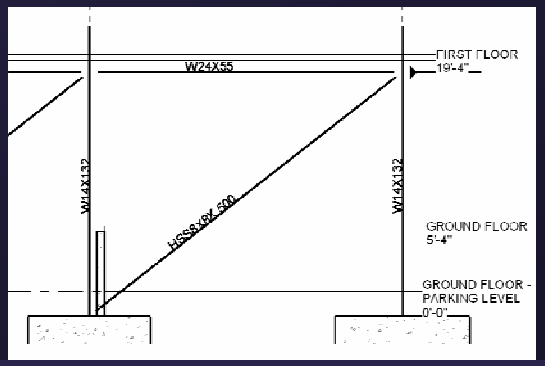
Team Coordination

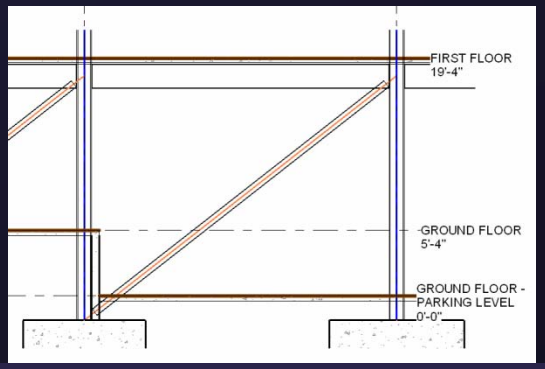


Team Coordination - Strategies

- Discuss who “owns” what.
- Example – CMU Shafts:
  - Architectural for window & door placement.
  - Structural for structural analysis.
- View settings must be coordinated.







Design Process - Schematic Design

- Requires more input from designers and senior staff due to decisions being made sooner.
- Don’t “cut corners” on the model.
- Model can be built quickly for future design flexibility – it’s a balance.

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Design Process - Schematic Design

- Coordinate with other disciplines.
- Model windows as windows.
- Pay attention to bottom and top of walls.
- Model doors with sidelights as such, not doors with a window beside it.
- Pay attention to material changes.
- Don’t over model! Use 2D model elements where ever possible.

Design Process - Construction Documents

- Detailing is much easier than anticipated.
- If you get through Design Development and maintain a quality model, then Construction Documentation is simple.

Design Process - Construction Documents

- Tough to overcome the AutoCAD mentality.
- Remember, it’s a model with multiple views.
- Avoid last minute changes.
- Use caution when using the model for presentations or walkthroughs with little time.

Results

- Like other programs, when to start in Revit is still debated.
- Better coordinated documentation.
- Most staff does not want to go back to AutoCAD or Microstation.

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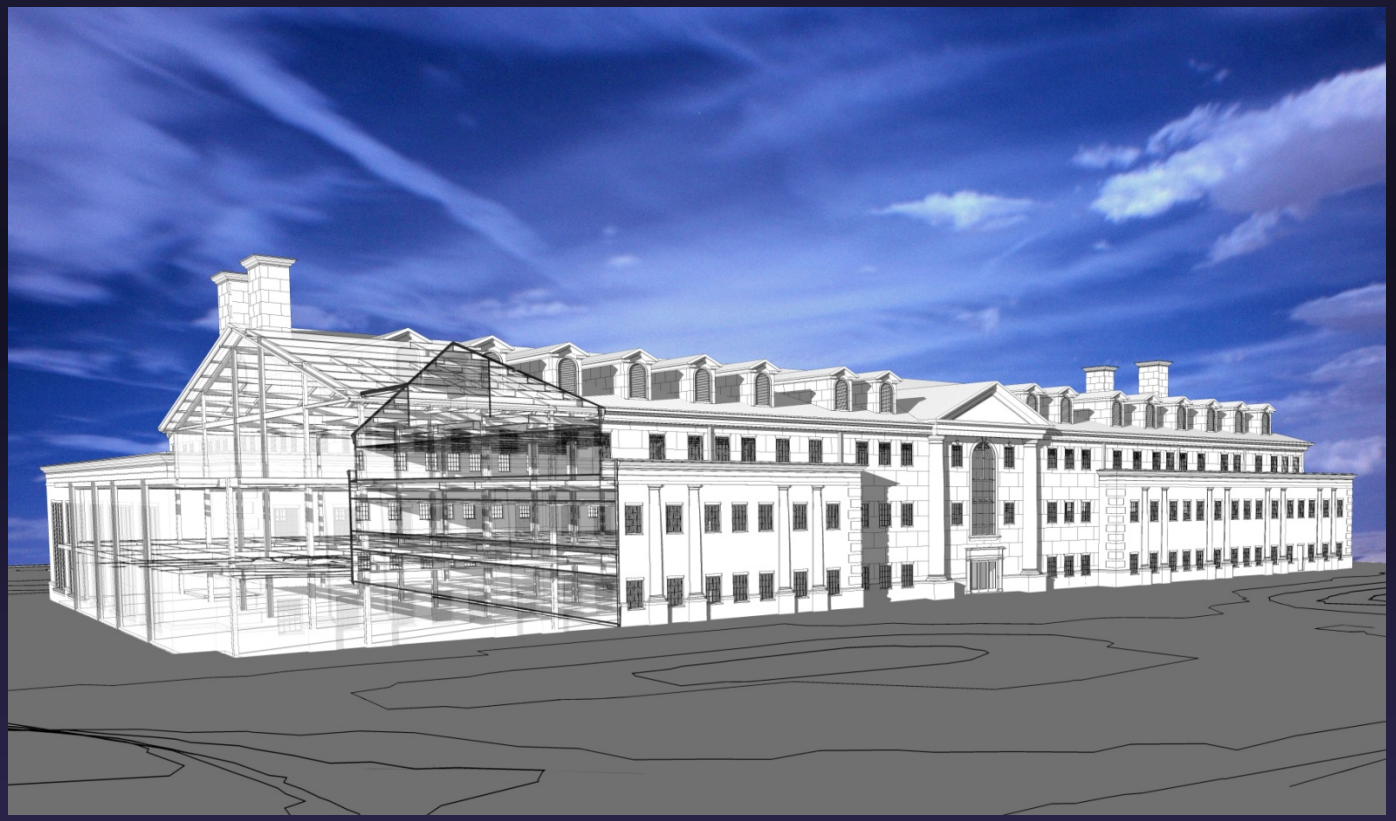
Questions