



Virtual Project Delivery

INSPIRING ENGAGEMENT, INVENTIVE
EXECUTION, DRIVING EXCELLENCE





INSPIRING
ENGAGEMENT



INVENTIVE
EXECUTION



DRIVING
EXCELLENCE





INSPIRING **ENGAGEMENT**



Consensus-driven methodologies using
proven digital platforms

Options and choice for stakeholder consultation


Tailored cultural + organizational fit






Balancing the needs of now with a passion for tomorrow's **possibilities, virtually.**


For us, creativity is driven by purpose. Knowing that transformation is truly possible inspires us to approach every situation with a fresh perspective. Our inventive and collaborative approach to problem solving helps bring big ideas to life through creative solutions in a virtual world. Whether our contribution is a design that strikes the perfect balance between function and aesthetics, a feat of engineering that redefines what's possible, or a project management approach that delivers results, we strive for outcomes that transcend the challenges they solve and shape the communities we serve for the better.




PATIENT
NAME: Brian
MY STORY... I was dx with cancer this year in kindergarten
WHAT I HOPE FOR... to get better, and go home
WHAT I AM WORRIED ABOUT... my mom & Dad w/ be look so worried and sad
THE MOST MEMORABLE MOMENT WAS... playing the guitar, the feeling of being safe and everyone smiling face at AHK




CASE MANAGER
NAME: Amber
MY STORY... I am a nurse, a mother, a wife, a sister & a daughter. I learned about AHK at the hospital where I worked previously.
WHAT I HOPE FOR... An environment where I can help our children & families cope in the world around them.
WHAT I AM WORRIED ABOUT... lack of tools, inefficiencies, quit agencies that don't talk to each other, hospital bureaucracies
THE MOST MEMORABLE MOMENT WAS... A family capable of managing on their own - walking out the door of AHK




VOLUNTEER
NAME: THATCHER
MY STORY... JUNIOR FINANCIAL ADVISOR - CLIENT WAS AT ME. JUST MOVED TO COVINGTON, WAS A BOY SCOUT, LOOKING FOR WAY TO ENGAGE W/ CHILDREN
WHAT I HOPE FOR... TO CONNECT W/ CHILDREN & FAMILIES TO SHOW THEM THE WONDER OF OUTDOORS, "ADVENTURE"
WHAT I AM WORRIED ABOUT... IS THERE A PLACE FOR THE CAN I REALLY CONTRIBUTE THESE KIDS SEEM TO NEED SUCH QUALITY CARE
THE MOST MEMORABLE MOMENT WAS... WHEN SAMI IDENTIFIED BUTTERFLIES IN THE PRANKLE GARDEN.




RN
NAME: Bis RACHH
MY STORY... Pediatric nurse transition @ AHK - engaged me, make
WHAT I HOPE FOR... Great care & outcomes for patients. Collaborative work environment which is efficient/organized/allow me to allow me to focus on nursing.
WHAT I AM WORRIED ABOUT... to be a nurse & a mother - let's do that together
THE MOST MEMORABLE MOMENT WAS... Not being able to make things better. Celebrating the growth & confidence in the kid & family as they got better/healthier. Knowledge about the long-term care.




PARENTS
NAME: Lorilee
MY STORY... PhD in education, strong supportive family, solid marriage, premature baby
WHAT I HOPE FOR... to raise a family, maintain a career, give back to the community and still have time to relax & enjoy life
WHAT I AM WORRIED ABOUT... work, family, finances
THE MOST MEMORABLE MOMENT WAS... holding my baby for the first time



PHYSICIAN
NAME: ANNIE KRAFT
MY STORY... VERY FORTUNATE TO ATTEND WELL KNOWN UNDERGRAD + MD SCHOOL. GREW FROM CHILDHOOD THAT I WANTED TO BE A DOCTOR.
WHAT I HOPE FOR... TO SAVE THE WORLD - I AM ENTHUSIASTIC I WANT TO HELP PEOPLE THROUGH THEIR HEALTH ISSUES TO LEAD A WONDERFUL LIFE -
WHAT I AM WORRIED ABOUT... TIME. JUGGLING ALL MY RESPONSIBILITIES. PROVIDING TOP QUALITY CARE AT ALL TIMES, EVERY TIME.
THE MOST MEMORABLE MOMENT WAS... SAYING A PARENTER SAY TO ME, THANK YOU FOR YOUR KINDNESS, COMPASSION, AND FOR HELPING MY CHILD, FOR UNDERSTANDING ME AND NOT KNOWING ME.



PATIENT
NAME: Joey 9yo
MY STORY... I have a central line & need IV antibiotic for 3 weeks. My parents aren't able to take care of me right now
WHAT I HOPE FOR... I hope for someone to play with things to do. Family to visit me maybe a little school?
WHAT I AM WORRIED ABOUT... that I'll feel scared or alone that the kids/ docs won't be nice to me; that my family won't visit that I'll be bored
THE MOST MEMORABLE MOMENT WAS... The child life specialist added cards taking time to get to know me & play & care for me.



CHILD LIFE SPECIALIST
NAME: Shammah Olor
MY STORY... eldest sister, passionate about caring for children, cousin has special needs, organized needs workshop at a activities center children's unit
WHAT I HOPE FOR... a soothing, engaging, fun experience for pts & families education help children gain development
WHAT I AM WORRIED ABOUT... transitioning children outside of AHK not having the engagement / stimulation
THE MOST MEMORABLE MOMENT WAS... making my first AHK pt. smile

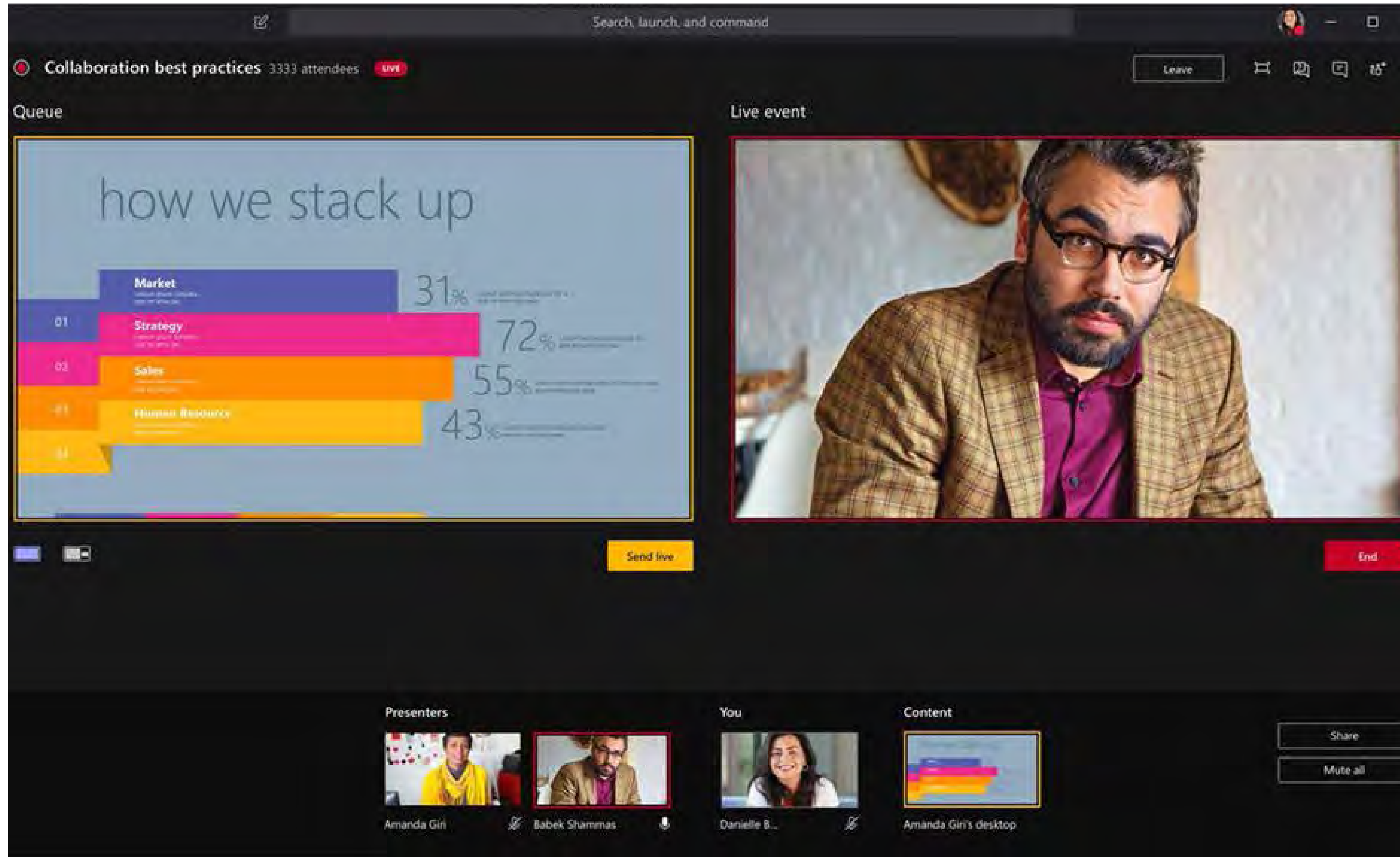
Character development and role-playing in support of experience mapping.

Trust. Share. Inspire.

Our invitation to dream.

We are dreaming, inventing, designing and planning with robust resources and expertise across our virtual platform. Stantec has invested in this approach for many years, the pandemic has hastened adoption and our teams are fully enabled for virtual engagement. We're in the business of limitless potential. We're constantly advancing the leading edge of what's possible. Offering virtual access to our creative problem-solving and latest design thinking to deliver health outcomes starts with inspiring engagement. Some ways we virtually engage are:

- Aesthetic/Inspiration-based
- Mission Endorsement
- Consensus Building
- Questioning
- Brainstorming
- Prototyping through Augmented + Virtual Reality Platforms, Individual "Dollhouse" Mock Ups, and Digital Gameboarding
- Big Room Approach
- Pull Planning Sessions
- Character + Personas Development
- Storyboarding
- Character Role-playing
- Storytelling
- Experience Mapping
- Virtual Design Charrettes
- Guiding Principle Agreement
- Visioning
- Interviewing
- Visualizing
- Lean Journey Tracking
- Measurable Outcomes Development

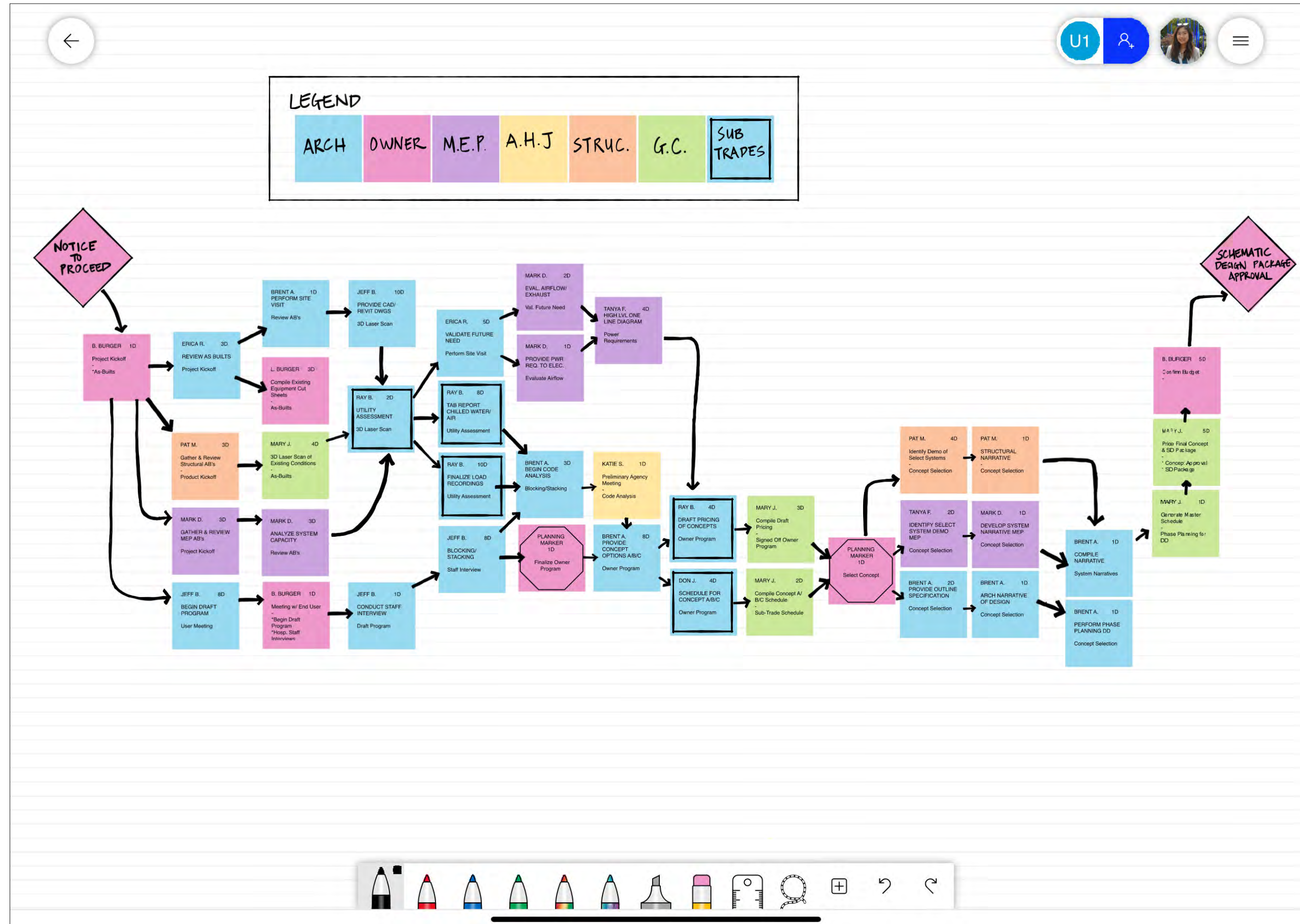
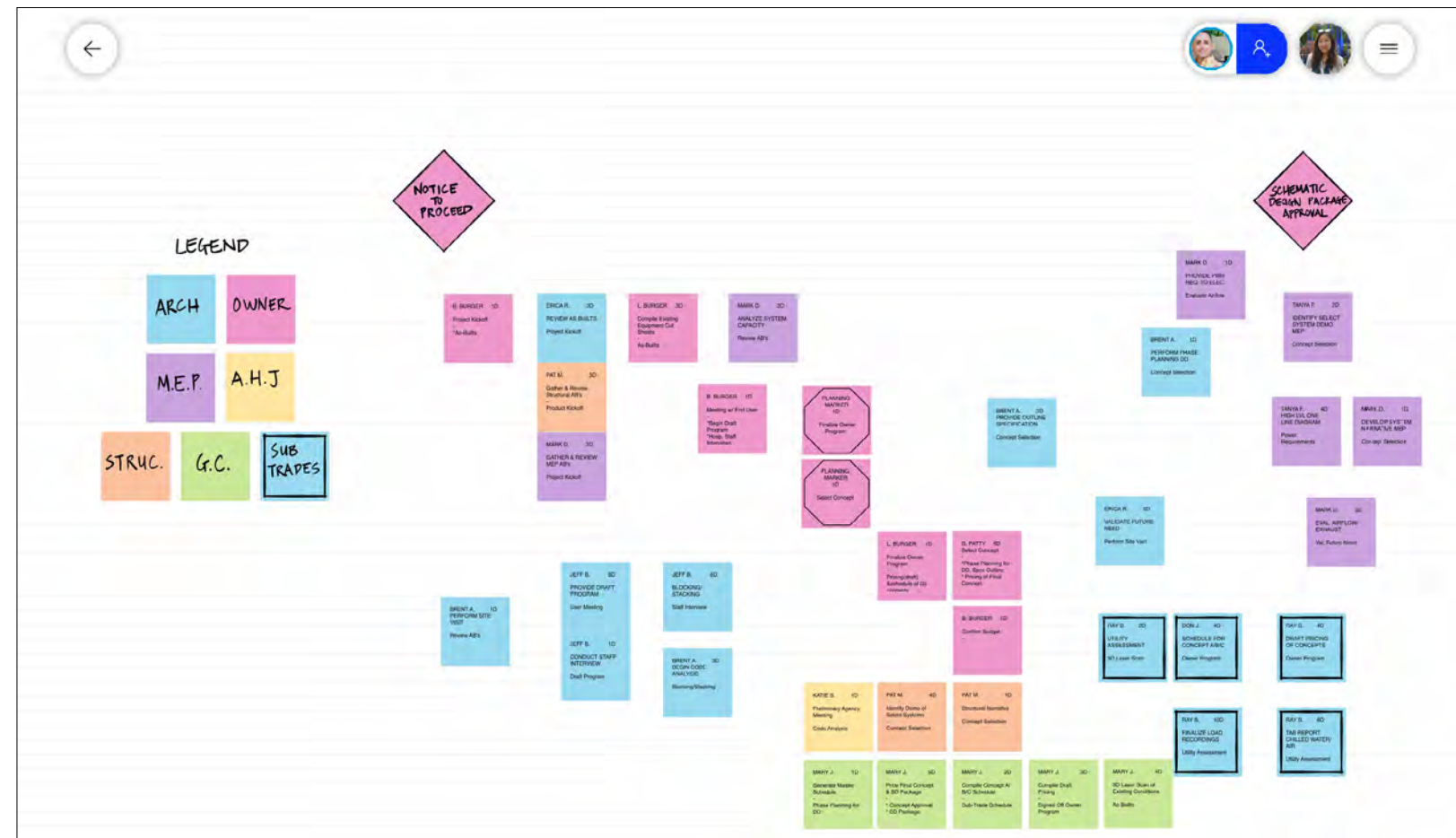
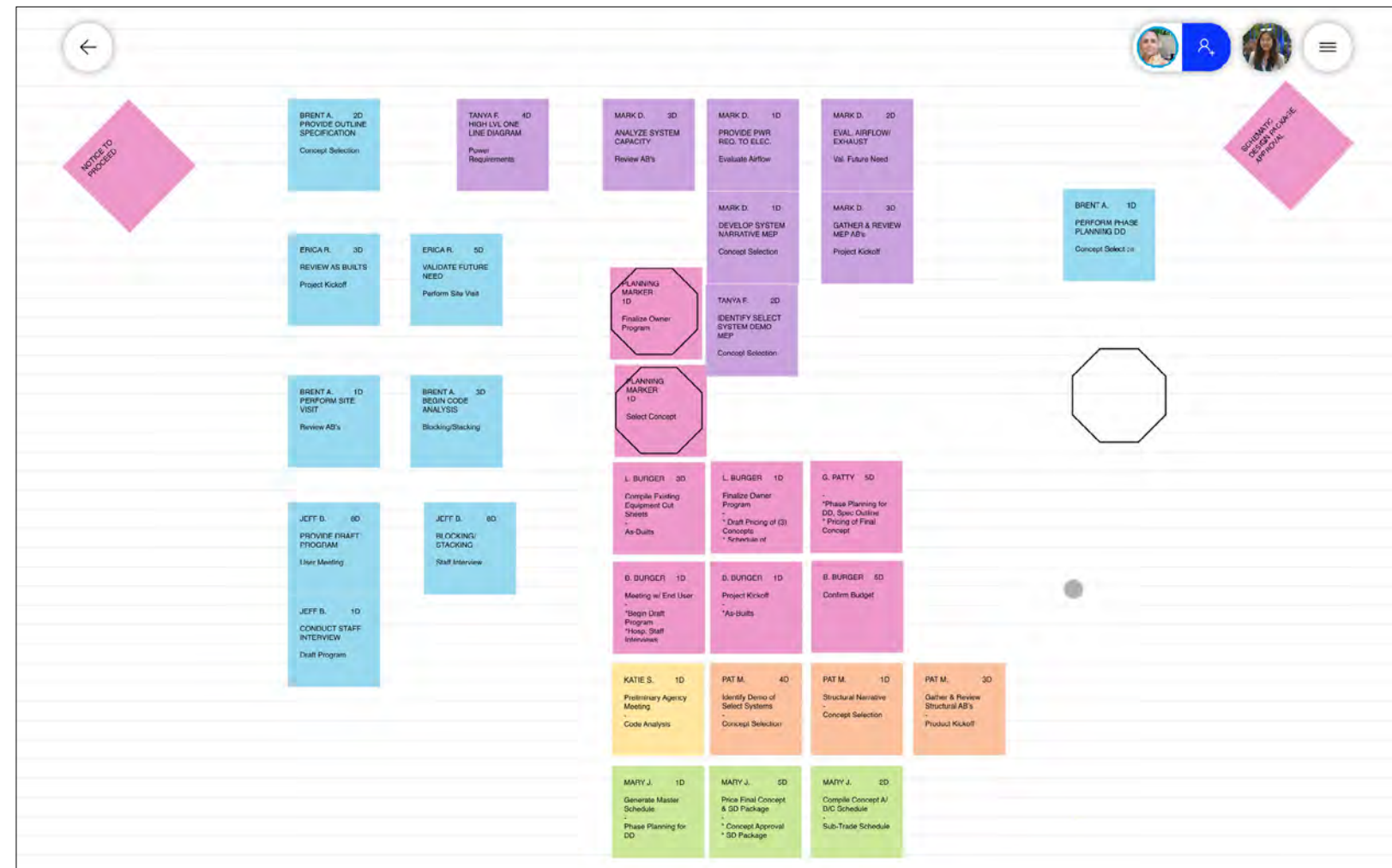


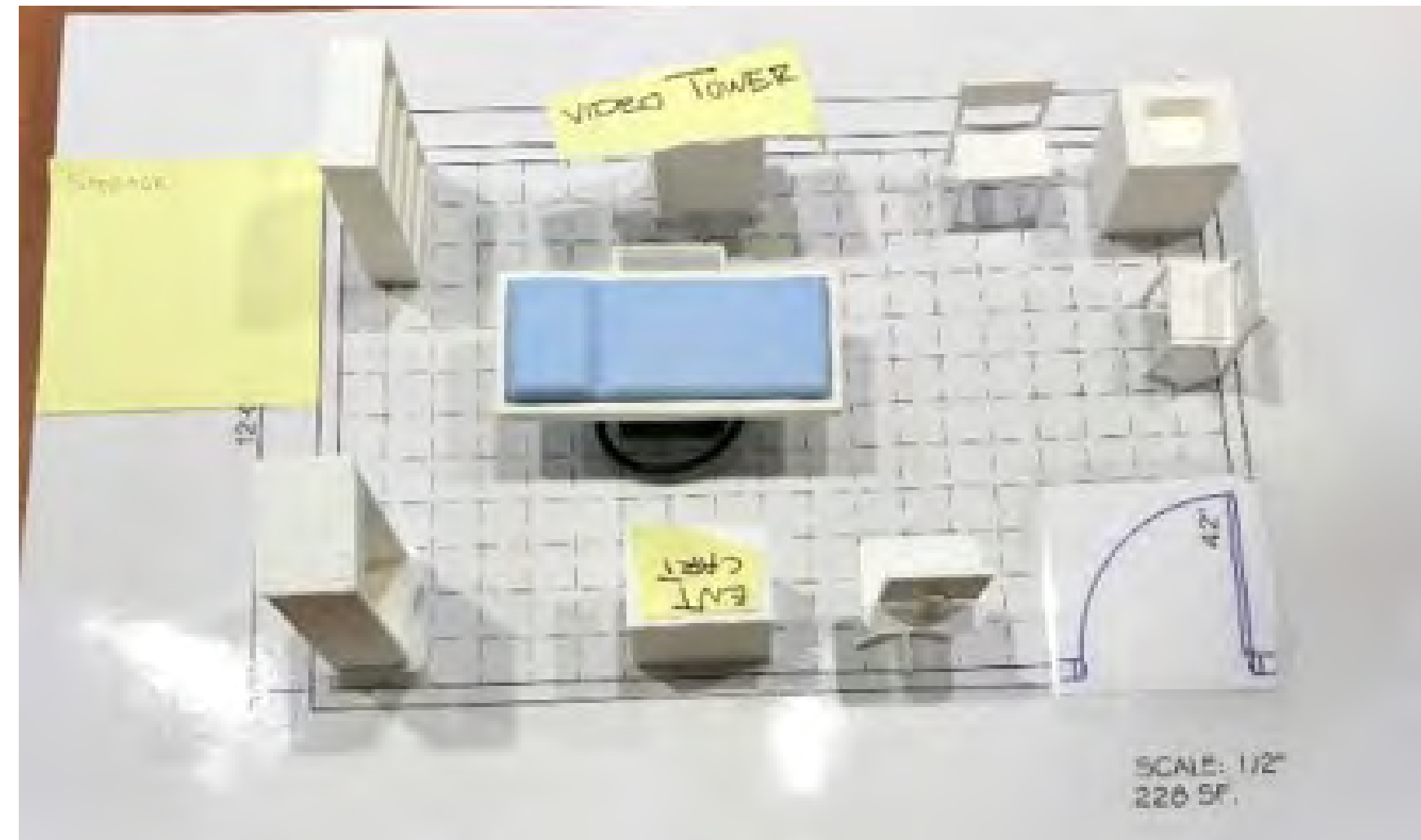
MICROSOFT TEAMS



GOTOWEBINAR + ZOOM MEETING

PULL PLANNING





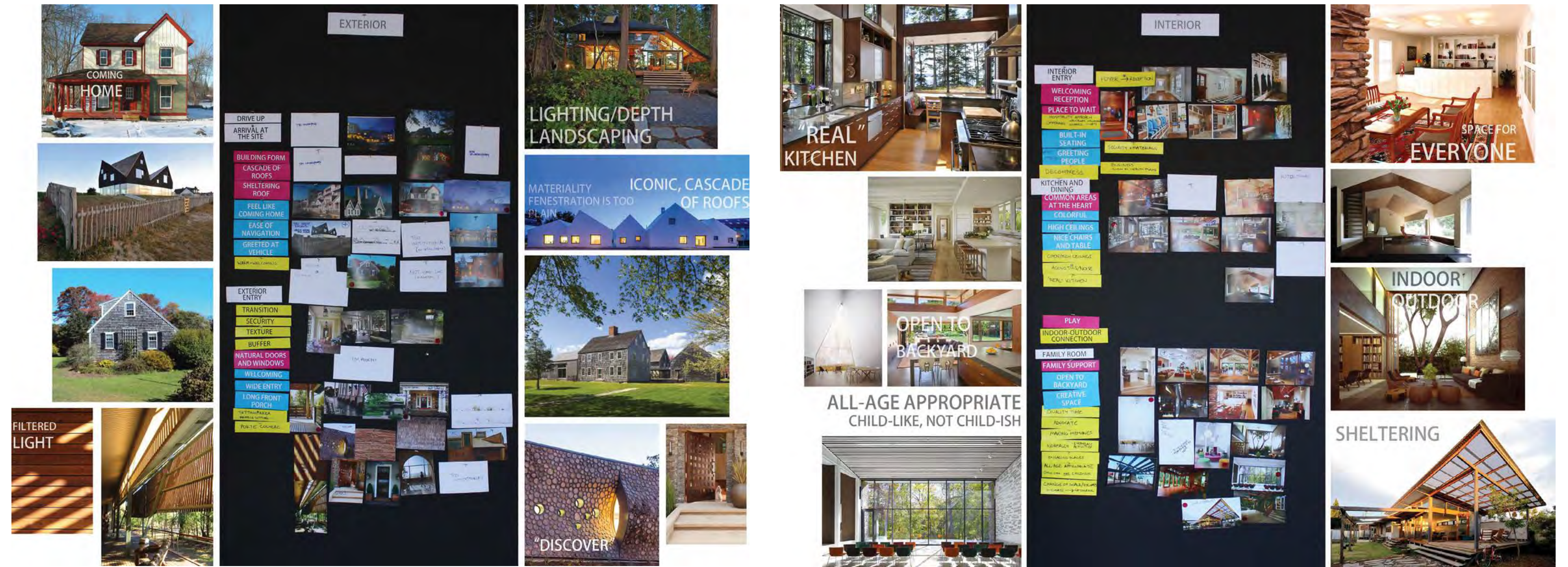
3D PRINTING FOR DOLLHOUSE MODELING

CUSTOM TOOL DEVELOPMENT

Collaboration evokes unique solutions.

We believe that the best solutions are the product of diverse perspectives. That's why we're committed to fostering an inclusive community of talents, backgrounds, and expertise enabled with digital platforms.

Listening to your needs, bringing the right people and skillsets to the table and understanding your current processes are the most important aspects to determine the best design strategy. We proactively engage stakeholders to develop a comprehensive plan so that the benefits are prevalent throughout the project, and by doing so, align expectations.



Aesthetic/Inspiration-based Consensus Building

A background graphic on the left side of the page consisting of a topographic map with various contour lines in shades of gray. The lines are more densely packed in some areas and more spread out in others, creating a sense of depth and terrain. In the lower-left corner of this graphic, there is a small orange square icon containing a white stylized symbol that resembles a compass rose or a similar directional indicator.

INVENTIVE **EXECUTION**

Investment in beta-tested processes to ensure a seamless approach

Customized review and coordination processes

Legacy and proven processes reimaged in digital format

Limitless talent optimized across geography, 18 (hours a day)/6 (days a week)



Transformative + anticipatory.

We're driven to seek what is next. To challenge ourselves and our clients to create solutions that solve challenges today – and give them a competitive edge in the future. On the following pages, we have shared just a few ways we have successfully utilized technology to this advantage and brought buildings to life through virtual project delivery.



Disruptive thinking. Innovative technology. Expert talent.

The convergence of these elements is reshaping how we think about project delivery and where to invest our time. In today's market, data is the key to unlocking a project's potential with robust capabilities of a virtual platform.

Here's a list on the types of applied technology we use to best serve our clients and to connect our teams.

Adobe Connect	MicroStation
AutoCAD	Mural
Autodesk Navisworks	Newforma
BIM	Oculus Quest
Cintoo	ProjectWise
dRofus	Remote Insite VR Meetings
Fuzor	Revit
Inventor	Unity
Matterport	Unreal Engine
Maya	Virtual Consultation Tool
Microsoft Teams	3D Studio Max

Virtual Reality

Before wrapping up the design development phase on the UPMC Pinnacle ACB, we invited our client to the office for an interior design presentation and Virtual Reality (VR) tour to receive their final approval. During the presentation, our client became uneasy about a focal ceiling that was shown in a rendering. We transitioned our client into Virtual Reality where the client was able to occupy the building and understand the design from a 360 perspective.

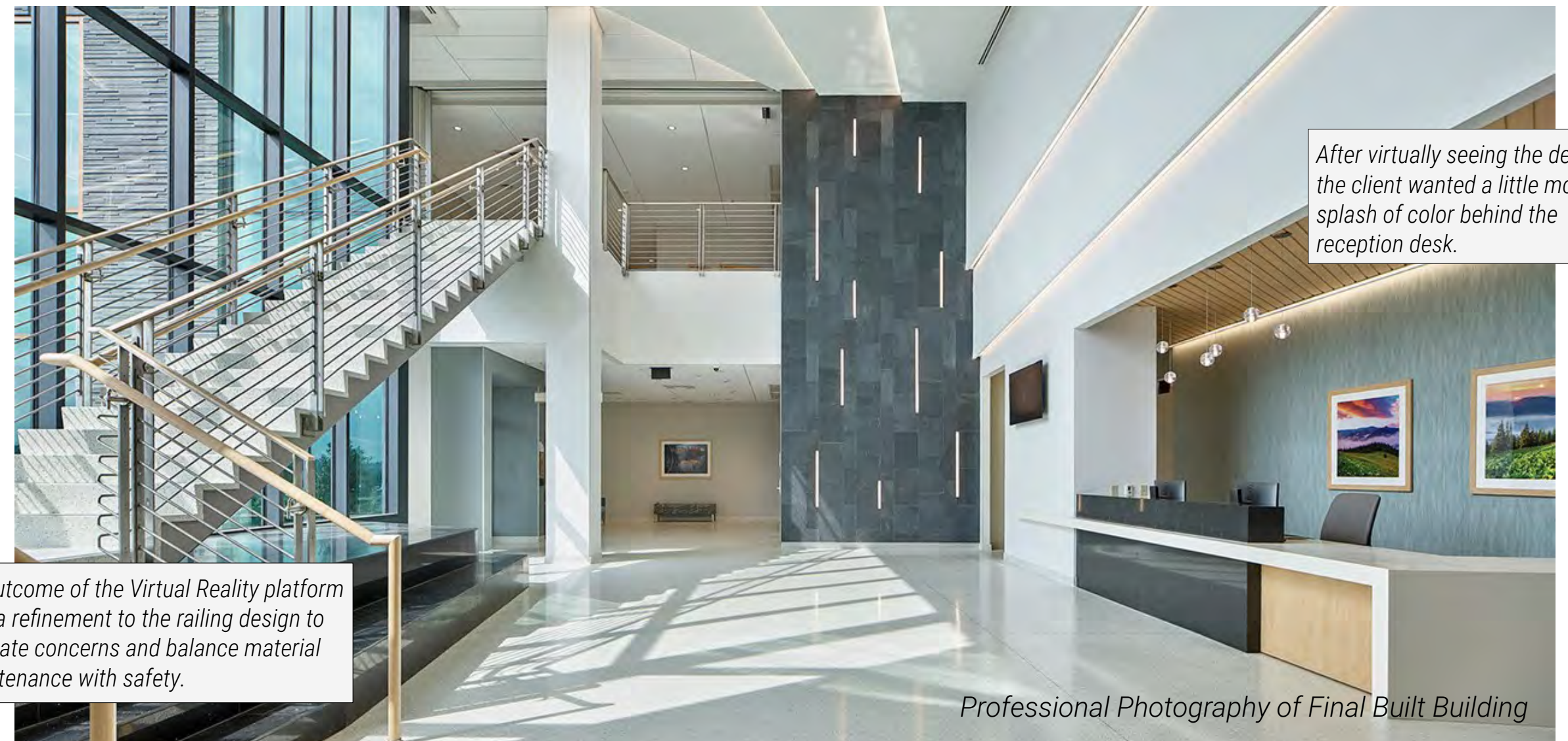
Having the opportunity to use VR technology allowed us to clearly communicate and move forward with our design.

UPMC PINNACLE AMBULATORY CARE BUILDING

York, Pennsylvania



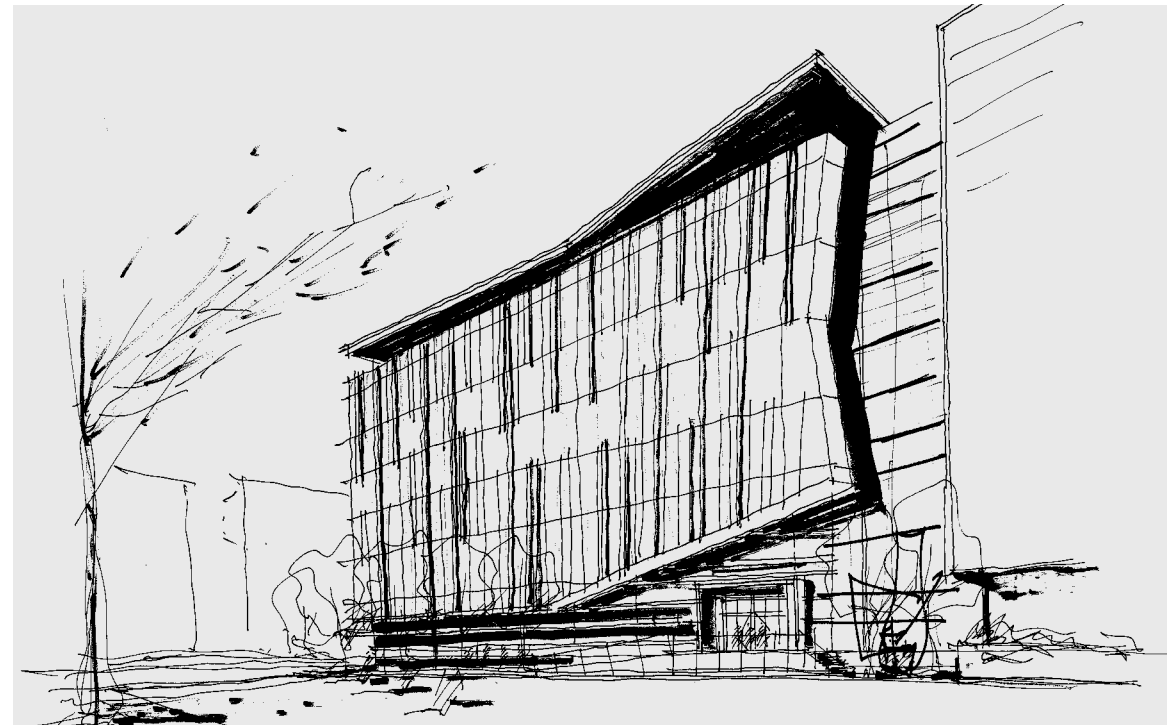
Virtual Reality Screen Capture



After virtually seeing the design, the client wanted a little more splash of color behind the reception desk.

An outcome of the Virtual Reality platform was a refinement to the railing design to alleviate concerns and balance material maintenance with safety.

Professional Photography of Final Built Building



Although the changes from the hand sketch through the two levels of digital renderings are subtle, they represent significant intersection between design and constructibility which was explored in the Virtual Reality realm to ensure design integrity.

Virtual Reality

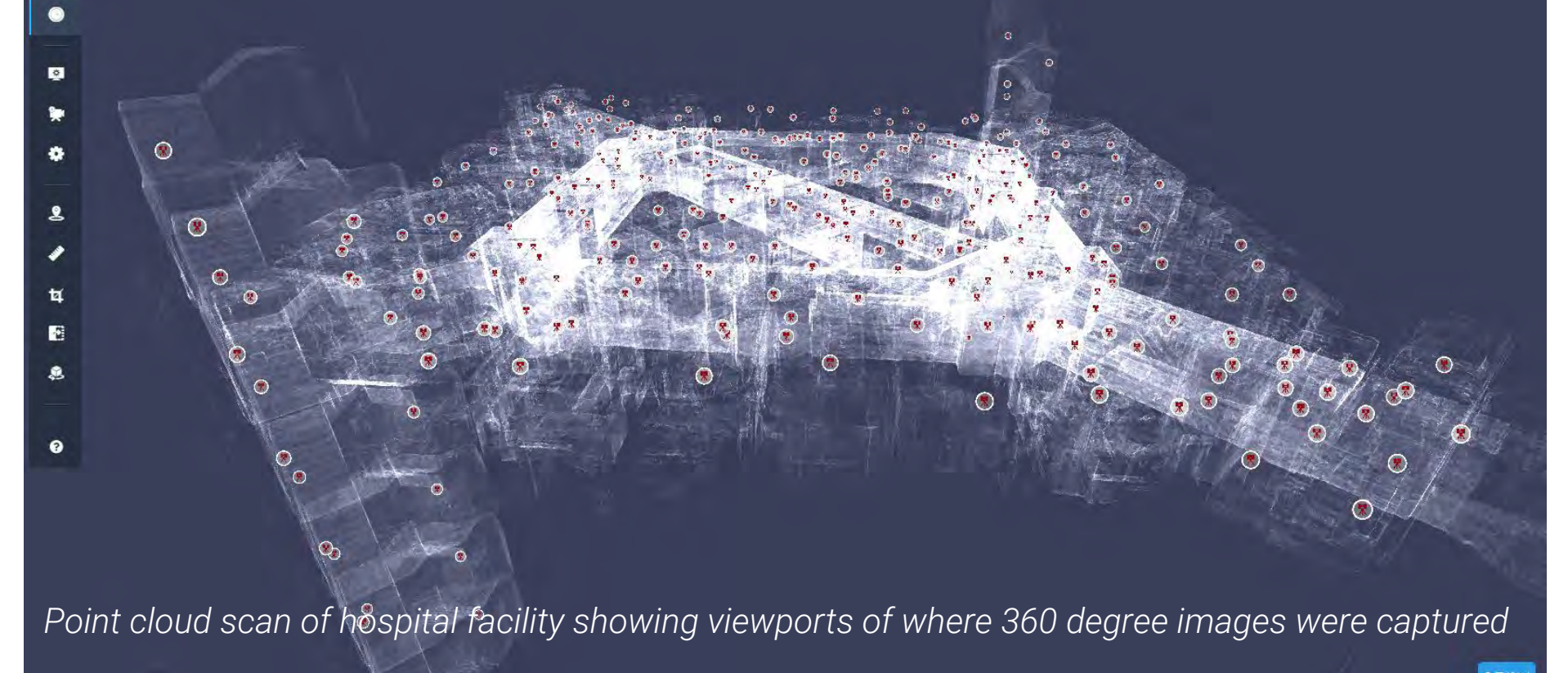
The UCSF Bakar Precision Cancer Medicine Building project team made the most of the co-location of design and construction teams onsite by installing virtual reality equipment in the construction trailer, directly next to the main hospital where the stakeholders collaborated. Doctors and nurses were able to experience the design by viewing it through headsets, allowing a deeper understanding of how their space would function and to provide feedback to the proposed layout. Since stakeholders were able to interact with mock-up spaces much earlier, essential feedback was gained to help inform the design process. It also allowed for the design team to hone in on the “rendition” of the project and the materiality.

UCSF BAKAR PRECISION CANCER MEDICINE BUILDING

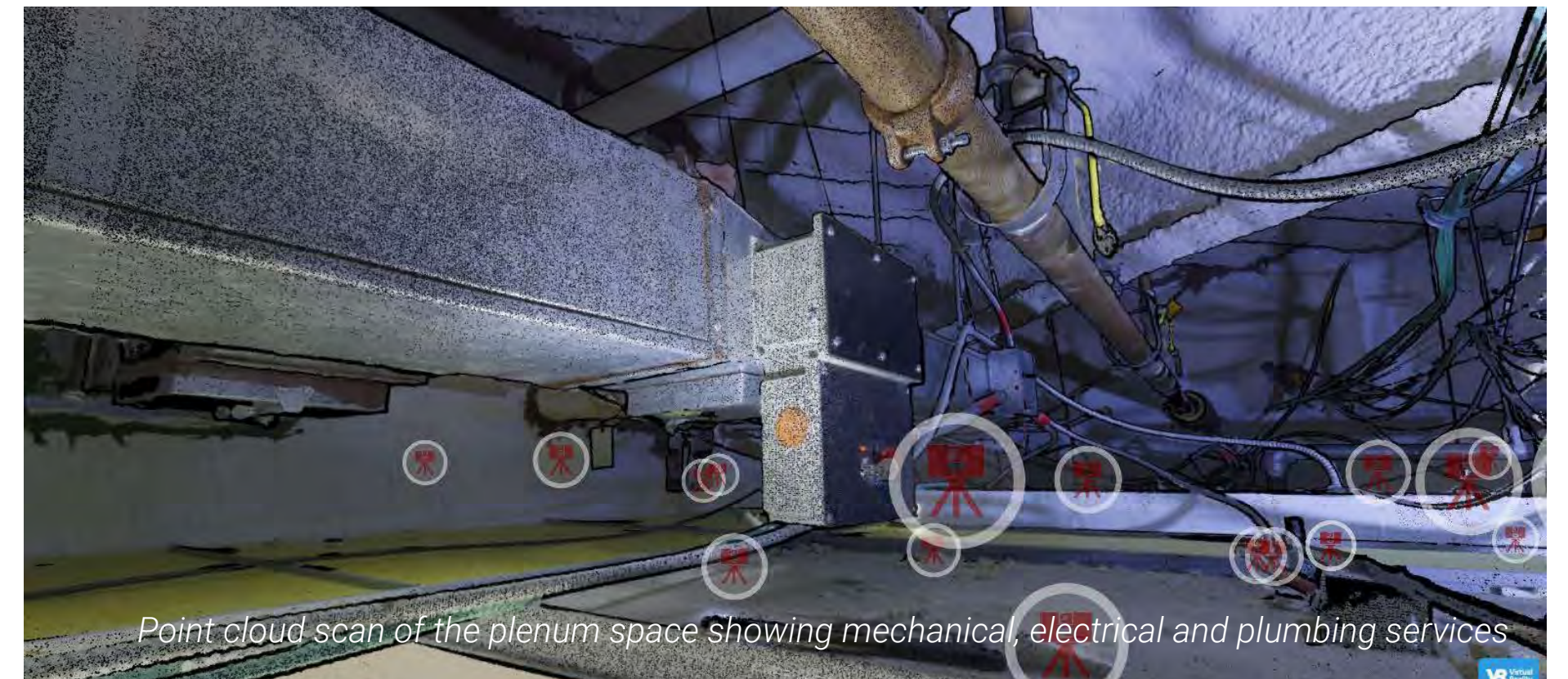
San Francisco, California

Reality Capture - Cintoo

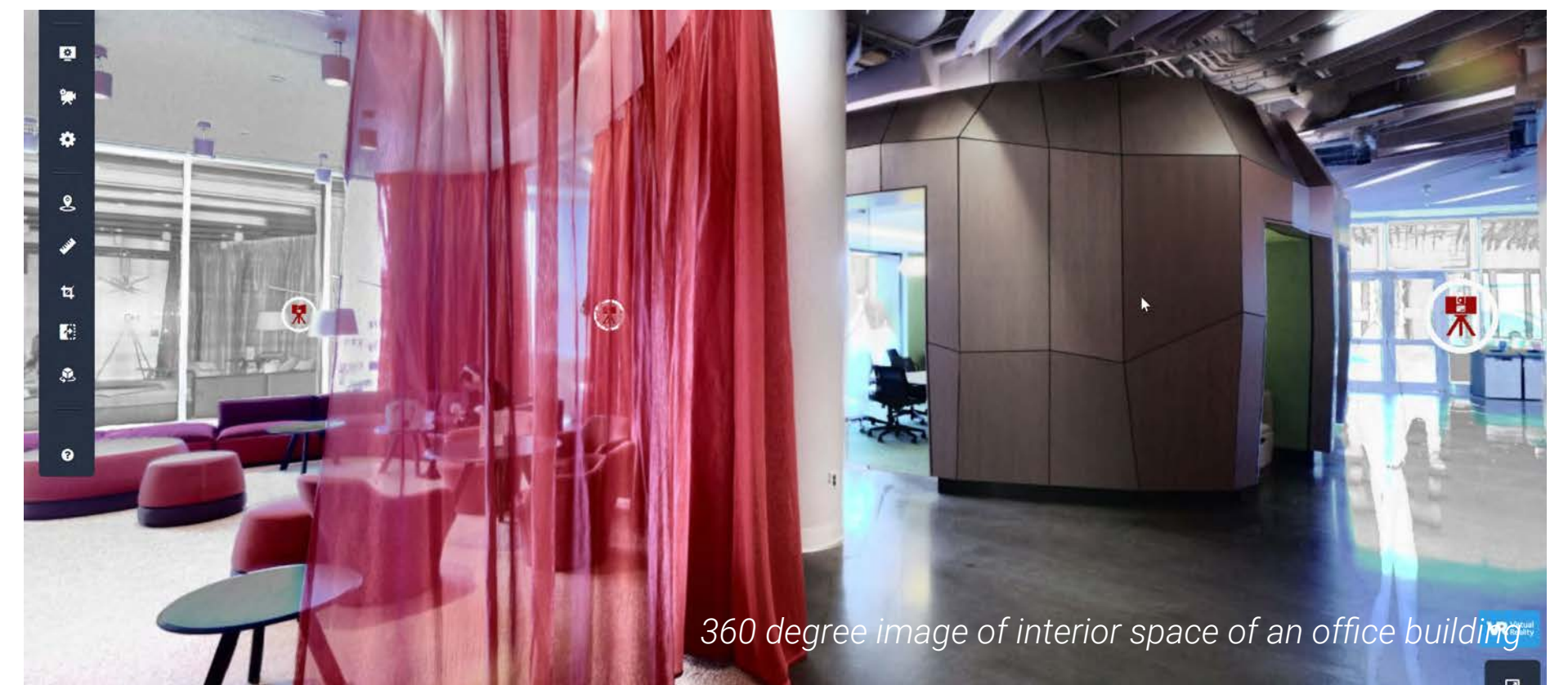
For a current client, we worked with a third-party company to laser scan a 7-story hospital building in Philadelphia for a renovation project. We set requirements for the density of scans both above and below the ceiling, and the delivery format for the scan files. We are now using Cintoo, a web-based point cloud management system, to efficiently host these massive point scan files. Secure access can be granted to any members of the project team to view this information. Cintoo provides several handy view styles and measurement tools. We can heat map our BIM360-hosted Revit model against the point scan to detect differences between our model and the scan, as well as selectively export portions of the scan in order to bring small, lightweight parts of the point scan into Revit. Using this technology platform means that we were able to move forward with a complex project despite the design team never setting foot inside the building—a critical innovation given current global restrictions and building access and travel.



Point cloud scan of hospital facility showing viewports of where 360 degree images were captured



Point cloud scan of the plenum space showing mechanical, electrical and plumbing services

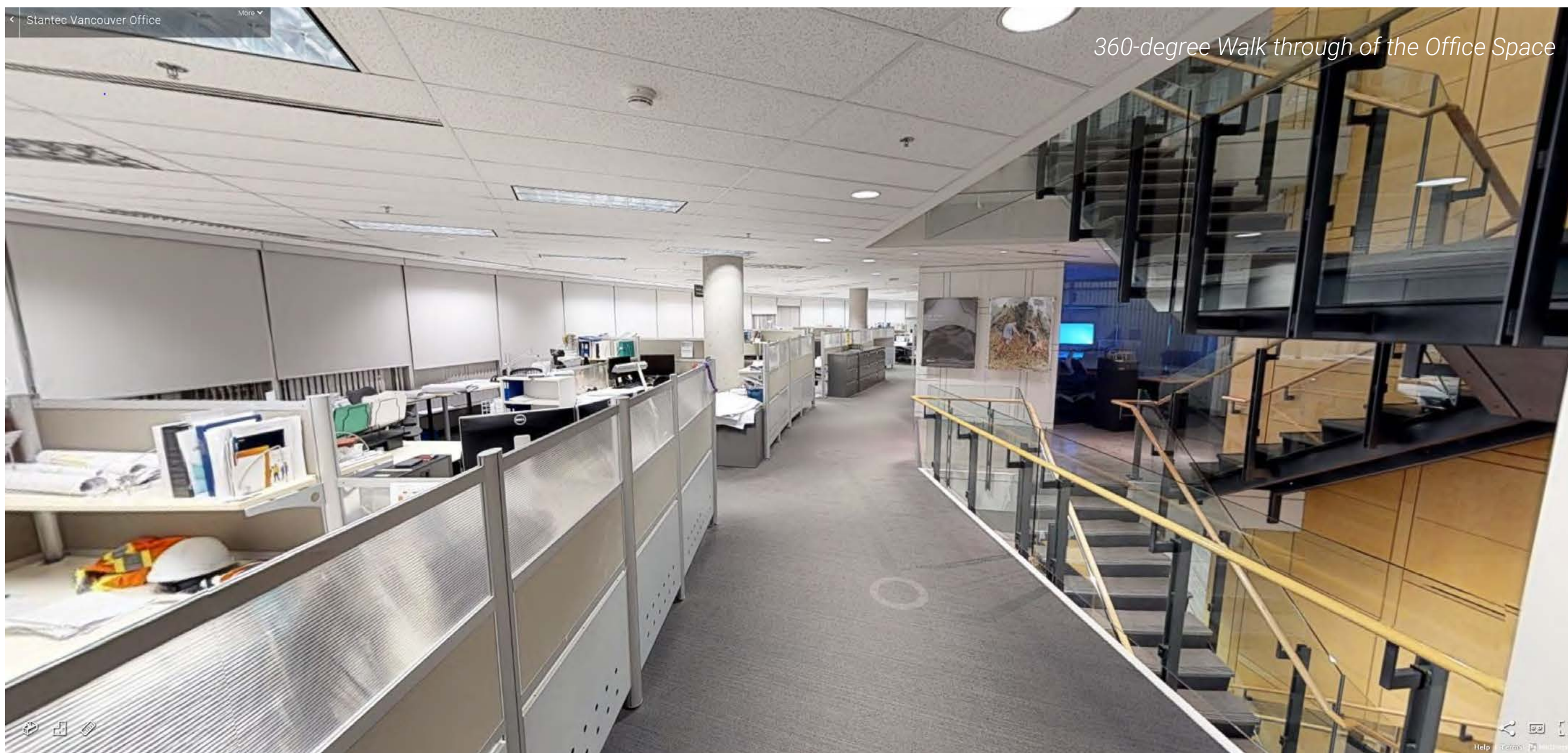


360 degree image of interior space of an office building

3D view of Stantec's Vancouver Office



360-degree Walk through of the Office Space



Reality Capture - Matterport

Stantec is working on a renovation to the surgical daycare unit within a hospital on Vancouver Island. To quickly understand the 24/7 operational environment, we used a Matterport camera to efficiently scan the space in off-peak hours to limit operational disruption. Once a scan is complete, the Matterport software can then stitch together the captured images to create a detailed, zoomable, 360-degree visual that teams can use as a reference from any remote location. Our project teams use these visual scans to walk through the spaces with both the client and consultants, providing an immersive experience that develops a shared understanding of existing conditions and facilitates more meaningful solutions-based conversations.



3D Printing

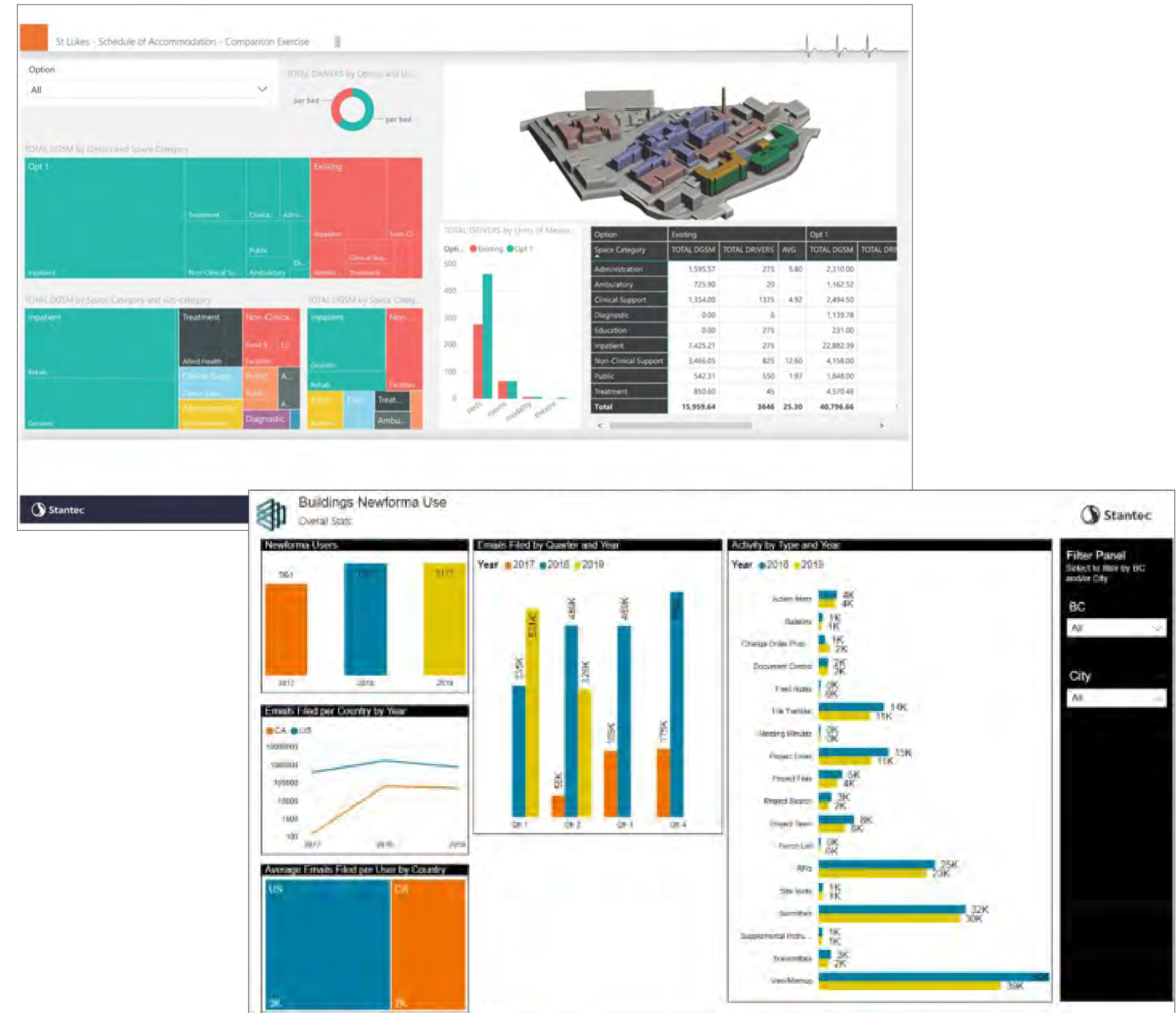
Our health planners recently adopted 3D printing in a new and playful way. They had the idea to use a Playmobil City Life hospital kit, built at the 1x1 scale, complete with doctors, nurses and many pre-manufactured room components. What was not included in the kit, we printed on our 3D printer. We now have a complete hands-on user engagement toolkit, complete with to-scale people, that allows users to quickly test equipment, material flow, and people flow through their spaces. It is a highly efficient process. Quick to assemble and reconfigure. And, we're growing a library of custom printed elements like CT Scanners and highly specialized medical equipment that aren't available in kids playsets. It's been a huge hit, and we're continuing to use this communication strategy with other clients.

Interactive Data Dashboard

For Steward Health Care Malta, Stantec applied Power BI as a means of communicating program distribution, area capacity analysis, network of program analysis for service delivery, as well as early phase cost analysis. This streamlined design thinking and created better alignment with client goals, highlighting opportunities to innovate in areas of our delivery that were not previously considered.

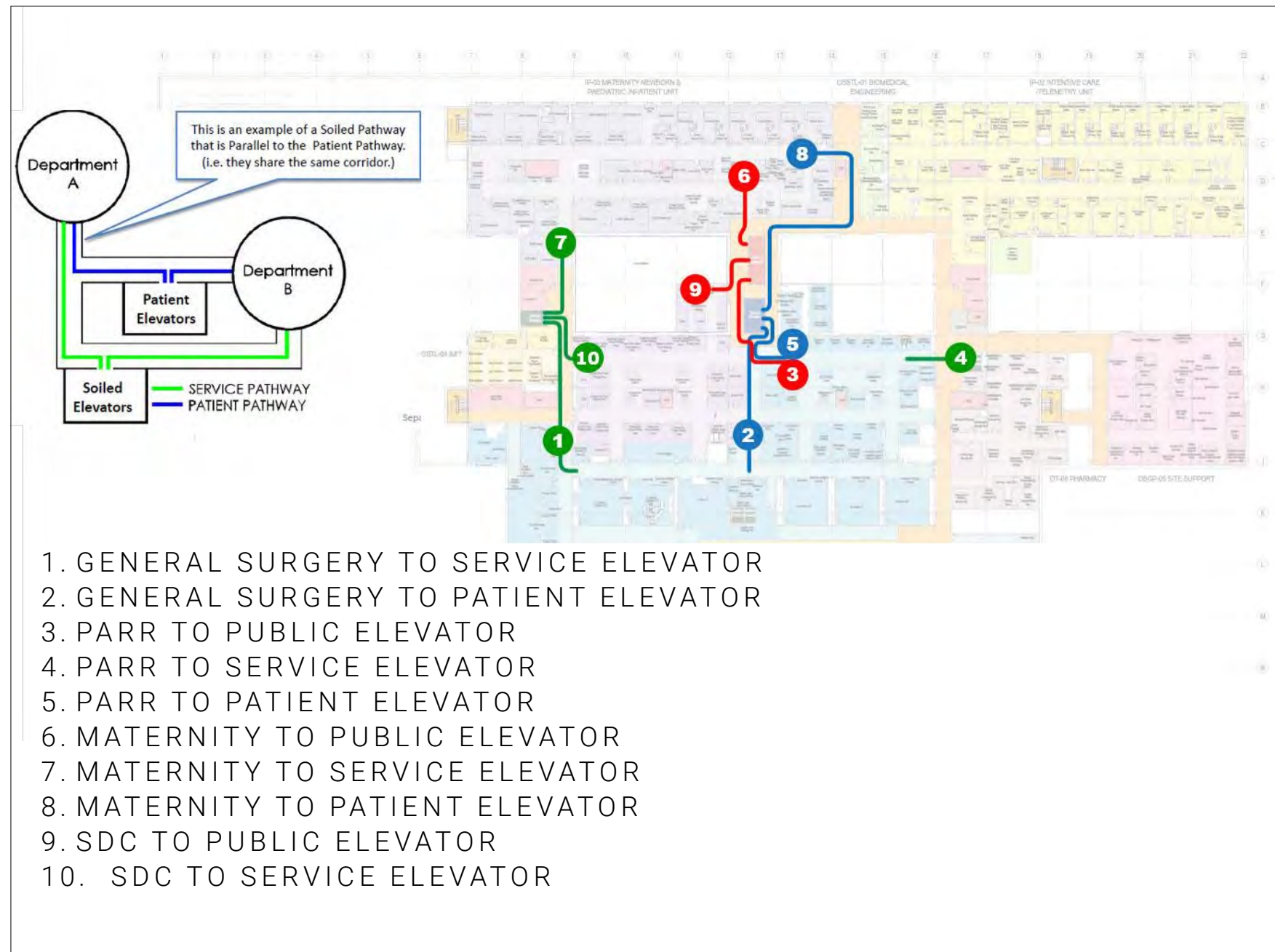
With the addition of new inpatient services, there is also a correlated need to add support spaces. The PowerBI dashboard visualizes the resulting impact to total hospital size with incremental inpatient care key room count increases, allowing the design and client team to fully understand size and cost implications to the project.

STEWARD HEALTH CARE MALTA

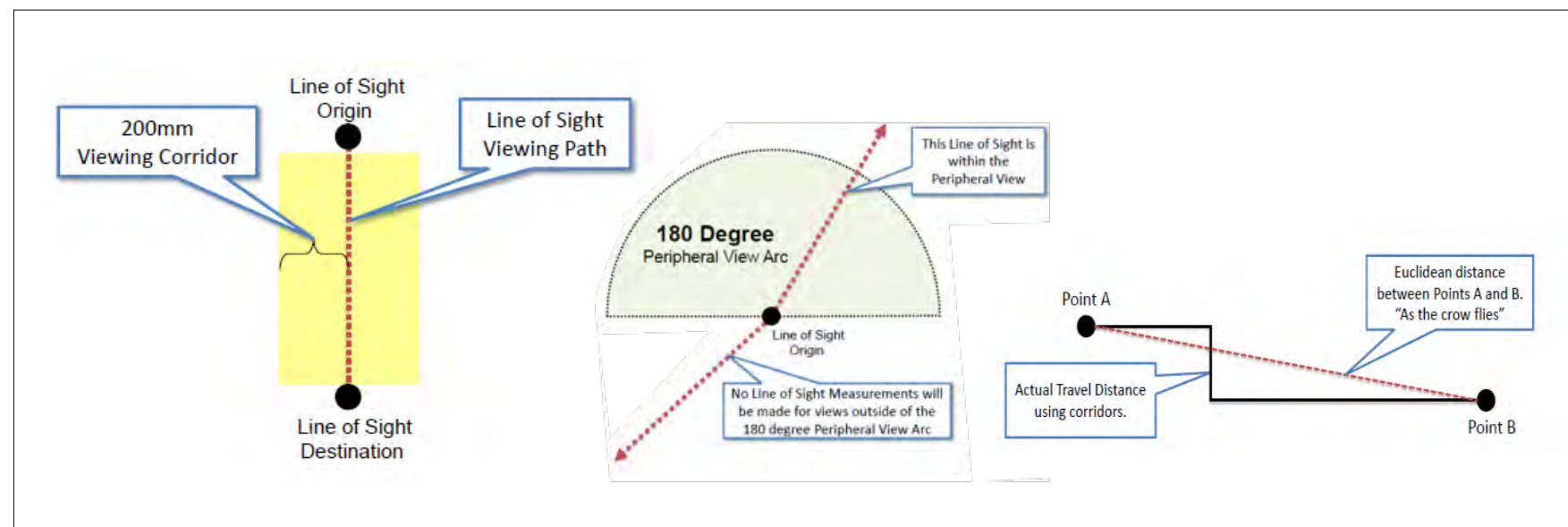


Power BI dashboard Screen Captures

SCORED ELEMENTS: SEPARATION OF FLOWS



CLINICAL SCORING REQUIREMENTS

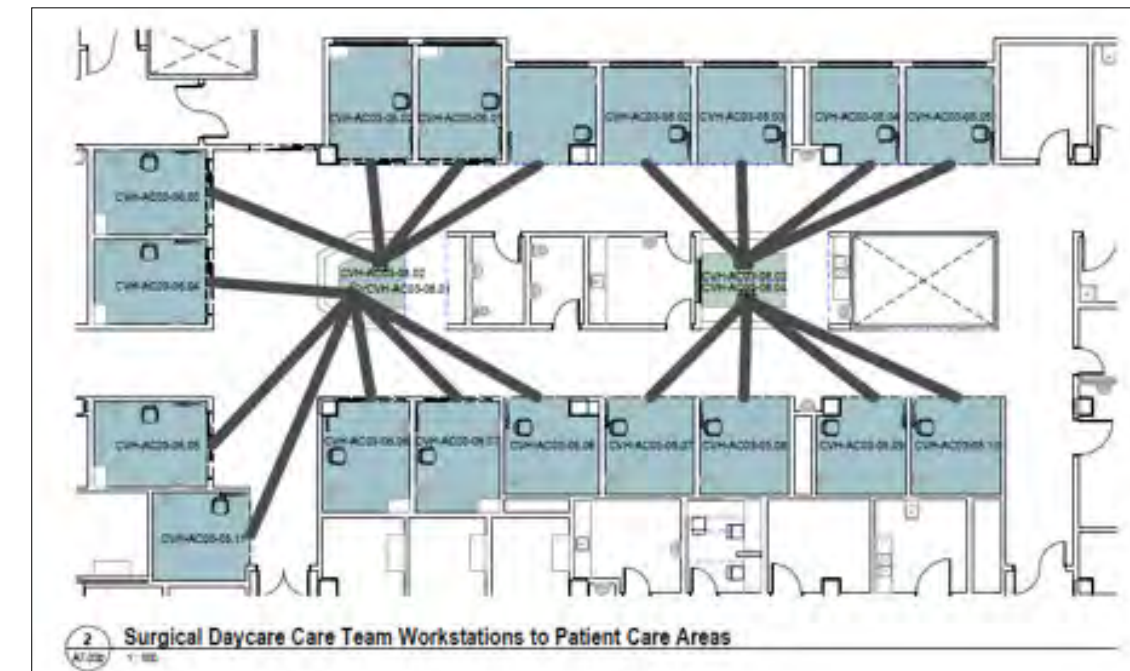


SCORING RESULTS:

LINE OF SIGHT



TRAVEL DISTANCE + SEPARATION FLOWS



Custom Tool Development

On the North Island Hospitals project pursuit, there was a scoring criterion requirement to determine the travel distances between certain room types. At the time, traditional software platforms did not have an efficient method for calculating this metric. So, we developed a tool to easily chart a path between two rooms and calculate the distance, resulting in the ability to track any and all relationships desired by the project and stakeholder teams.

It also facilitated the development of the necessary documentation to prove compliance with the client requirements. Our innovative approach to this solution was recently added as functionality to the software platform, demonstrating our position as thought leaders in the AEC industry.

NORTH ISLAND HOSPITALS

Canada

Long Term Care – Virtual Charrette

14 DAYS FROM INCEPTION TO SCHEMATIC DESIGN

In September of 2020, and in response to the global pandemic, a confidential governmental client invited the Stantec team to participate in an intensive 2 week design period to evaluate potential solutions for the rapid delivery of over 1,000 new Long Term Care beds, to be designed in detail, built and commissioned in less than 14 months – a task that would traditionally have a 1 year design phase and a 2-year construction phase.

In response to the request, Stantec took on the role of Prime Consultant and by leveraging the strength of our Stantec Global Health Sector network, we assembled a virtual project delivery team of over 30 Stantec thought-leaders across six (6) regions; coordinated into twelve (12) specific task forces adjacent with an Executive Leadership Team in oversight.

Over a 14-day design period, the task force teams met daily with each other, contractors, modular delivery manufactures and end client groups to identify and test alternative potential design solutions. With the well understood tools

TASK FORCE TEAMS

BUILDING SYSTEMS

- *Long Term Care Design Innovation*
- *Exterior building envelope*
- *Interior architecture*
- *Site and civil*

DELIVERABLE COMMUNICATIONS

- *Design: elevations & perspectives*
- *Structural*
- *Process Planning*

SPECIALTY SYSTEMS:

- *Helipad Team*
- *Acoustics and sensory design*
- *Modular construction process*

ADMINISTRATION SERVICES:

- *Permitting*
- *Legal*

of AutoCAD, REVIT, BIM 360, dRofus, Enscape, SketchUp, Primavera and MS Teams at their fingertips, the team was able to effectively facilitate the flow and distribution of information and collaborate with internal and external design partners in an iterative way.

Though the pandemic limited the ability to travel to physical meetings, it also enabled the team to use virtual platforms for meaningful engagement. This unlocked the ability to bring specialty designers from across the global organization. With regular morning and evening virtual calls, valuable time was spent on technical and design aspects, as well as interpersonal relationship-building. By way of this, the team created an environment that supported trust in short order.

The result of the 2 week effort, was the development of three (3) viable design scenarios with accelerated construction timeframes, complete with detailed design and delivery schedules and workplans to satisfied the clients needs.

Long-term Care Virtual Charrette

Virtues of Virtual Project Delivery from this Unique Opportunity:

WE CAN MOVE MOUNTAINS

Driven by the gravity and importance around the need for the rapid deployment of Long Term Care beds and fueled by the innovation of the team members, new workflows and methods for achieving the impossible were invented in real time.

DOING VS. DELEGATING

Driven by the compressed timeframe, the process required a team of Senior Leaders doing the work which may have otherwise been delegated. Our client-centered, Principal-led, ideas-driven culture was key to this hands-on approach and ultimate success.

DESIGN RESILIENCY

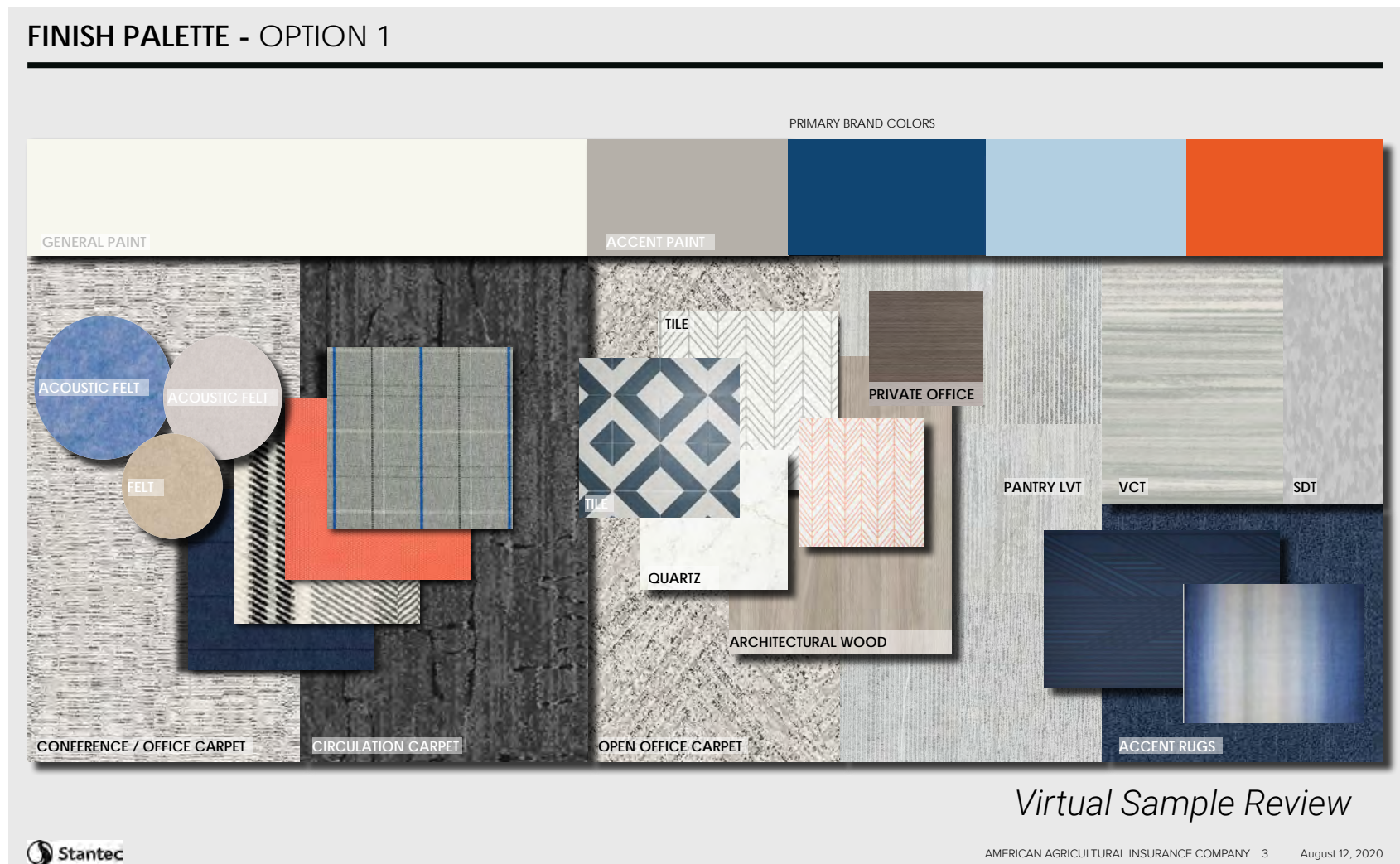
As multiple design scenarios were being developed and vetted in parallel, and new information was regularly coming online, the design products were intentionally resilient for immediate refinement. The design team used the adjacent matrix to guide development decisions around what tools to use for specific assignments.

THE HUMAN FACTOR

Although the team was using technology to work smarter instead of harder, at the end of the day, we were a team of human beings working very hard, and physiological and psychological factors were at play and required consideration. By being mindful of providing adequate work breaks, ensuring team members were eating properly, staying hydrated, taking time to exercise and mediate we were able to mitigate potential burnouts and ensure that team members were able to be their best versions of themselves along the way.

EASY TO BUILD, HARD TO BREAK	HARD TO BUILD, HARD TO BREAK
EASY TO BUILD, EASY TO BREAK	HARD TO BUILD, EASY TO BREAK

Development Decision-making Matrix - Aligning Effort with Tools



Interior Design Sample Review

In order to virtually review finish samples with Niagara Health, our interior designers sent the stakeholders organized and coded boxes for delivery ahead of the scheduled Microsoft Teams meeting. Once the Teams meeting began, the stakeholders were able to review the samples and ask questions in real-time.

Following the Teams meeting review, our designers will create Virtual Reality mockups of key spaces for Niagara Health. With the creation of virtual mock ups, our team is actually able to produce more and larger amounts of space that we would not otherwise have the space to build in physical cardboard mockups.

Another way our interior designers virtually can review samples with clients is through digital palattes shown in the bottom photo.

NIAGARA HEALTH

Canada

DRIVING **EXCELLENCE**



Design focus

Integrated services platform

Global expertise, local presence



Dedicated to virtual project delivery success.

We are dedicated to delivering excellence, across our global platform. Through our innovative technology practices, our offices from coast to coast North America to London, UK are readily available 18 hours a day, 6 days a week to implement your project needs.

At Stantec, we take a holistic approach to the adoption and advancement of digital tools and virtual processes, having successfully weaved them into our project approach for years. We promote creativity and innovation via technology to improve the design, delivery and handover of facilities to our clients. Each aspect of our project approach from design and collaboration, project management, BIM management, and quality control are governed by our Stantec Project Management Framework, which includes our Digital Project Execution Plan (dPxP). This framework defines the processes and protocols for successful design technology implementation on every project.



Proven track record across the map.

We get it. To us, virtual project delivery is second nature. Our teams have been collaborating across offices for years and have successfully brought award-winning buildings to life. We understand the nuances to be able to anticipate the hiccups and how to create a smooth project delivery process. It's only showing through our recent projects.



UCSF Bakar Precision Cancer Medicine Building

San Francisco, California

Virtual project team members from:

- Philadelphia, Pennsylvania
- San Francisco, California
- Seattle, Washington
- Toronto, Ontario

Centre for Addiction and Mental Health Redevelopment

Toronto, Ontario

Virtual project team members from:

- Chicago, Illinois
- Edmonton, Alberta
- Mississauga, Ontario
- Toronto, Ontario

Jefferson Health Specialty Care Pavilion

Philadelphia, Pennsylvania

Virtual project team members from:

- Chicago, Illinois
- Philadelphia, Pennsylvania
- Seattle, Washington
- Washington DC

*Courtesy National Real Estate Advisors
& Ennead Architects*

Global firm striving for **virtual excellence.**

We pride ourselves on the ability to virtually connect to our projects on a personal level and advance the quality of life across the globe. We measure success by the positive impact to the community.

We're driven to seek what's next. To challenge ourselves and our clients to create solutions that solve challenges today—and give them a competitive edge in the future. Nothing great ever happens by accident. Or in isolation.

Great things happen when smart people get together and are guided by their imagination and ambition to achieve real-world goals. Here's how we rank amongst peer organizations, nationally and internationally.

Global rankings

#1

TOP 150 ARCHITECTURE
ENGINEERING FIRMS
| BUILDING DESIGN +
CONSTRUCTION

#1

TOP 10 ARCHITECT/DESIGN
FIRMS - HEALTHCARE
| COMMERCIAL
CONSTRUCTION +
RENOVATION

#3

TOP 48 HEALTHCARE
ARCHITECTURE FIRMS |
MODERN HEALTHCARE

#3

TOP 150 HEALTHCARE
ARCHITECTURE FIRMS
| BUILDING DESIGN +
CONSTRUCTION

#5

TOP 50 DESIGN FIRMS
IN GENERAL BUILDING
| ENGINEERING NEWS
RECORD



Engagement. Execution. Excellence.

The buildings that make up the landscape of our daily lives seem like permanent fixtures, fastened to a time and place. But what if that didn't have to be true? What if our built environment – where we live, learn, play, and conduct business – carried us forward instead?

Our design practice keeps people at its heart, recognizing that our shared journey forward is shaped by the meaningful and responsive places we design. Interior or exterior, we create spaces true to each site's unique context and adaptable to changing needs. Spaces that engage and uplift us. Spaces that contribute to our sense of health and well-being. And spaces that fulfill our clients' missions while enriching the communities that surround them.

This is even more important now as we [reinvigorate our communities](#) and continue to [provide safe havens](#) for care. We are [dedicated to providing an unparalleled creative process through Stantec's virtual project delivery platform](#). We invite you to learn more and [explore the possibilities with us](#).

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