Creating History with BIM: Crowdsourced Reconstruction of Sir Soane's Bank of England

Shaun Frazier
RAMSA: Director of IT

Lindsey DuBosar
STV Inc.: BIM Operations Manager

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CGarchitect Digital Media Corp: CEO

Rick Davis
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Class Summary

Sir John's Soane's Bank of England (built from 1788 to 1833) was destroyed in the 1920 in what is considered by some architectural historians to be the greatest modern architectural travesty. Today, Soane's Bank of England is revered by architects worldwide for its spectacular use of natural lighting and mesmerizing effects of scale, and inspires the neoclassical architectural approach of Robert A.M. Stern Architects (RAMSA). Autodesk, HP, and NVIDIA® have joined forces with RAMSA, CASE, CG Architect, and Sir John Soane Museum to engage the world's architects to help recreate Soane's Bank of England in BIM, in the first crowdsourcing project of its kind. Shaun Frazier, Paul Aubin, and Lindsey DuBosar will discuss the approach to modelling classical architecture with Revit, and how technologies from HP, NVIDIA, and Autodesk are enabling global BIM collaboration. Please join to learn more about The Soane Project, and how you can contribute.

Key Learning Objectives

At the end of this class, you will be able to:

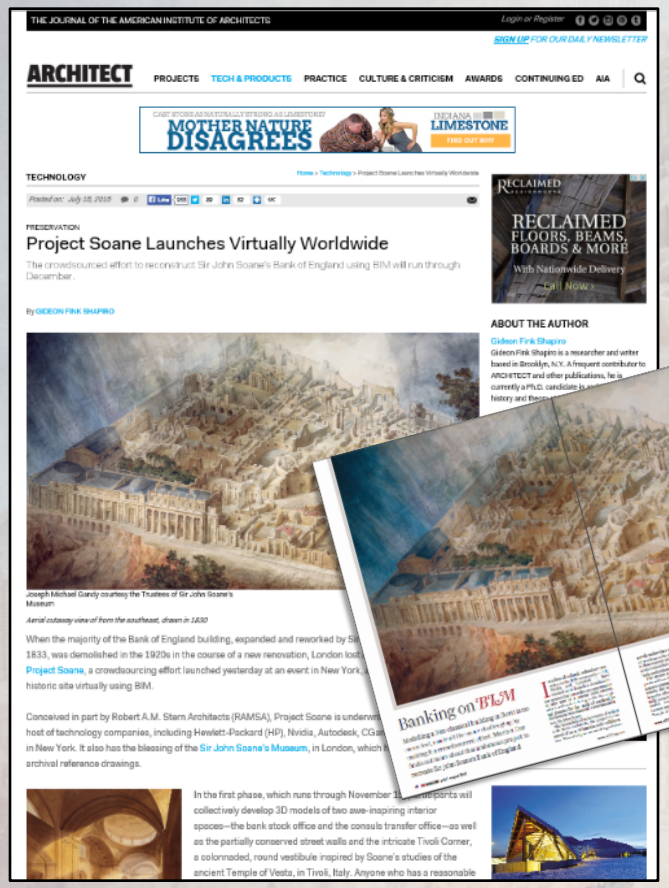
- Autodesk A360 for global collaboration and crowdsourcing
- Modeling classical architecture in Revit
- Collaboration in Revit
- Rendering Project Soane with 3ds Max

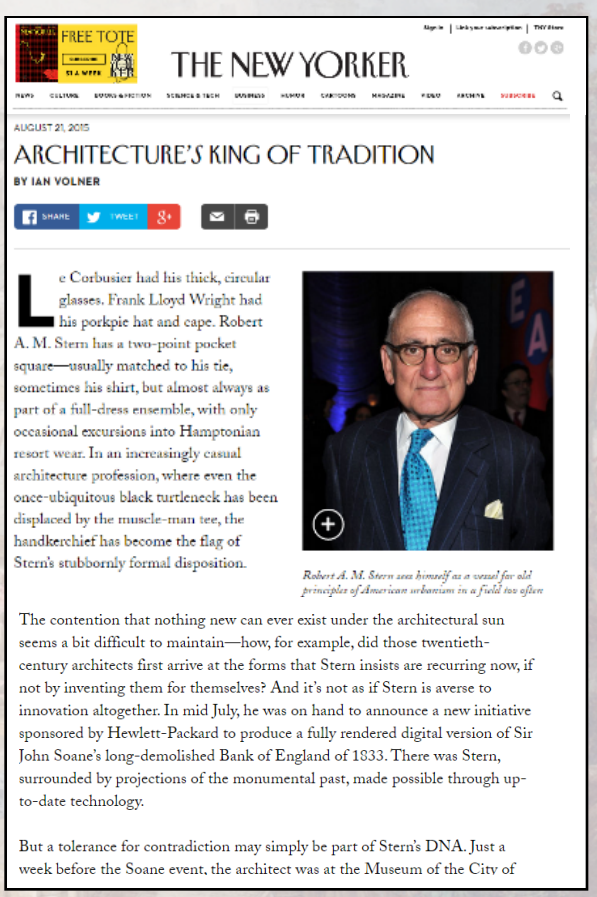
Project Soane Launch: July 2015

New York City, NY Launch Party with Robert A.M. Stern

Washington D.C. Launch with Shaun Frazier, Lindsey DuBosar & Paul Aubin

Project Soane in the Press





Project Soane in the Press

ARCHITECT magazine
July 15 at 3:00pm

Project Soane: The worldwide crowdsourced effort to reconstruct Sir John Soane's Bank of England using BIM will run through December. Conceived in part by Robert A.M. Stern Architects, it is being supported by a host of tech companies, including HP, Nvidia, Autodesk, CGarchitect, and Case Inc.

Project Soane Launches Virtually Worldwide
The crowdsourced effort to reconstruct Sir John Soane's Bank of England using BIM will run through December.
ARCHITECTMAGAZINE.COM

Like · Comment · Share

Sareddy Renuka, Juanito Mas Jr., ზაზა ჩხეკვაძე and 661 others like this. Most Relevant

83 shares

Timothy Weston Joseph Gandy's skilled and detailed drawings express the Romantic fascination with ruins, fashionable at the time, and also show that fantasy in architectural drawing is not just a recent trend.
Yesterday at 12:30am

Rahma Mohammed Oh RAMSA, you make me so happy.
Yesterday at 10:02am

Rafik Khokhar Nice
Yesterday at 5:51am

CGarchitect.com
July 14 at 3:36pm · Edited

Here in NYC for the launch of Project Soane http://www.projectsoane.com a project CGarchitect has been working on with many people for the better part of a year.

Participate in a worldwide crowdsourcing effort to virtually reconstruct the lost treasure that is Sir John Soane's Bank of England. Join Autodesk®, HP, NVIDIA, Robert A.M. Stern Architects, CASE, CGarchitect and Sir John Soane's Museum for this first of its kind project that leverages modern BIM technologies to collaboratively re-create Classical architectural forms. Contributors will receive worldwide recognition and a chance at winning over $25,000 in prizes.

Like · Comment · Share

Shakthi Kiran, Anton Kopylov, Bala Ganapathy and 15 others like this.

CGarchitect.com Project partner RAMSA's own Robert A.M. Stern!

July 14 at 3:47pm

A360 @adskA360 · Aug 14
Rick Davis, Autodesk giving a #ProjectSoane presentation at Siggraph2015 autode.sk/1TF9Ulw @HP @AutodeskAEC

Autodesk Revit @AutodeskRevit · Aug 14
Join the #projectsoane mission to recreate the Bank of England in #BIM on @adskA360 · autode.sk/1L43ubL

Architizer @Architizer · Jul 14
Crowdsource Sir John Soane's Bank of England and win @HP's competition! Register now: arc.ht/1IXNJDP

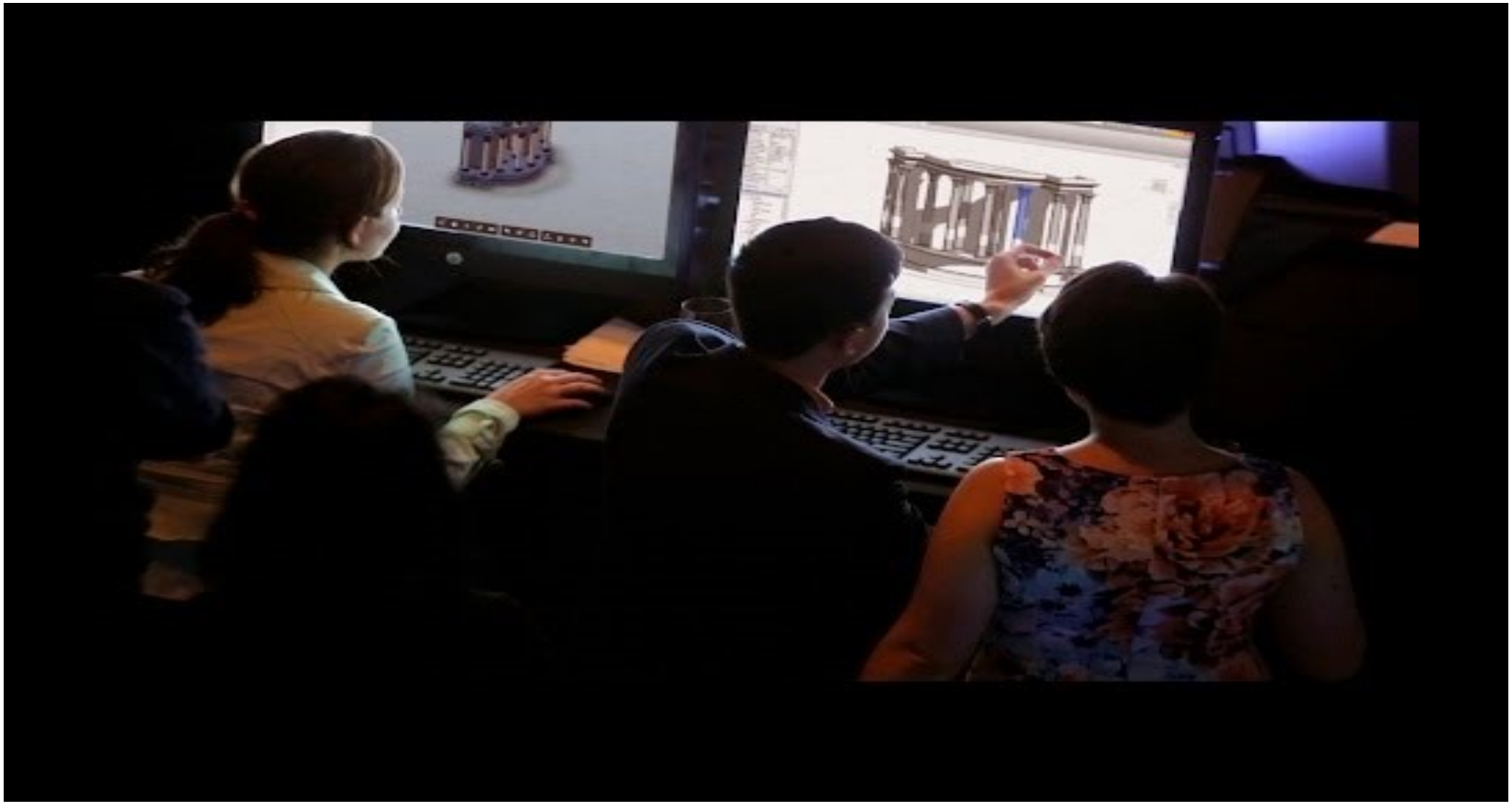
View photo

Project Soane @projectsoane · Sep 1
Russell Fuller Hill's incredible contribution to #projectsoane buff.ly/1X5KK1X

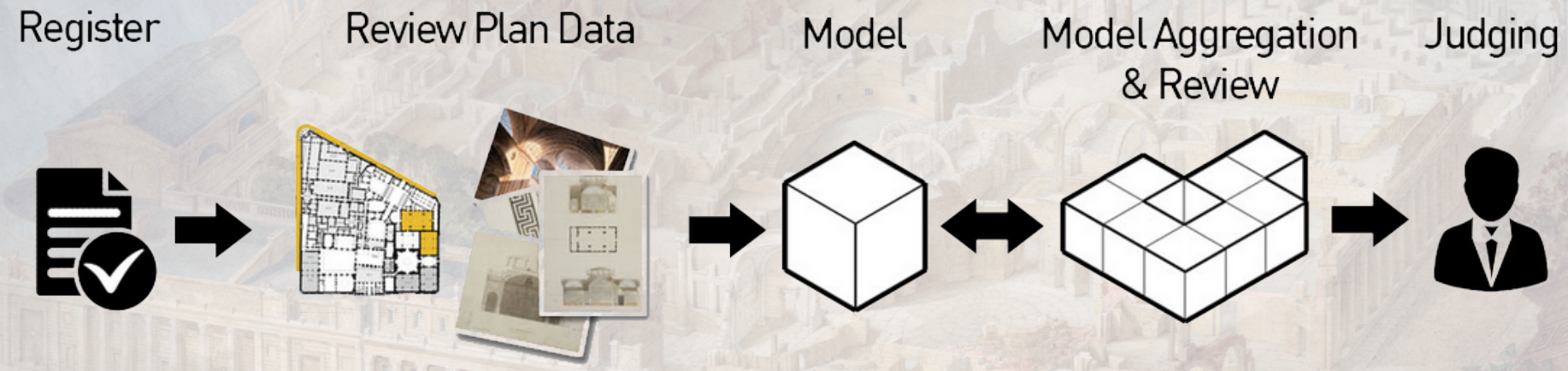
Javier Alonso Madrid @javieralonsomad · Aug 31
Great collaboration from @paulfaubin in #projectsoane
THANKS !!!!!!!
#Revit #architecture

BIMThoughts

The Mission.....



Phase 1: How it Works



Sir John Soane

1753-1837

- English architect specializing in the Neo-Classical style.
- Rose to the top of his profession, becoming professor of architecture at the Royal Academy and an official architect to the Office of Works.
- On 16 October 1788 Soane was appointed architect and surveyor to the Bank of England, where his work would continue for the next 45 years.
- During his tenure, Soane rebuilt much of the bank, and vastly extended it.
- Received a knighthood in 1831.

Bank of England

1788-1833

- Nearly every part of the building was rebuilt and more than doubled its area.
- The complex arrangement of corridors, courts, top-lit banking halls, storage and offices lay concealed behind the fortified screen wall.
- Soane's contributions to the Bank of England were destroyed in the 1920s to make way for renovations.

Phase 1

1:1	Existing building
1:2	Bank buildings by Sir Robert Taylor*
1:3	Entrance building
1:4	Princes Street
1:5	Rotunda vestibule
1:6	Dividend Pay Office
1:7	Barracks
1:8	Governor's Room
1:9	Illuminations*

Phase 2

2:1	Bank Stock Office
2:2	Acquiring property on Lothbury and Princes Streets*
2:3	Rotunda
2:4	Four Per Cent Office
2:5	Lothbury screen wall
2:6	Porter's Lodge and Residence Court
2:7	Lothbury Court and surrounding offices
2:8	Library
2:9	Consols Transfer Office
2:10	Chief Cashier's Office

Phase 3

3:1	Front Court and Pay Hall
3:2	Acquiring property on Lothbury and Princes Streets*
3:3	Corporation of London city planning*
3:4	Princes and Lothbury Streets Screen Walls
3:5	Tivoli Corner
3:6	Waiting Room Court
3:7	Doric Vestibule
3:8	Accountants Office
3:9	Printing Office
3:10	Discount Office and Long Passage
3:11	Barracks
3:12	Bullion Office
3:13	Directors' Office
3:14	Vaults beneath the director's offices and Pay Hall*

Phase 4

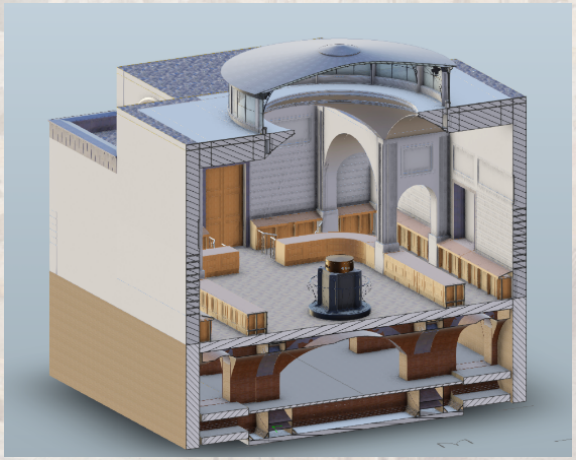
4:1	Rotunda vestibule
4:2	Proposals for new facades*
4:3	Office over the Reduced Annuities Office
4:4	Reduced Annuities Office

Phase 5

5:1	Transfer Offices
5:2	Facades
5:3	Improvements to Streets around the Bank*
5:4	Temporary alterations*
5:5	Record drawings*

Bank Stock Office

- Soane's first major work at the Bank of England
- Reduces classical elements to their structural essentials
- Substitution of linear for modeled ornamentation
- Frequent use of shallow domes and top lighting
- Demolished for Sir Herbert Baker's rebuilding in 1925



Contributed by: Alberto Vilas Blanco

Consols Transfer Office

- Freed from any preexisting structural conditions
- More Orthodox use of classical vocabulary
- Ornamental/decorative attitude
- Largest of Soane's banking halls
- Demolished for Sir Herbert Baker's rebuilding in 1925

Contributed by: Alberto Vilas Blanco

Princes & Lothbury Streets Screen Walls

- Exemplifies the aesthetic used in the design of predominately windowless walls
- Includes motifs such as the Corinthian capital taken from the Temple of Vesta at Tivoli, Italy, as well as scrolled acroteria ornamenting the wall's tall parapet
- Somewhat intact today

Contributed by: Andrew Milburn

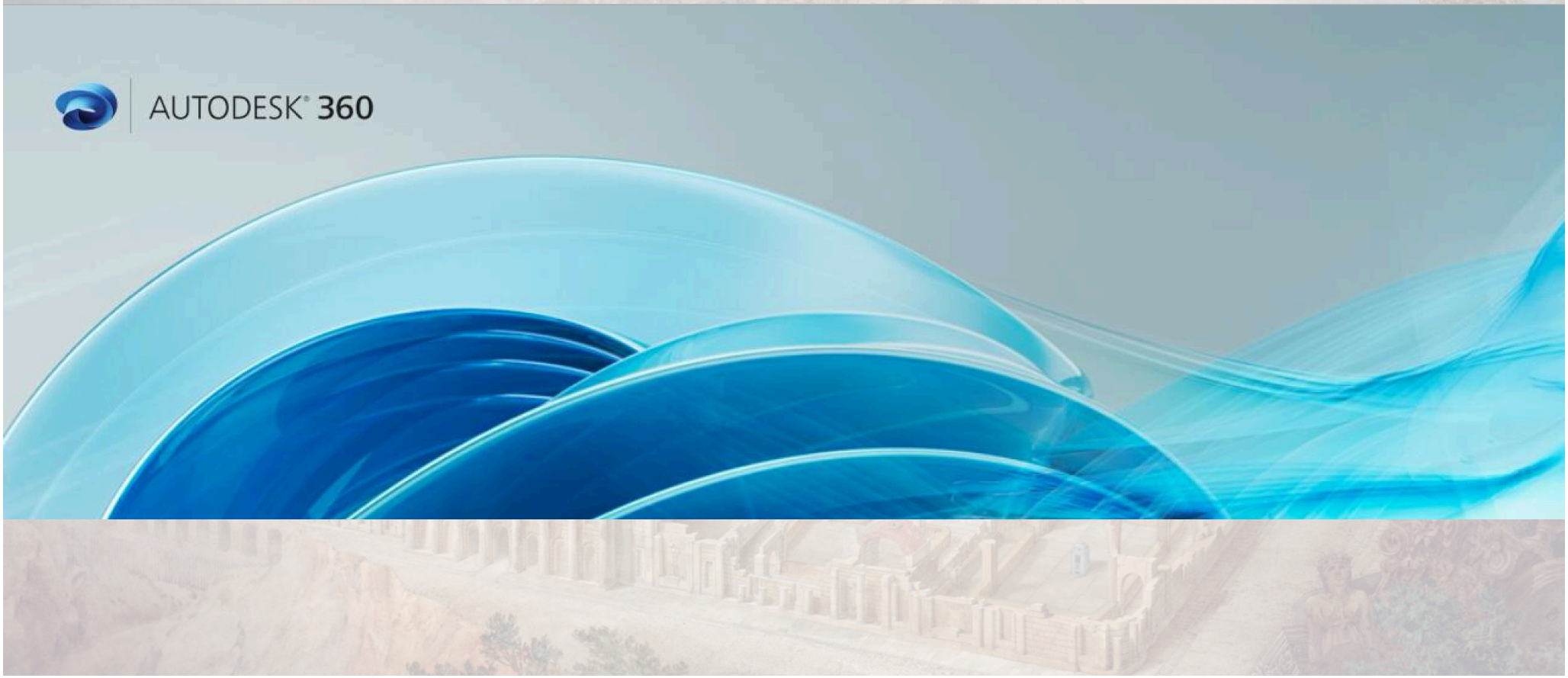
Tivoli Corner

- Precedent was the Temple of Vesta at Tivoli, Italy
- Intended as a focal point of the new cityscape
- Contemporaries appreciated it as one of Soane's best works
- Referenced in Soane's own lectures and publications

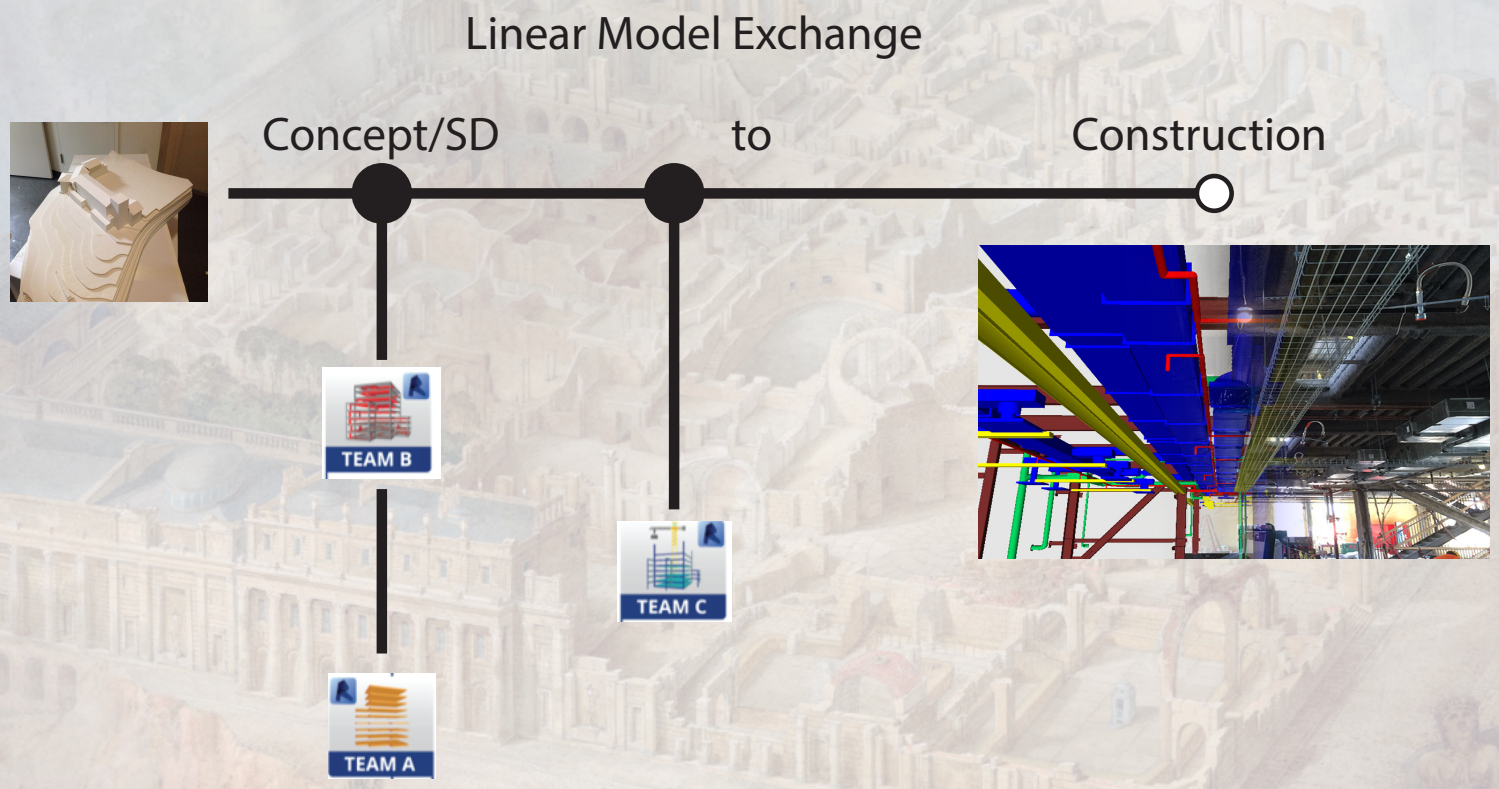
Contributed by: Paul Aubin & Others (A360 Viewer)

Global Collaboration Made Easy.....

Cloud Collaboration

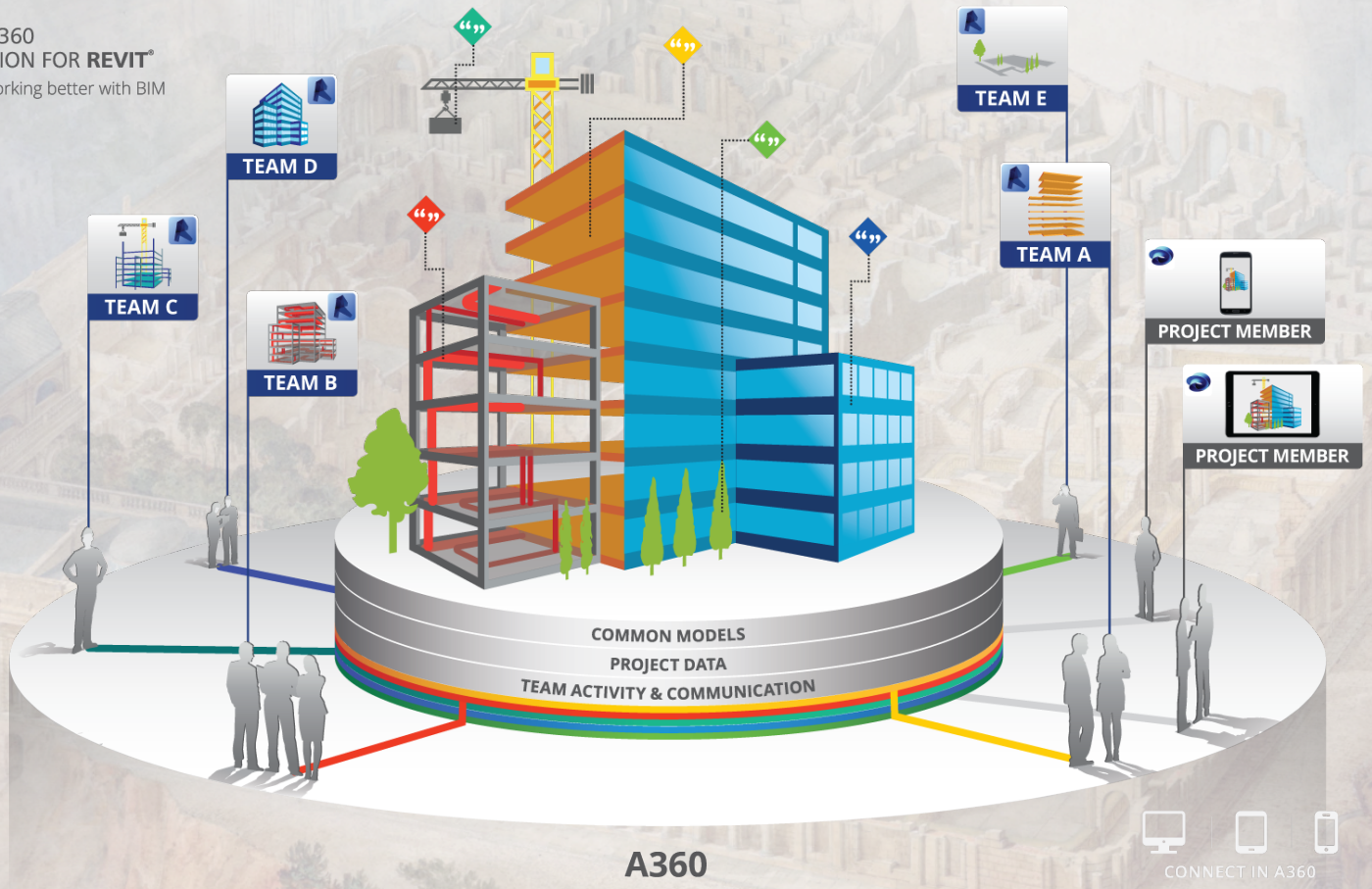


Cloud Collaboration



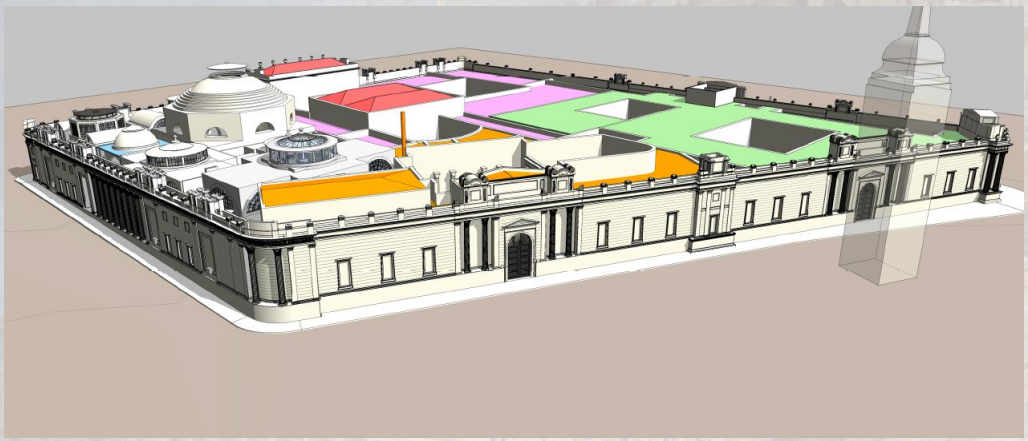
Cloud Collaboration

AUTODESK® A360
COLLABORATION FOR **REVIT**®
Project teams working better with BIM



Crowdsourcing History in the Cloud

www.projectsoane.com



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Getting Started

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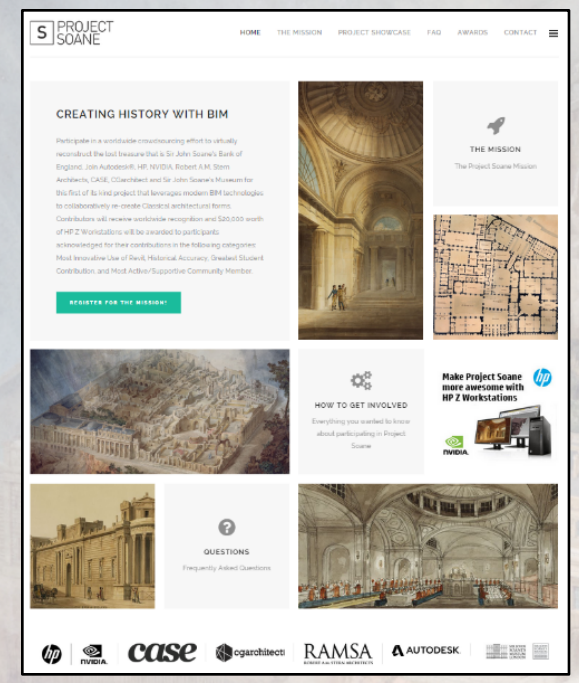

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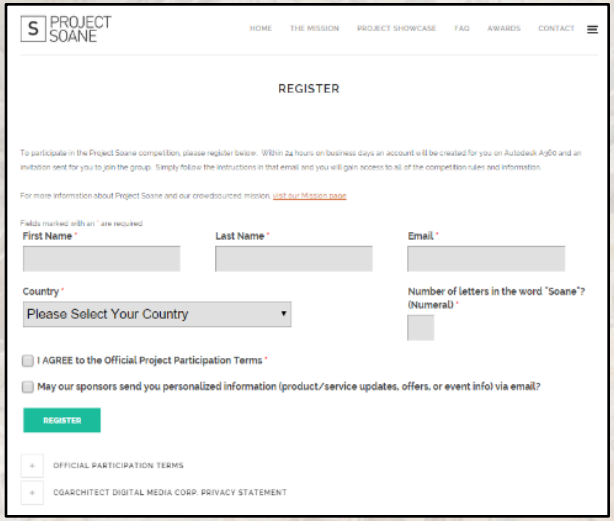

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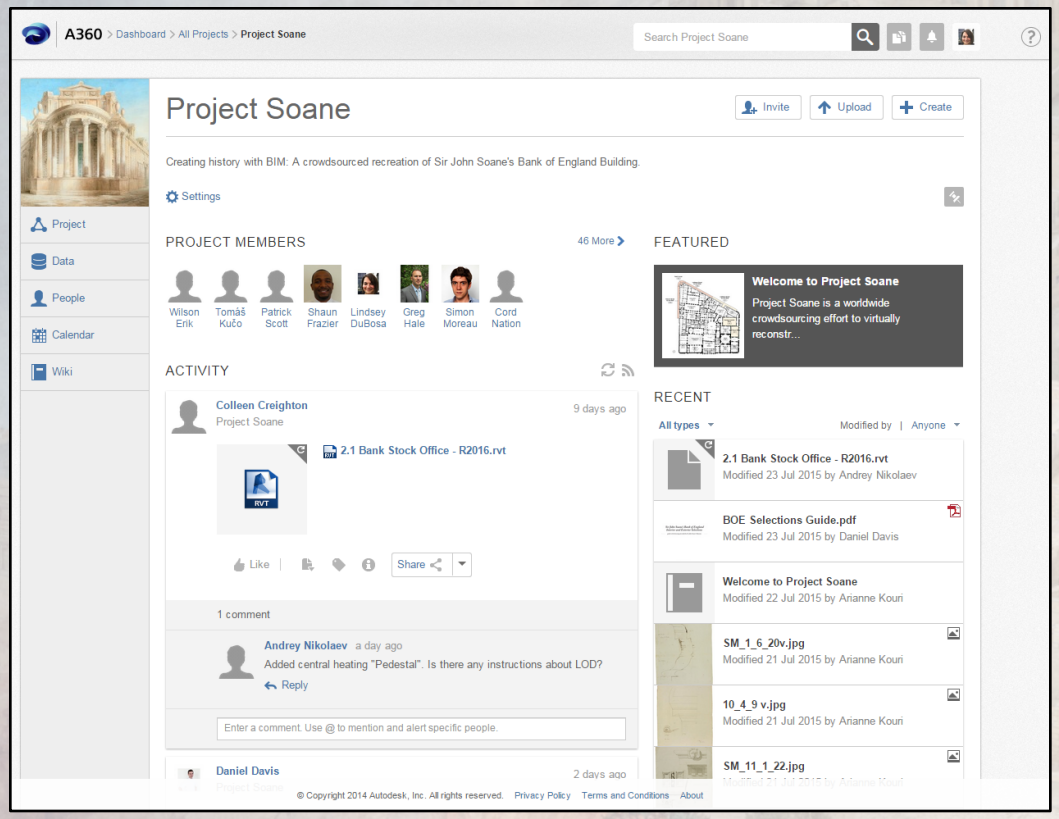
Autodesk A360 for global collaboration and crowdsourcing



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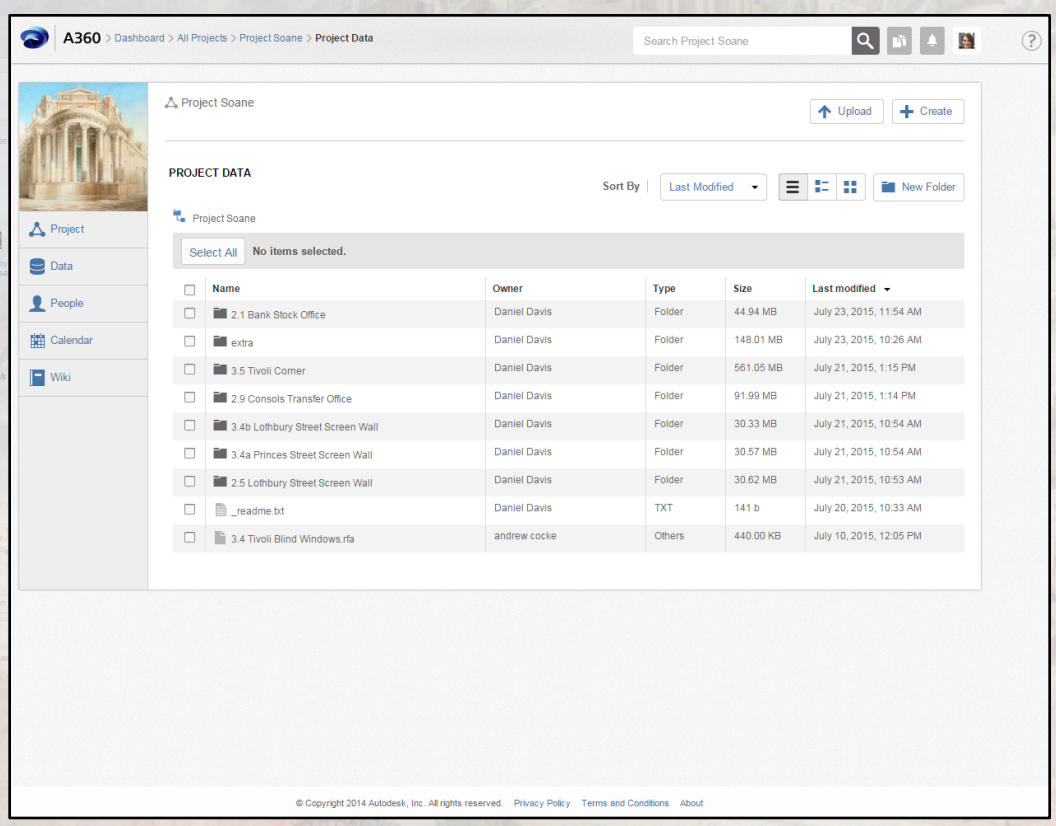

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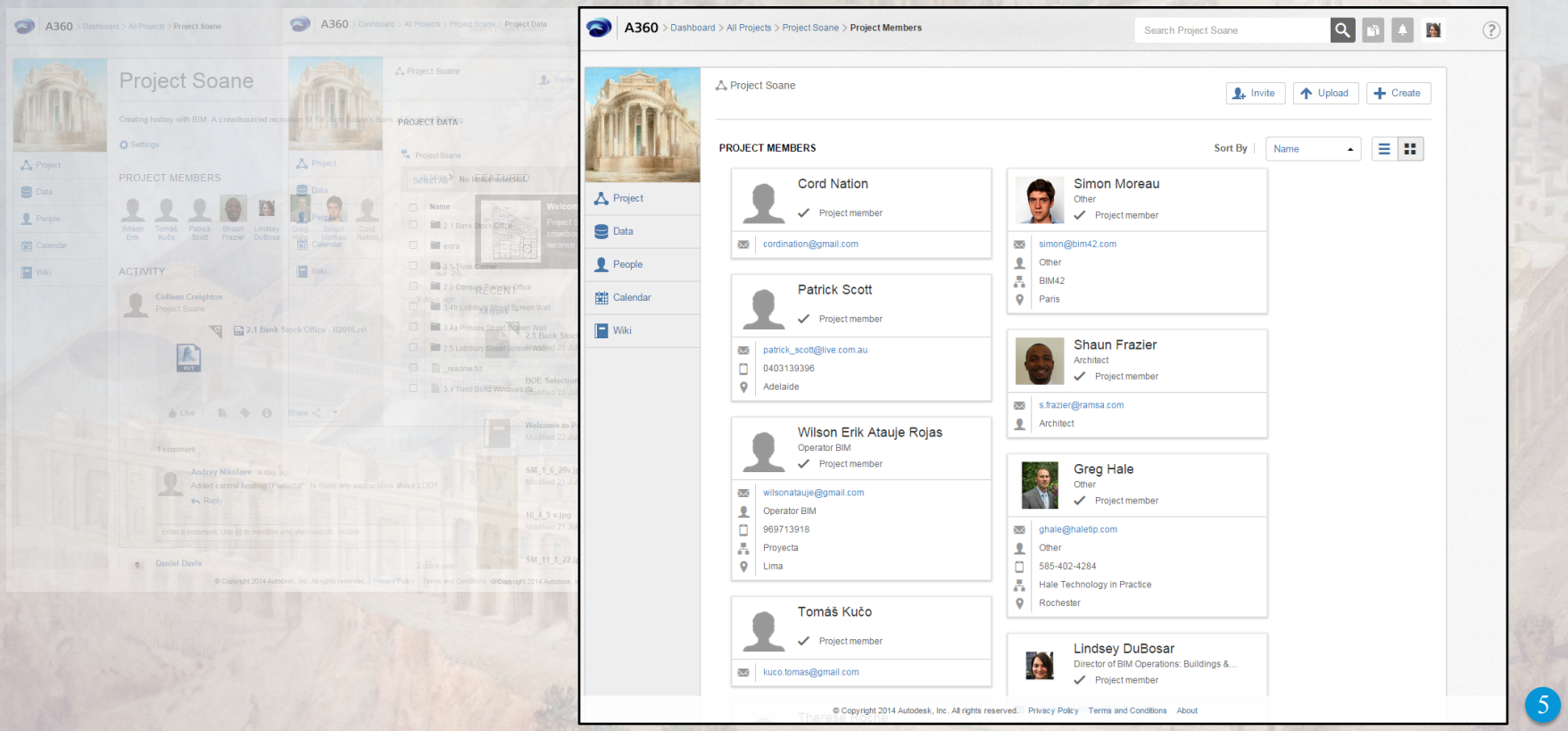

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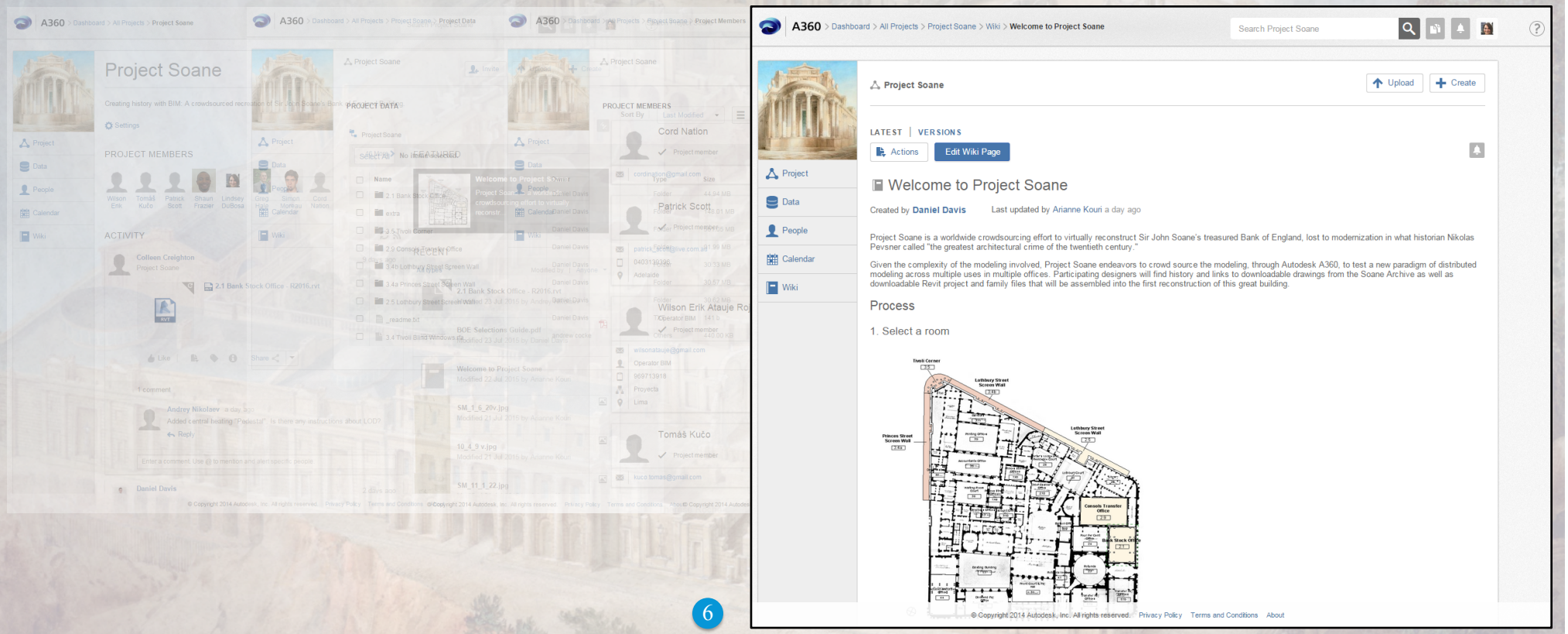

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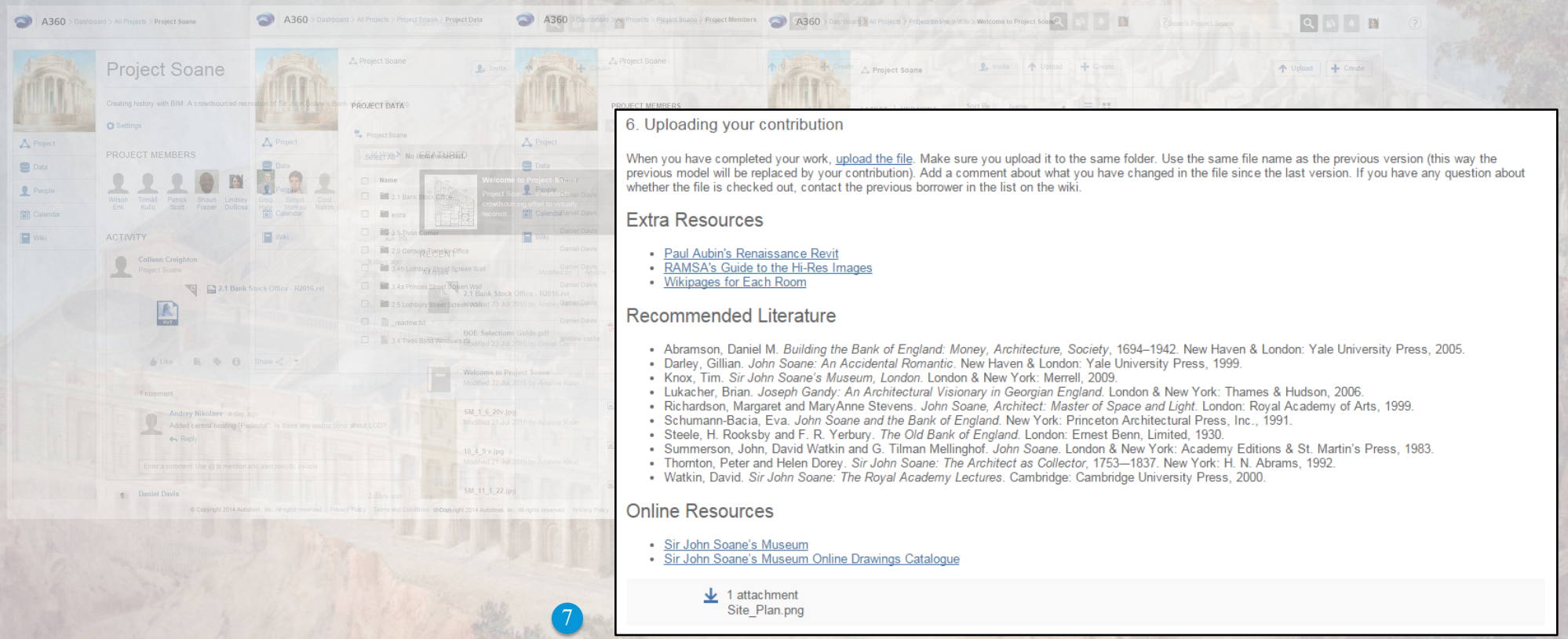
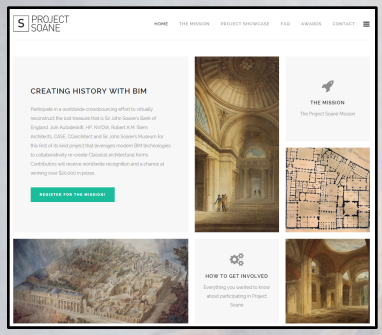


Collaboration Process

www.projectsoane.com



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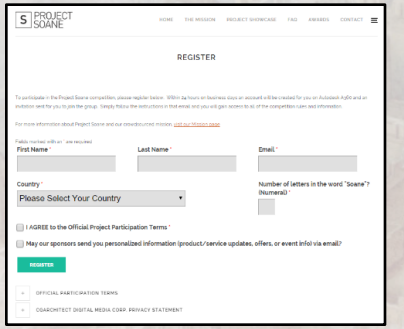

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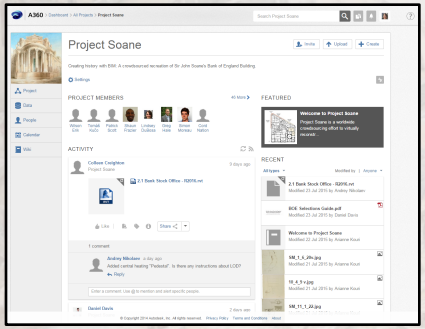

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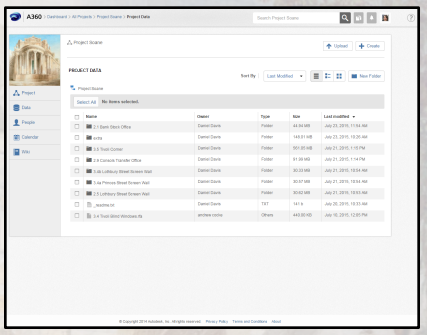

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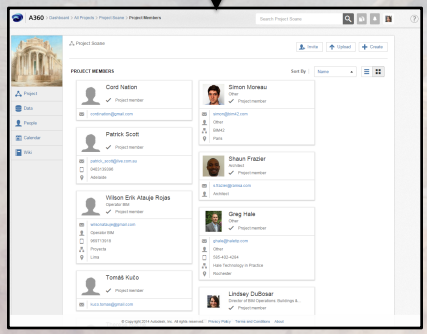

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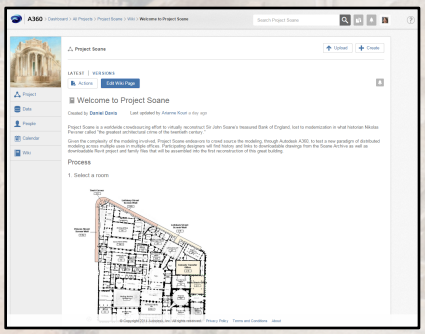

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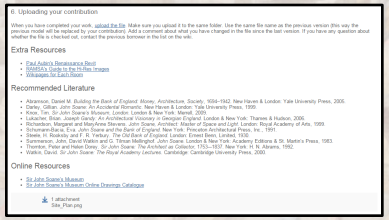
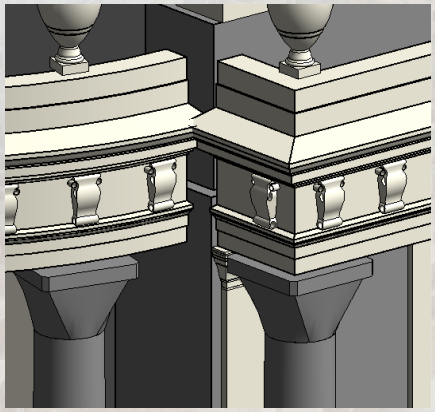
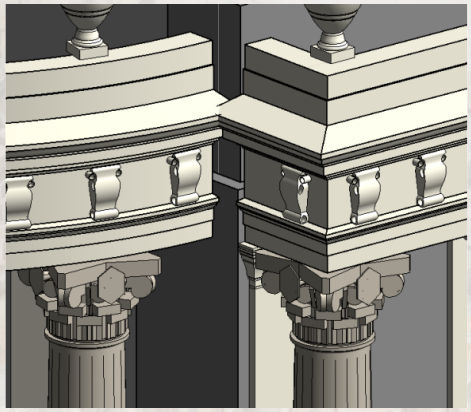
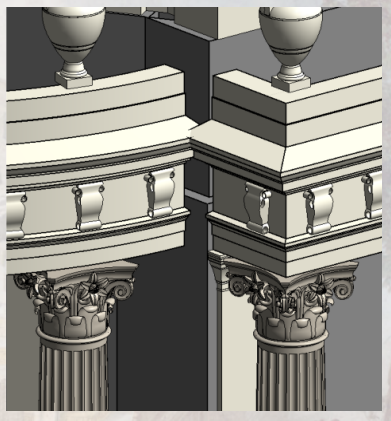
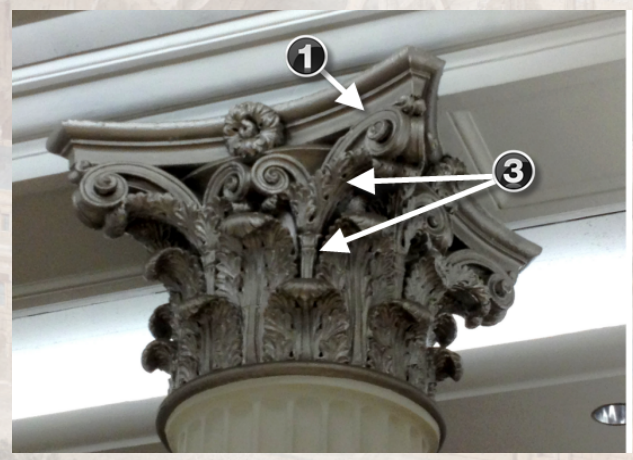


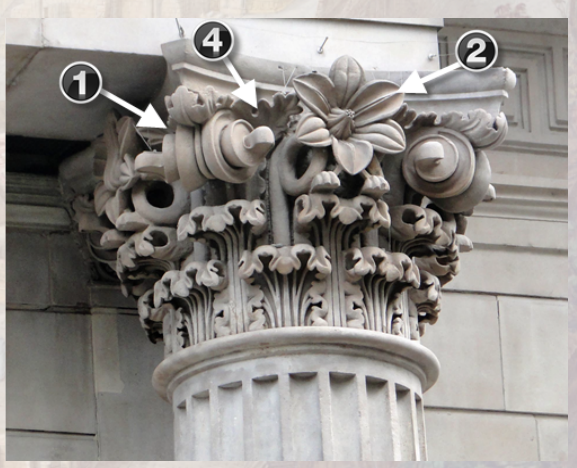
7

PROJECT SOANE
Revitalizing Classical Architecture…..

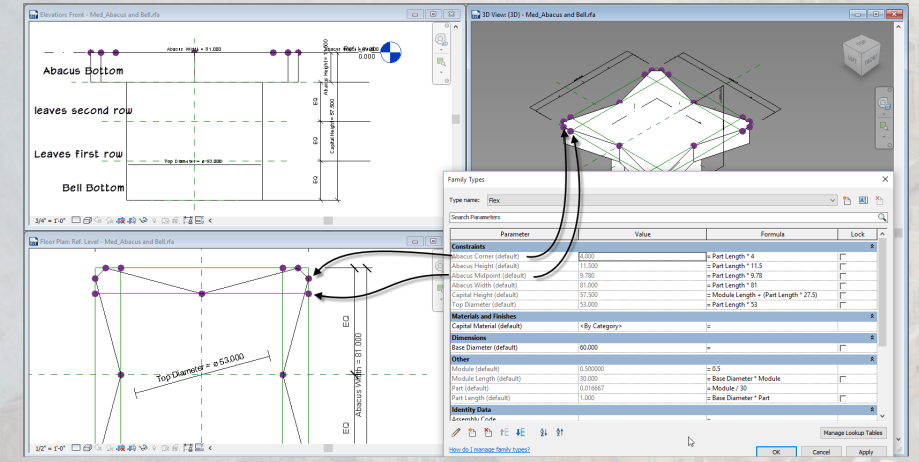
Modeling Classical Architecture in Revit

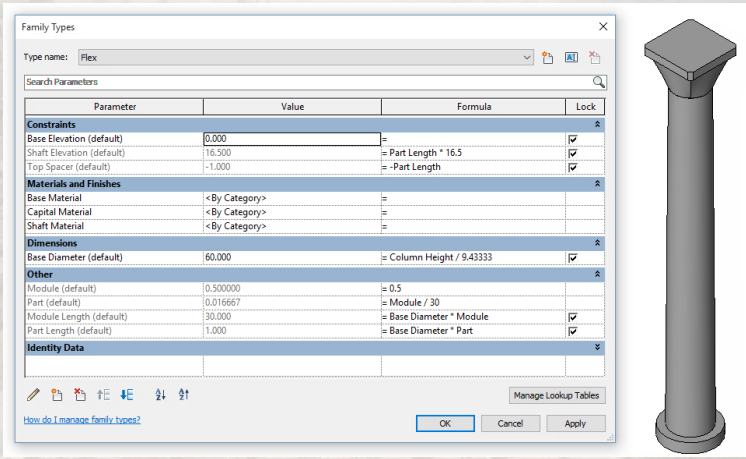




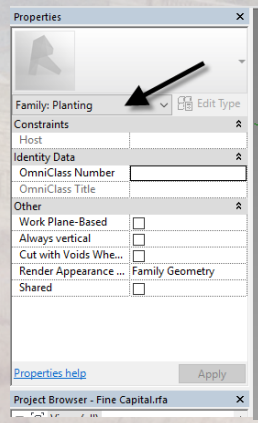


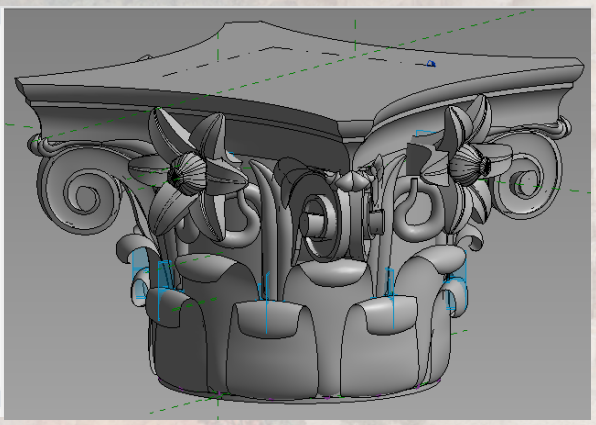


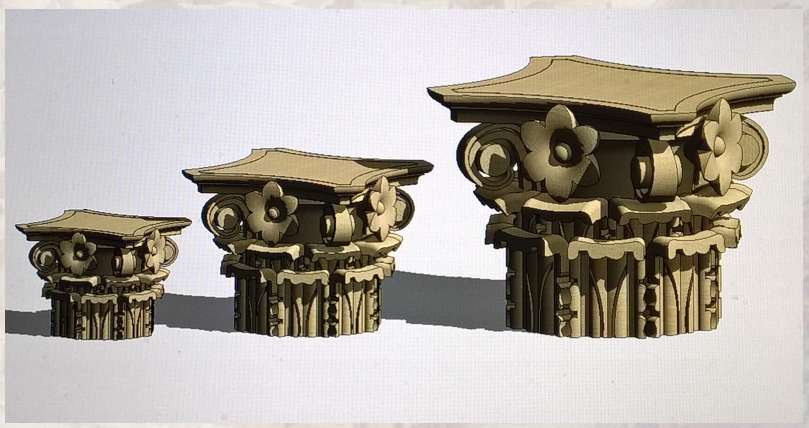
Modeling Classical Architecture in Revit



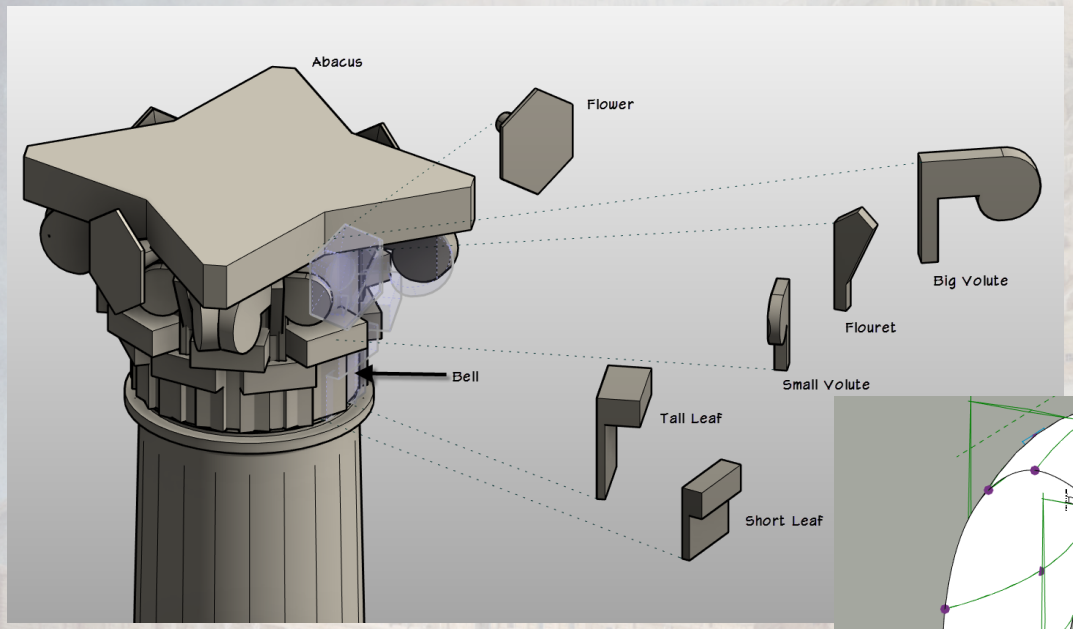


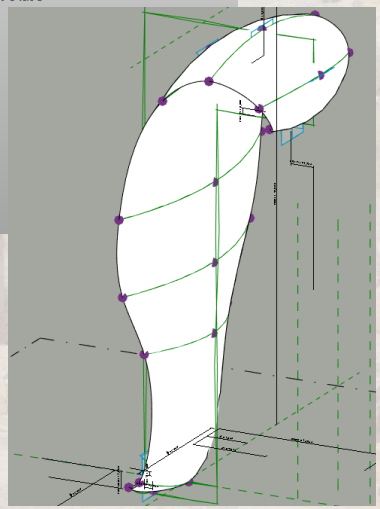


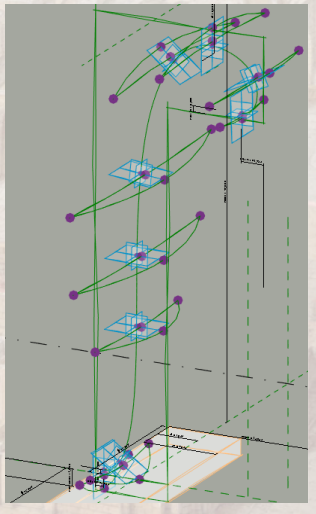


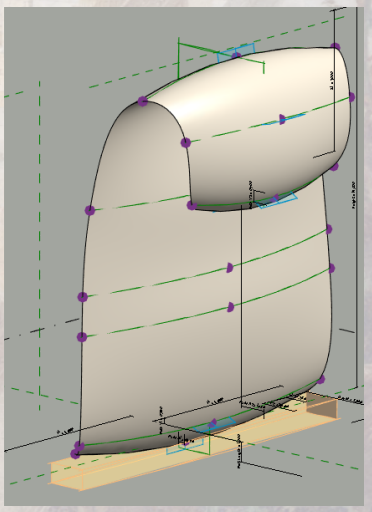


Modeling Classical Architecture in Revit

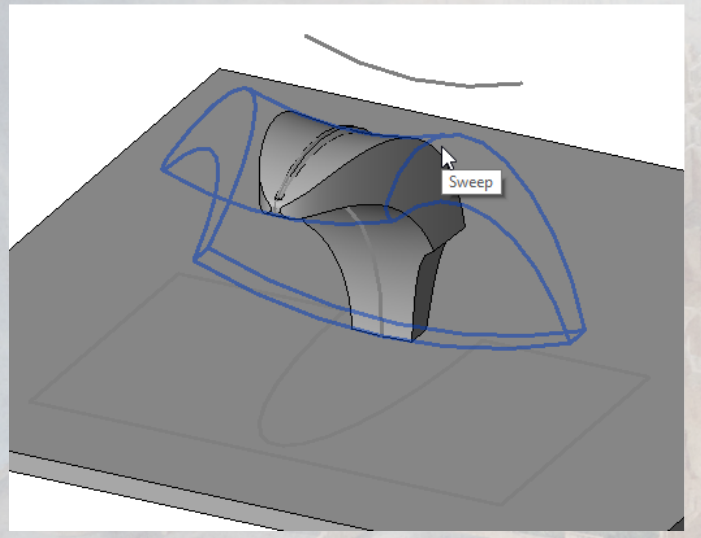


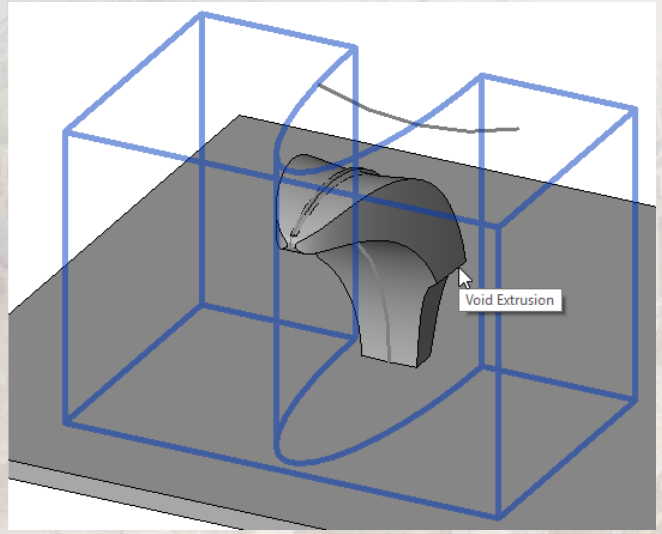


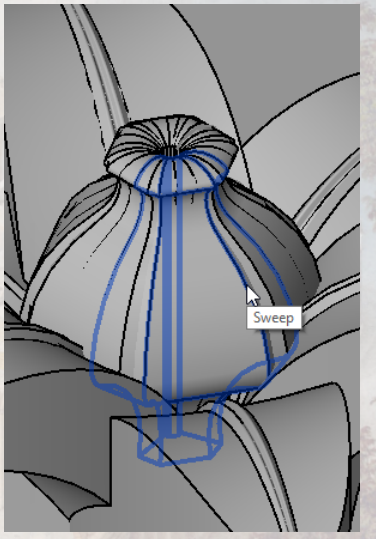


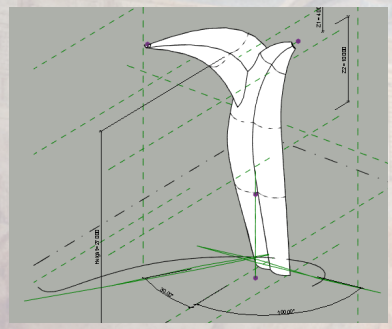


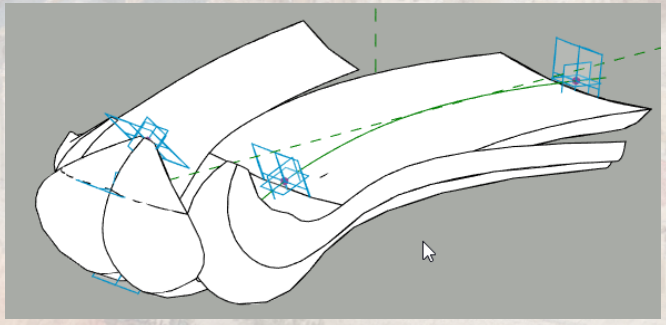
Modeling Classical Architecture in Revit

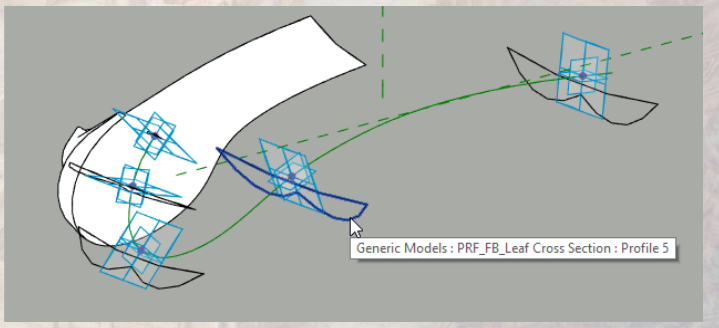










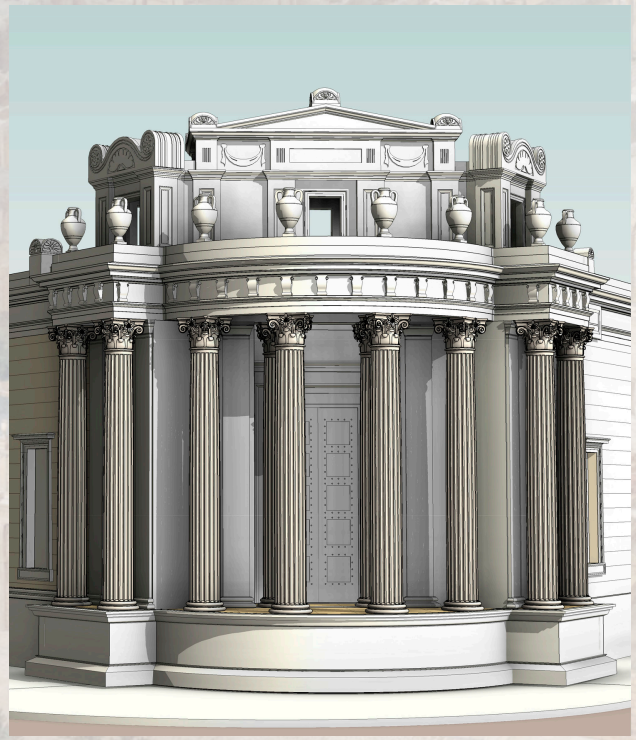


And the Phase 1 Winners Are…..

Sir John Soane Award for Outstanding Achievement

The Sir John Soane Award for Outstanding Achievement was created to recognize and honor exemplary dedication and outstanding contributions by a single participant. This community member has served the Project Soane community in the broadest sense throughout the program.

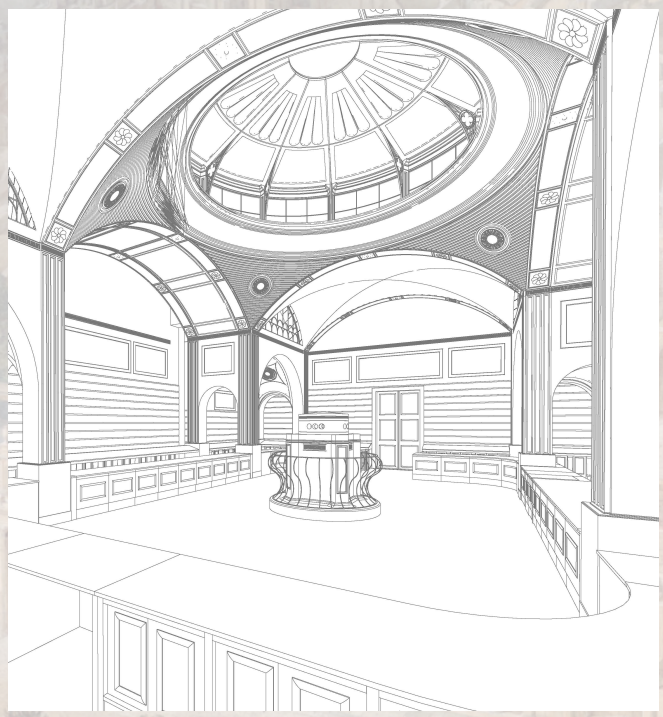
Andrew Milburn

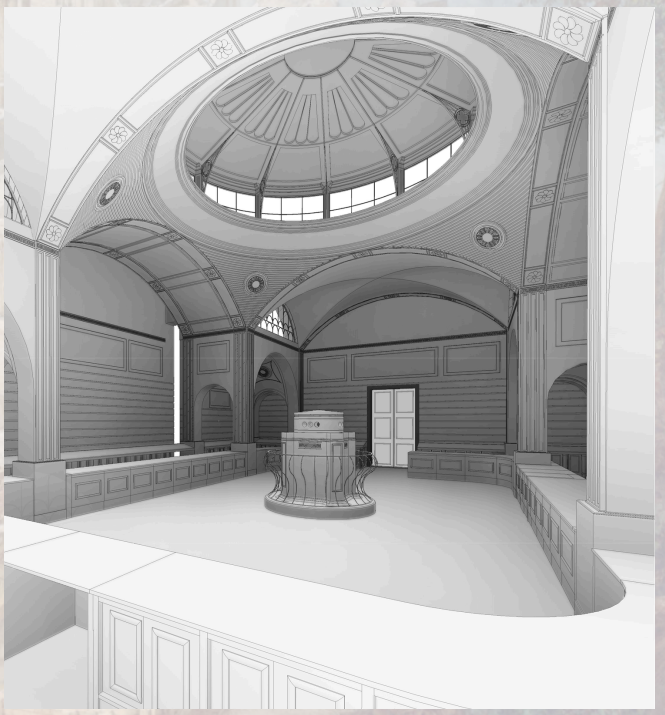


Historical Accuracy Award

The Historical Accuracy Award will be awarded to the community member who most accurately represents Sir John Soane's Bank of England through in BIM.

Alberto Blanco





PROJECT SOANE

Most Innovative Use of Revit

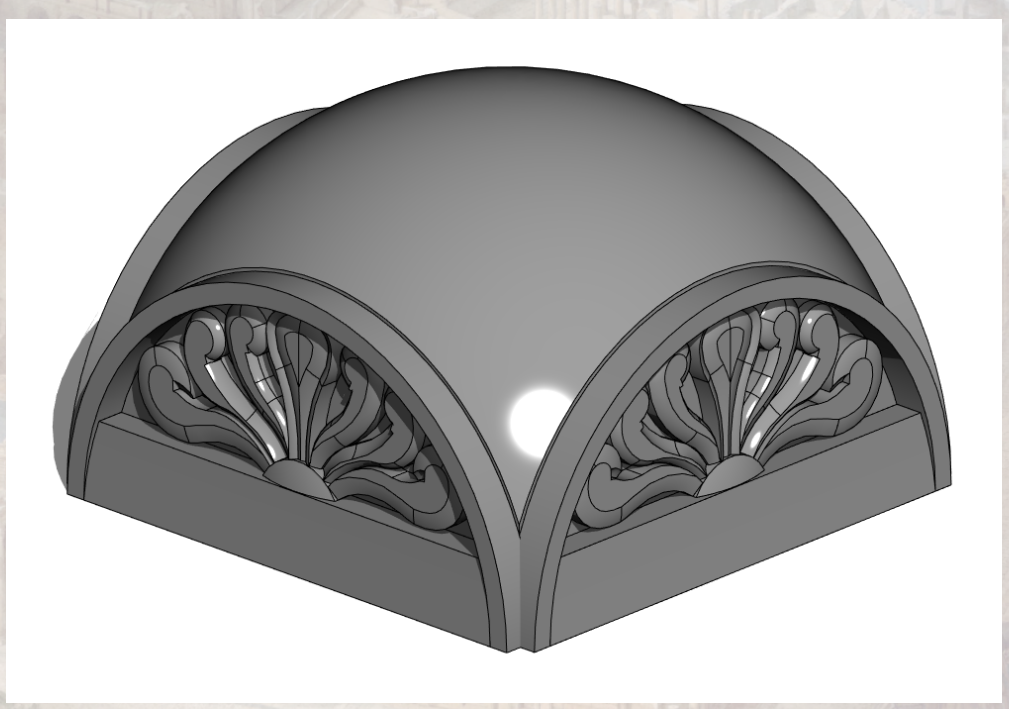
The prize for most innovative use of Autodesk® Revit® software will be awarded to the individual or team who, as determined by our panel of expert judges, makes the best use of the technology.

Russell Fuller Hill

Most Active/Supportive Community Member

The Sir John Soane Award for Outstanding Achievement was created to recognize and honor exemplary dedication and outstanding contributions by a single participant. This community member has served the Project Soane community in the broadest sense throughout the program.

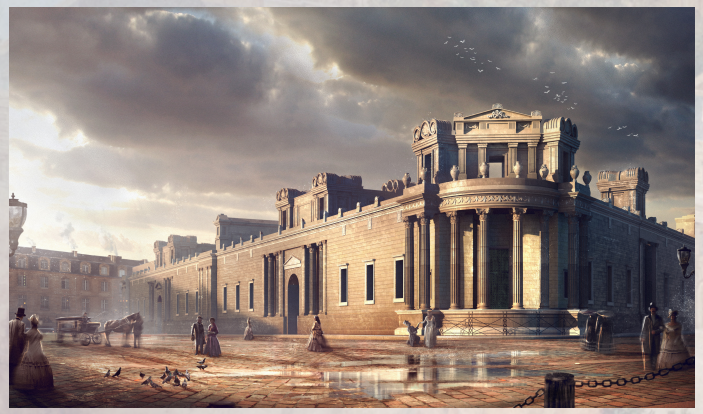
David Mettler



Rendering in 3DS Max…..

PROJECT SOANE

Rendering Project Soane in 3DS Max



THE CONNECTED FUTURE OF DESIGN VISUALIZATION

Rick Davis
Design Visualization Industry Manager

CONVERGENCE
IT'S HAPPENING

Courtesy of Neoscape

Image courtesy of Sérgio Merêces

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THE FUTURE
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