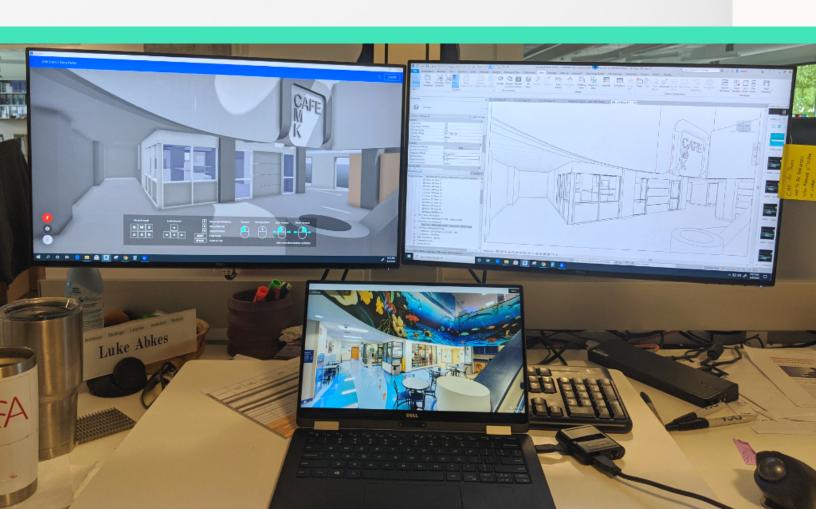


# Saving \$10,000 per project using VR Collaboration

Using VR to answer spatial questions, reduce RFIs, and catch design issues.



Using The Wild can save BSA

## 150+ RFI Hours

**PER PROJECT** 



BSA LifeStructures, an Indianapolis-based architecture and engineering firm, is adopting VR collaboration with The Wild to future-proof their services and design smarter. They're looking to use VR to answer spatial questions, reduce RFIs, and catch design issues from their 3D models.

### **Case Study Overview**

#### **Project**

26,000 sq. ft. Medical Office Building addition in Nebraska Hospital

#### **Timeline**

1 year design,18 months construction

#### Team

Design phase

- Architect Owner
- Engineer

#### Construction Phase

- Architect Owner
- Contractor
- Engineers



## **VR Adoption at BSA**

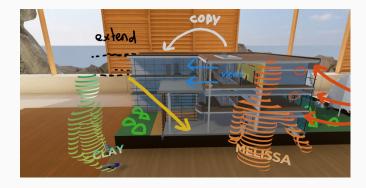


"We're trying to make ourselves more lean, and sometimes being more lean means you have to invest upfront for headsets and software."

- Luke Abkes, Architectural Designer, BSA LifeStructures

To pilot their adoption of VR, BSA invested in 2 Oculus Quests and 6 HTC Vive headsets for their team.





#### THE WILD

BSA is using The Wild for VR Collaboration to bring their stakeholders together to visualize and make changes in their designs remotely.

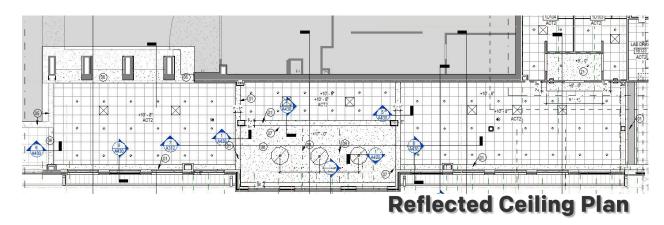
## **Reducing RFIs with VR**

Luke Abkes, an Architectural Designer at BSA, tracked every RFI for the Nebraska Hospital project that could have been mitigated through better construction management and design visualization.

Using an average billing rate of \$100/hr (often much higher in other regions), Luke was able to prorate savings for almost 70 RFIs based on estimated hours saved through VR.

RFI#	NAME	TEAM (OACE)	EST. HOURS SAVED	EST. PRORATED SAVINGS
87	Joist Demo Clarification in New Laundry Area	A/C	15	\$975.00
136	Jogg in 2nd Level Slab and Wall	A/C/E	10	\$900.00
239	Wondoor Soffit Elevation	A/C/E	9	\$810.00
46	Plumbing Wall at Braced Frame	A/C/E	5	\$300.00
101	Width of Ramp at Entry	O/A/C	4	\$300.00
139	Level 2 Gap at Roof Line	A/C	4	\$280.00
224	Fin Tube and Wondoor Conflict	A/C/E	4	\$280.00
175	Area I Window Layout	O/A/C/E	3.25	\$260.00
137	Mechanical Chase at IT Room 1st Floor	A/C/E	3	\$240.00
161	Front Entry Floor Finishes	O/A/C	2.5	\$212.50
169	Cafeteria Wall Demo	A/C	2.5	\$200.00
225	Materials Mgmt. Finishes	O/A/C	2.5	\$200.00
133	Main Stair Elevation Issues	O/A/C	3	\$195.00
131	Curtain Wall at Entry Vestibule	O/A/C	2	\$160.00
183	Bathroom Finishes	O/A/C	2	\$160.00
193	Clear Story Window Ceiling Conditions	A/C	1.5	\$142.50
79	Level 2 Duct Chase Location Discrepancy	A/C/E	2.5	\$137.50
164	Base Trim color at Bathroom Walls w/o Tile	A/C	1.5	\$135.00
218	Extent of Paint in West Stair	A/C	1.5	\$135.00
244	Tile in Lieu of Stone at Stairs/Ramp	O/A/C	1.5	\$135.00
231	Corridor Finishes	O/A/C	1.5	\$127.50
94	Elevation Dimension Discrpepncy	A/C/E	2	\$100.00
226	Downspout Relocation	A/C/E	1.5	\$97.50
51R	Corridor Request to Lower Ceilings	O/A/C/E	1.5	\$90.00
181	Basement Demo Extents Clarification	O/A/C	1.5	\$90.00
184	Main Stair Clarifications	O/A/C	1.5	\$90.00
187	Window Elevations Discrepency with Existing	A/C	1.5	\$90.00
114	Ceiling Grid Height Open Bay 1C108 Existing Clinic	O/A/C/E	1	\$80.00
115	Insulated metal panel and Spandrel Glass at Front Entry	O/A/C	1	\$80.00
36	Lighting Layout Discrepancies Lighting Plan vs. RCP's	O/A/C/E	1.5	\$75.00
74	Entry Steps Dimensions and Finish	O/A/C	1.25	\$75.00
98	Sanitary Line Tripping Hazard in Stair 1S200	A/C/E	1.5	\$75.00
104	Light Fixture K4 Length	A/C/E	1.5	\$75.00
246	Neg Pressure Patient Room Wall Sconce	A/C/E	0.75	\$71.25

By tracking the team involved (Owner, Architecture, Contractor, Engineering) and estimated hours saved for each RFI, it became apparent that there was a need to get VR headsets for the entire team as early in the process as possible.







## **Project Takeaways**

Total estimated hours saved: 150.5

Total estimated prorated savings: \$9521.25

Over a 6 month period it was identified that conservatively, on a single project, The Wild could help reduce 150 hours of RFI time, equating to \$9,521.25 in cost savings.

If this was to be accomplished on 1 project a quarter, this would equate to 600 hours in time saved and \$38,085 in costs saved.

#### Other VR collaboration workflow benefits:

- Design charrettes: Utilizing The Wild, Revit, and Matterport simultaneously allows BSA to decide on design details that have been a sticking point.
- Spatial interaction: The hands-on approach to interacting with spaces can make even better design and client interactions.



BSA is looking at rolling out VR collaboration with one "Champion" to guide remote meetings at each of their six offices and three "Experts" to help lead global adoption.

## **Creating Trust with VR**



"Familiarity offers peace of mind."

- Luke Abkes, Architectural Designer, BSA LifeStructures



Taking a walk through BSA's model with BIM measuring tools builds familiarity for human-scale accessibility.

In addition to the better owner cost savings and construction management, Luke has discovered that one of the most important intangible benefits of using VR collaboration is the peace of mind stakeholders gain through experiencing projects at human scale.

When considering work on projects that affect large communities such as hospitals, schools, and other facilities, having this peace of mind helps to build trust for BSA as forward-thinking and human-centric in its approach.

VR is guiding the future of collaboration at BSA for building our next generation's spaces for Healing, Learning, Discovering, and Leading.