

Department of State Presentation 02-13-17
Overseas Buildings Operations

Building Information

BIM

Modeling



Building Information Model (BIM) is a database of the information contained within the building process.

Information appropriate to each users' needs can be extracted at any time.

**D/B Team
Information**

Schedule



**Subcontractor
Design Info.**

**Materials and
Equipment**

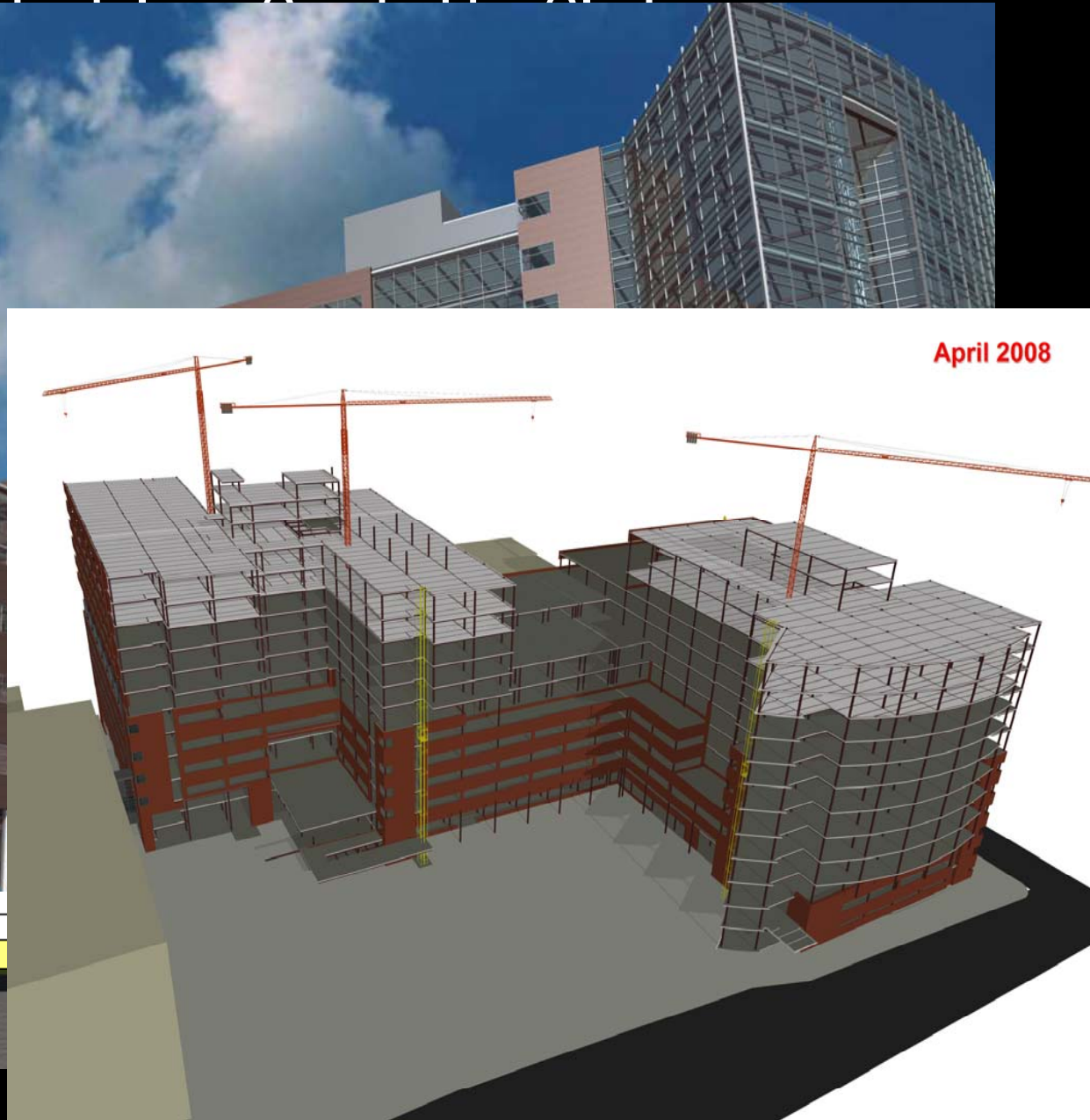


**Resources,
Sequences,
and
Durations**

**Quantities, Cost, Size,
Location, Specifications,
etc.**

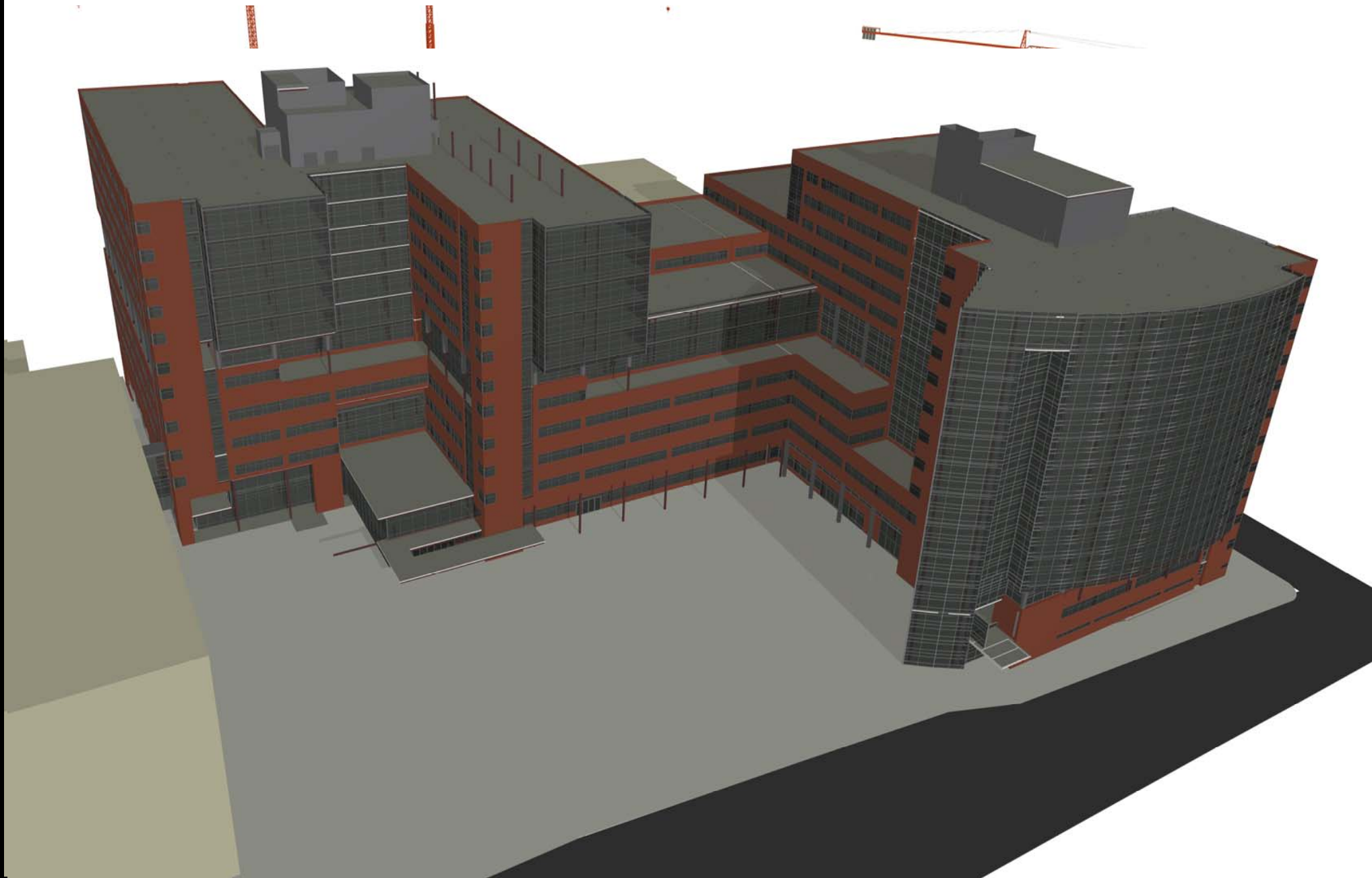
Johns Hopkins Hospital

Modeled by Clark



CNCB0130	Area 4 Club Level Concrete on Metal	15	15
CNCB0140	Area 5 Club Level Concrete on Metal	15	15
SUITE LEVEL			

September 2008



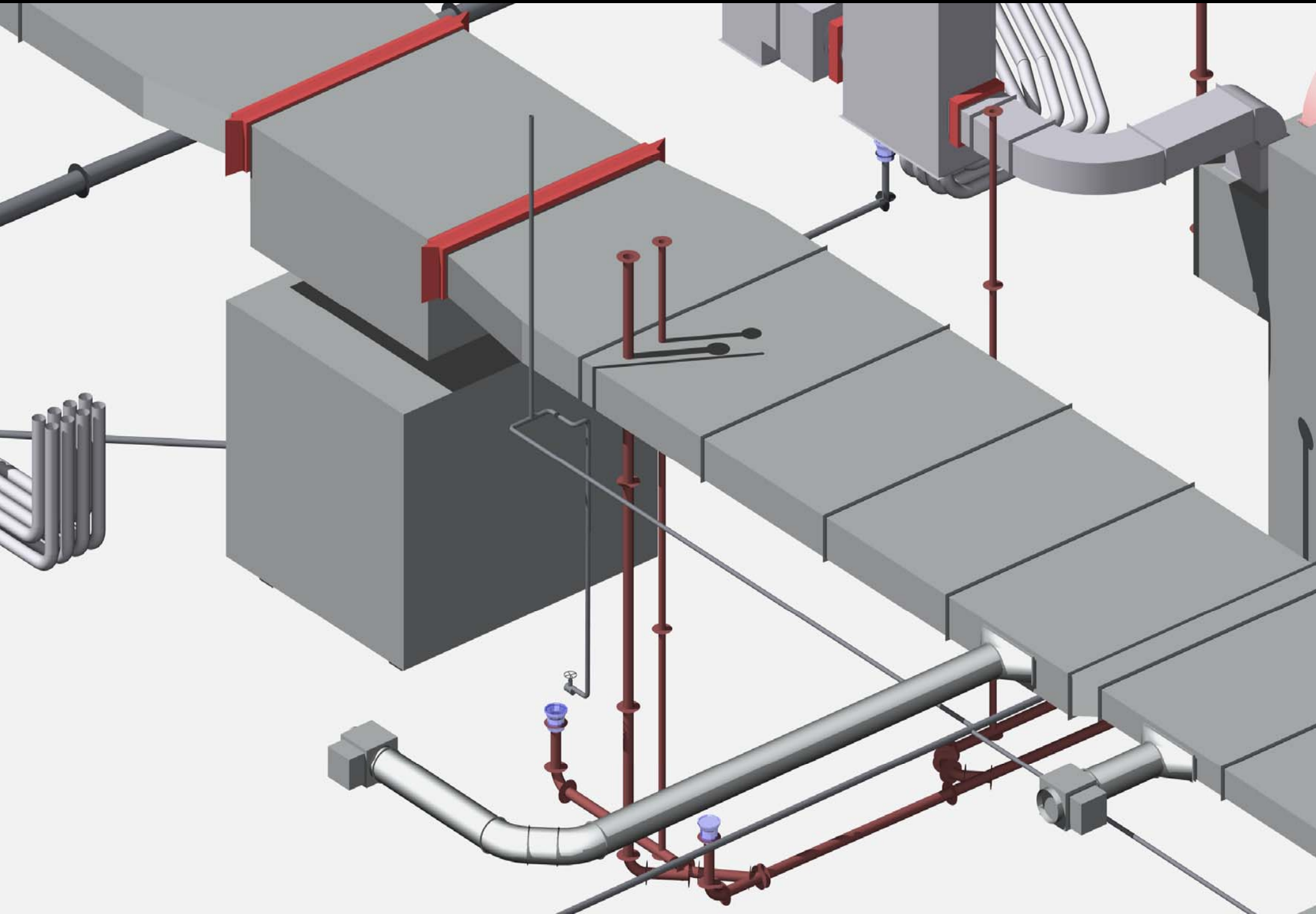
11/27/06

Stair Model (Partial)
and IFC Export by
American Iron Works

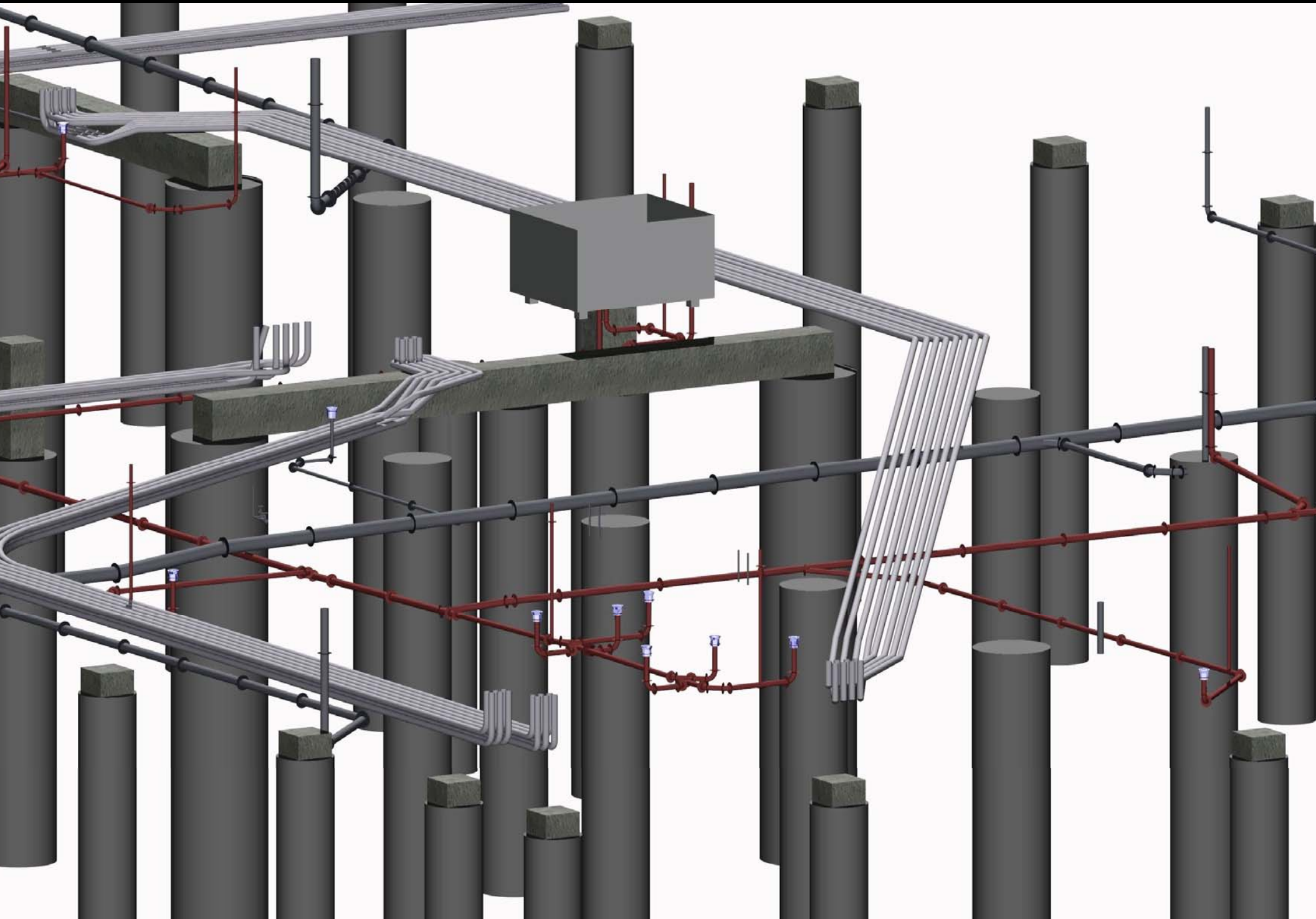
IFC 2x3 Import and Lightwave Render
by
Clark Construction Group, LLC



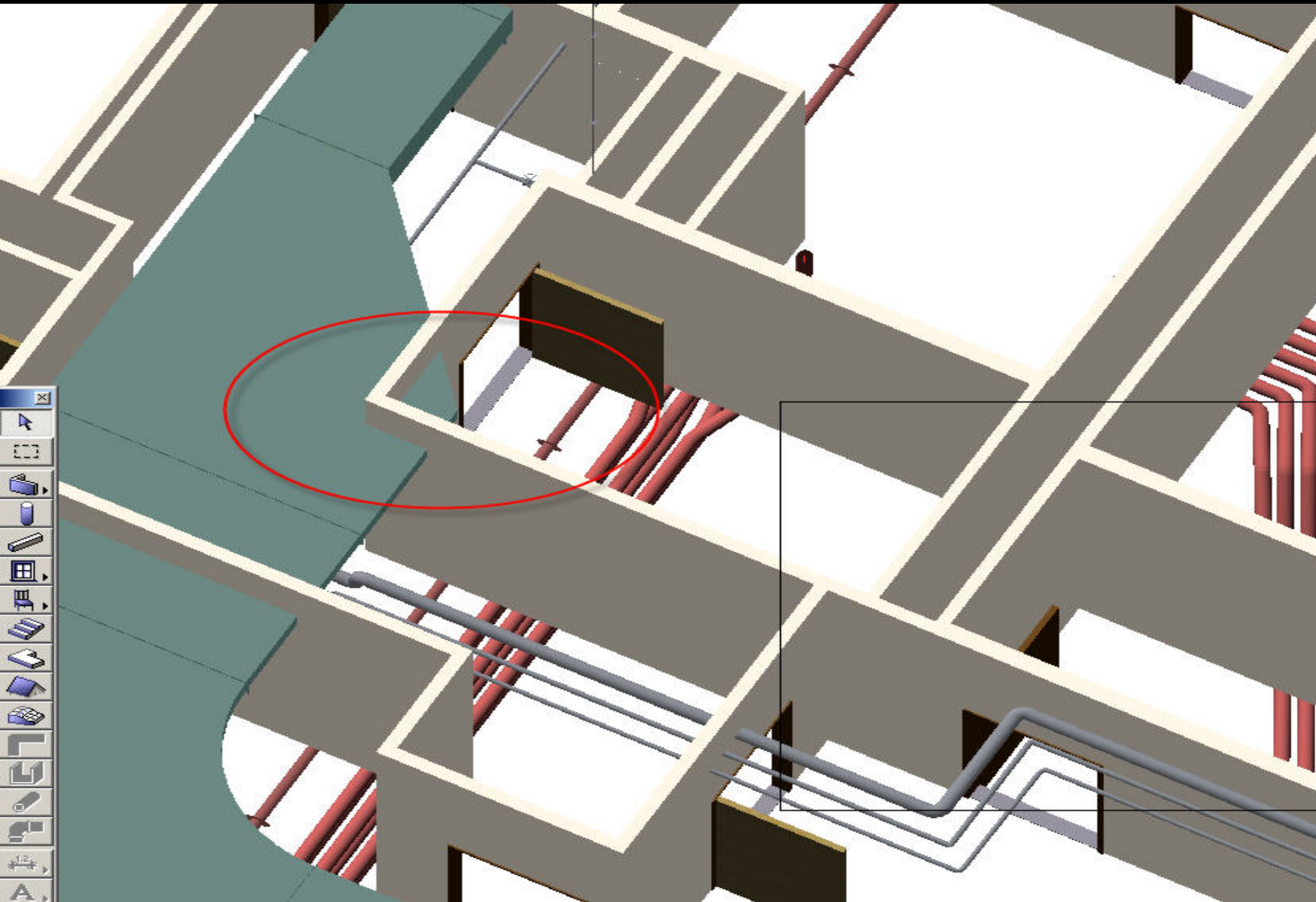
MEP Coordinated Drawings



Under Slab Coordinated Drawings



MEP Coordinated Drawings vs. Architectural



Conflict Resolution - Elevator Pit RFI

Mission Ridge at Westfields
(112642)
BIM RFI 02
06/12/06

Sketch 1 of 1 (includes
detail A)

Question #3: Per S2.00 Note D-5-B:
Walls & Piers Concrete Mix =
4000psi / Caissons = 3500psi
What psi conc. mix
should be used at
the slab under
the two steel
columns?

Question #4: What is the
Rebar Configuration
at Col Lines C/8 at
the top of the wall?
Note: The Column
is shown properly
sized.

Question #2
What is the Top-of-
Caisson Elevation?
-6'-0" per S2.01 /
-7'-0" as shown here
with 1'-2" Slab / or
-7'-4" (with 1'-6" slab)
Note: Applies to all four
caissons at elevator pit.

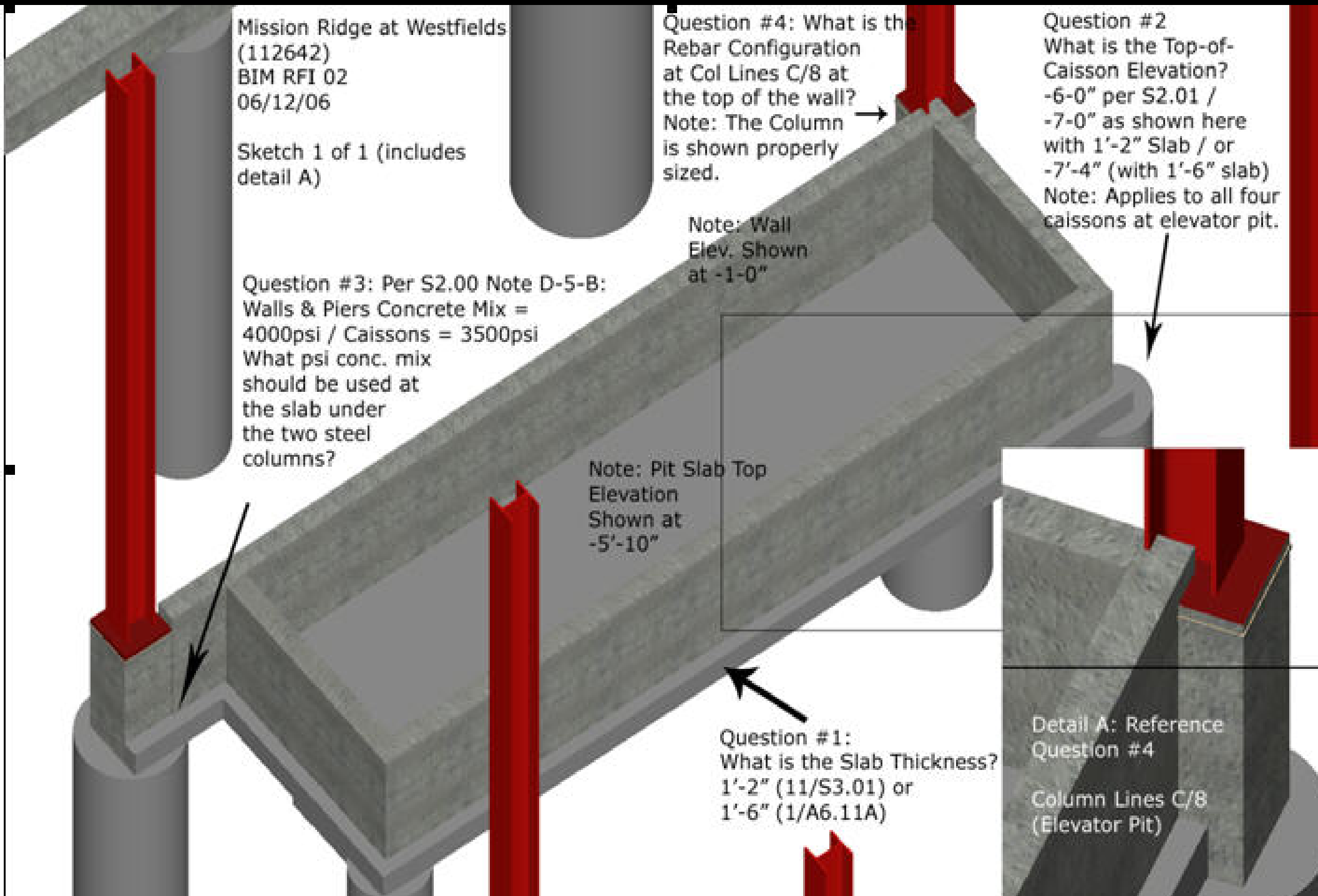
Note: Wall
Elev. Shown
at -1'-0"

Note: Pit Slab Top
Elevation
Shown at
-5'-10"

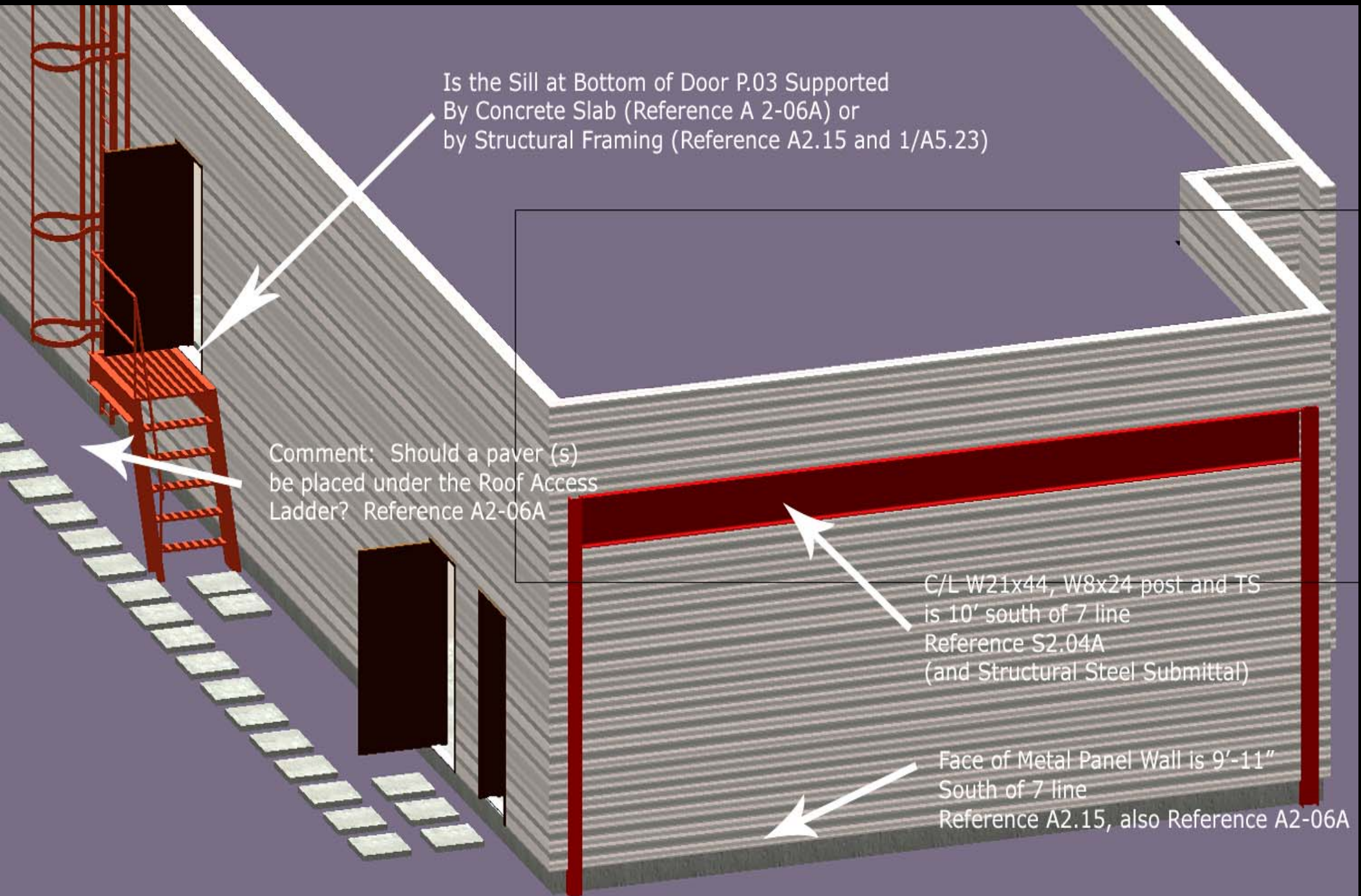
Question #1:
What is the Slab Thickness?
1'-2" (11/S3.01) or
1'-6" (1/A6.11A)

Detail A: Reference
Question #4

Column Lines C/8
(Elevator Pit)



Conflict Resolution



BIM Benefits

Improvement in Efficiency

- **Enhances D-B / Sub. / Owner Collaboration**
 - Coordination Issues resolved early in the project
 - Reduce scope misunderstandings
- **Mitigate Cost and Time Impacts**
 - Find more problems before they reach the jobsite
 - The Visual RFI to resolve constructability issues
- **Project Record / Tool For Facility Manager**
 - ID links to devices and controls

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Questions?

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