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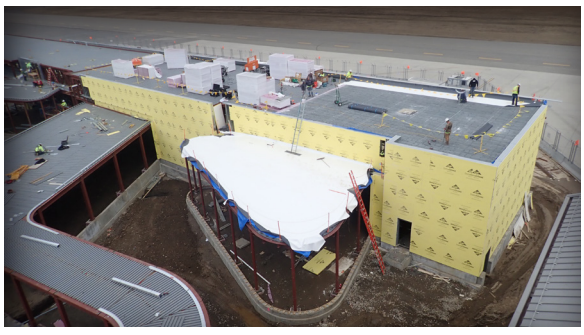
2019 Jeffrey J. Zogg Build New York Award

ELMIRA-CORNING REGIONAL AIRPORT TERMINAL REVITALIZATION

Award Submission - October 4, 2019



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ENTRY FORM

DEADLINE: October 4, 2019

Date Submitted October 3, 2019

Contractor Company Name Welliver

This is the first time this firm has submitted a Build New York Award entry: ☐ Yes ☑ No

Street Address 250 North Genesee Street

City/State/Zip Montour Falls, NY 14865

Chief Executive Officer JD Young / Anne Welliver-Hartsing - President

Project Title Elmira-Corning Regional Airport (ELM) Terminal Revitalization Location Elmira, NY

Project Size $ 61M

Performed as: ☐ General Contractor ☐ CM at Risk ☐ Design/Builder ■ CM as Agent

Project Owner County of Chemung, Tom Freeman, Director of Aviation

Project Architect Fennick McCredie Architecture Ltd.

Project Engineer McFarland-Johnson, Inc. (Lead Design, Structural, Civil, MEP)

Category: ■ New Building ■ Restoration/Renovation ☐ Heavy Civil ☐ Bridge ☐ Highway

Notable Contributing Team Member (consultant, sub, supervisory employee, supplier, craftsperson)

Date Project Started 7/31/2017 Completion Date (must be between 9/1/17-9/1/19) 10/2018

Entry Submitted By Brad Kasiske Phone (607) 535-5400

E-mail bkasiske@buildwelliver.com Fax (607) 535-9254

Note: AGC NYS will contact this person if we have any questions about your entry.

See Build New York Entry Guidelines for further instructions. Application Fee: **$300.00**

Mail a copy of entry form and check to: AGC NYS, 10 Airline Drive, Suite 203, Albany, New York 12205. All entry materials must be sent in via flash drive or via file sharing (Dropbox etc.)

Direct questions to: Brendan Manning, bmanning@agcnys.org or 518-456-1134

BUILD NEW YORK AWARD
SAFETY SUMMARY

Project: Elmira-Corning Regional Airport - Terminal Revitalization

Contractor: Welliver

PLEASE COMPLETE ALL 3 SECTIONS

1) **The following information pertains to the contractor listed above, NOT subcontractors.**

Total hours worked on the above project: 16,000

Number of incidents on the above project: 0

Number of lost workdays on the above project: 0

Incident rate on the above project: 0
(# of incidents / total hours worked x 200,000)

Severity rate on the above project: 0
(# of lost workdays / total hours worked x 200,000)

2) **The following information pertains to the overall project including subcontractors.**

Total hours worked on the above project: 186,000

Number of incidents on the above project: 0

Number of lost workdays on the above project: 0

Incident rate on the above project: 0
(# of incidents / total hours worked x 200,000)

Severity rate on the above project: 0
(# of lost workdays / total hours worked x 200,000)

3) **Company's overall experience modification rating (EMR) (not just this project):** .59

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INTRODUCTION

Elmira-Corning Regional Airport – Terminal Revitalization

Location: Elmira, New York
Project Size: Renovated area: 47,555 SF
New construction: 41,581 SF
Total: 89,136 SF
Construction Value: $61M
Construction Start: July 2017
Completion: October 2018
Project Type: Renovation, New Build
Welliver Role: Construction Manager

Front drive and main entrance to ticketing.

Welliver helped transform a small regional airport into a modern facility with world-class features and quality. The terminal expansion and modernization was designed and constructed over 19 months while maintaining full commercial airport operations. Prior to construction, the existing terminal was at capacity and passenger numbers were increasing annually. Many of the building components were at or nearing the end of their lifecycle and in need of repair or replacement. As airlines were starting or expanding operations, the larger aircraft could not be accommodated by much of the existing facility, leading to extensive use of ground boarding and associated aircraft delays. It also limited further expansion of airline operations.

We used a phased design approach to allow construction to start as soon as possible. The first design phase included temporary facilities, demolition, and construction of the building shell. The second design phase included all MEP work and interior fit out. Other phases of design included a new restaurant and bar, wayfinding signage, and exterior rehabilitation of the existing control tower.

The first month of construction built temporary facilities for existing tenants within the existing ticketing area. This allowed the restaurant, baggage claim, and half of the terminal to be closed and demolished to construct a new terminal, baggage claim, and TSA checkpoint. Once completed and opened, ticketing operations were shifted to the new building and a full renovation of ticketing, the old TSA checkpoint, and the other half of the existing terminal were gutted and renovated into ticketing, a restaurant, and administration offices. This allowed commercial air traffic and airport operations to continue uninterrupted throughout the construction process. The completed terminal features extensive use of glass to maximize views and enhance public experience, courtyards that highlight local plant life, an elevated concourse allowing all aircraft to use passenger boarding bridges thus maximizing boarding efficiency and minimizing delays, and additional boarding bridges to accommodate increased traffic.

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Project Highlights

- All existing boilers were removed and replaced with high-efficiency boilers
- All new lighting throughout the building is high-efficiency LED lighting
- State grant funding required the building design to include a 'wow factor'. A primary aesthetic feature is extensive use of glass throughout the facility. The front of the building at baggage claim and ticketing is comprised entirely of glass, allowing wide-ranging views from any angle.
- Each departure lounge displays all-glass walls, including the use of curved glass, for exterior views of courtyards and landscaping using native plants
- Modern furniture with integral power outlets and USB charging ports are installed throughout the facility
- There are now three passenger boarding bridges, which greatly minimizes the use of ground boarding
- The footprint of the concourse allows for extension at a future date without impacting other buildings or operations
- The new baggage claim system was designed with infrastructure for an additional baggage carousel to be added at a later date with minimal disruption or expense

Concourse departure lounge.

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NARRATIVE

Excellence in Project Management

With the tight design and construction schedule required for the project, it was critical that decisions were made and information was shared quickly, accurately, and efficiently among all team members. Welliver utilized a cloud-based software system for real-time distribution of all construction information, including construction document updates, submittals, RFI's, and more. When the design team issued any revisions or additions to the construction documents, all contractors and owners were automatically notified and emailed a link to the documents. These documents were also maintained within a searchable database. Submittals and RFI's were uploaded, marked up, and returned all within the software. All submittals were reviewed concurrently by Welliver and the design team to minimize overall review timeframe. This ensured no time was wasted with the transfer of information and also maintained a complete, accurate database of all information on the project to minimize errors and increase efficiency.

Welliver facilitated weekly video conferences with the design team to review any open issues on the project. This included briefly reviewing all submitted and upcoming RFI's and submittals to set priorities for return and resolution, allow the design team to commit to return dates that met the project schedule, discuss any potential changes or updates to ensure they met the schedule and budget, and prepare the design team for the amount of items headed their way. This meeting was held following a weekly contractor coordination meeting to immediately resolve open issues and questions from the contractors.

Welliver also conducted a weekly meeting with airport operations to review any impacts to the operational needs of the airport and tenants and to review the overall project budget. With strict TSA, FAA, and other federal regulatory requirements, this ensured construction was completed without any risk to the safety of the traveling public. The meeting also reviewed changes to the construction documents and their associated financial impacts. Set through public funding requirements, the project budget was unable to be raised without putting significant financial constraint on the long-term operations of the airport. It was critical to control costs and engage the airport to make informed decisions about all changes.

Completed TSA checkpoint and departure lounge, viewed from public patio.

TSA checkpoint and concourse under construction.

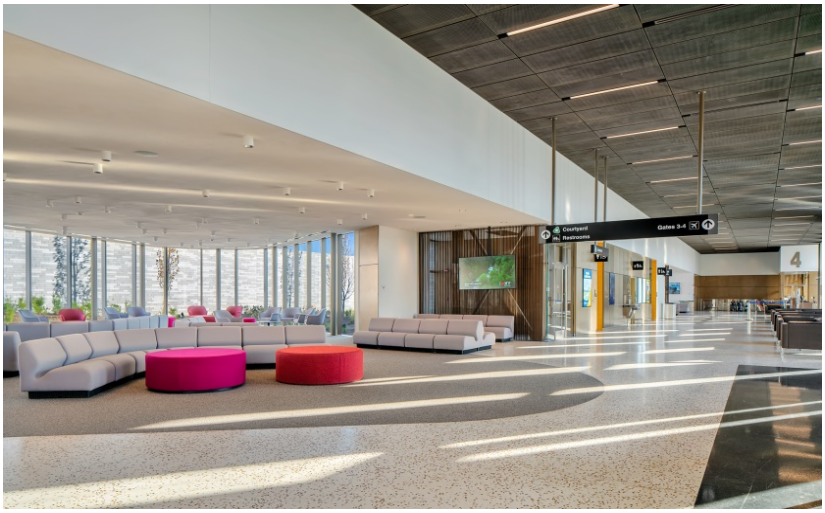
Responsiveness to Client Needs – Financial, Scheduling, and Other

The project schedule requirements in the state grant allowed only 19 months from the start of design until substantial completion. The airport also needed to remain operational at all times. Welliver collaborated with the design team to develop a design and construction phasing plan that would meet the schedule and financial goals of the project. Given the tight timeframe, the plan had to be right the first time. It was determined that all new building construction needed to be constructed concurrently and other phases needed to be limited to renovations and reinforcement of the existing structure. It was also determined that the design would need to be released for public bid in phases to allow demolition and construction to begin as quickly as possible.

Passenger concourse as finishes are being completed.

The overall phasing plan was to consolidate operations into two thirds of the original terminal, demolish the remaining third, and expand the new terminal. Once the new terminal area was completed, temporary conditions were made to shift operations into the new terminal and the existing terminal was then renovated with minimal disruptions to the public and construction efforts. Close coordination was maintained with all tenants and interested parties, including four different local and federal government agencies, six multi-national corporations, and three local companies, to ensure smooth transitions between phases and into temporary spaces without disruptions of services.

Given the short overall project duration, the design was required to be released for public bid in phases to allow construction to begin less than five months after design started. The initial bid packages included temporary conditions and operations, utility enabling work, abatement and demolition, civil work, and the building structure and façade. This allowed work to begin quickly and long-lead time materials to be ordered on a timely basis. The second, and largest, set of bid packages included all interiors and MEP work. The final sets of bid packages included wayfinding signage, additional site work, furniture, restaurant fit-out, and tower work not previously part of the project. Welliver and the design team maintained close coordination throughout the project to ensure the design incorporated materials and methods that could be obtained and constructed within the project schedule. The original project completed date was maintained throughout construction and the new building was completed and opened a day ahead of schedule.



Completed passenger concourse and departure lounge.

Innovation in Construction Techniques, Materials or Equipment and State-of-the-Art Advancement

Completed TSA checkpoint entrance - a walk through the woods.

Departure lounge under construction.

State grant funding required the building design to include a 'wow factor'. A primary aesthetic feature is extensive use of custom and curved glass throughout the facility. Once the project grants were awarded, the lead time of a lot of the components would not allow the project to be completed on schedule. Welliver coordinated with various manufacturers and contractors to help the design team develop a scope to incorporate as many unique design aspects as possible, such as curved glass that could be manufactured and installed within the overall project schedule. This allowed the design team to achieve the custom look they desired without compromising airport operations.

There were significant challenges to schedule considering the construction timeframe was 15 months and there was a phased design approach. In order to complete the building on time, regularly scheduled meetings were held with all contractors to fully develop the construction schedule in a collaborative environment. All contractors were tasked with coming up with strategies to reduce construction time or re-phase parts of the project to maximize efficiency or increase construction time for critical activities. An example of how this approach was successful was during the final phase of the project. Renovation of the ticketing area could not be completed within the time allocated on the schedule. Welliver and the team of contractors identified the critical path work for the reconstruction of the existing public bathrooms, came up with a plan to use temporary bathroom trailers to extend the timeframe for the bathroom reconstruction phase, and work with the airport on the logistics and design to provide quality temporary facilities that would not negatively impact the overall passenger experience.

Completed departure lounge viewed from the secure courtyard.

Departure lounge from the secure courtyard - structure being erected.

Overcoming Challenging and Unusual or Unique Circumstances

Designing and constructing a new airport terminal in a short timeframe dictated by grant funding all while maintaining complete airport operations presented several challenges. The initial challenge was designing a project that could be phased as minimally as possible to maintain operations. After many meetings with the design firms, construction management team, and airport operations, the minimum amount of space for short-term concourse, TSA, baggage handling, ticketing, and vendor operations was determined. Minor renovations were designed within half of the existing structure to relocate all tenants and maintain their operations. The remainder of the structure was demolished to allow expansion and reconstruction of the terminal while reducing design constraints and incorporating features to enhance the public experience.

Completed airline ticketing area.

To meet the timeframe, it was also determined that the other half of the existing building needed to maintain the structure and undergo thorough interior renovations only. Another significant challenge was maintaining the safety and security of the general public while minimizing the impact this had on construction work. Federal security regulations are very strict within all areas of an airport, especially secure and sterile areas.

Leading up to the start of construction, meetings were held with the construction manager, airport operations, sheriff's office, and the TSA to review construction phasing and the impacts it would have on the travelling public. The SIDA lines were moved several times during construction, the airport security plan redefined, and temporary security barriers meeting federal requirements erected and relocated whenever possible to allow construction to occur in non-secure areas inaccessible to the public. Weekly meetings were held with airport operations to review all aspects of the work being completed, its effect on operations, and create an open forum with stakeholders to ensure impacts to operations were minimized and the highest levels of security maintained at all times.

Completed baggage handling system carousel.

Baggage handling system carousel, under construction.

Exceptional Service

Steel erection of TSA checkpoint and departure lounge.

Welliver delivered the project a day early, under budget, and with minimal impacts to existing airport operations, which is open 24 hours a day, 7 days a week, and the buildings occupied a minimum 4am to midnight 7 days a week. During that time, there were no closures due to the construction project. This was due to consistent and constant collaboration throughout the process with all stakeholders.

To streamline the process, Welliver communicated directly with all stakeholders to review their specific needs and any construction activities that may affect them. Stakeholders included airport operations, FAA, TSA, sheriff's office, three airlines, three rental car companies, two transportation companies, a parking company, and restaurant and bar services. Each one of them had very different needs and corporate or federal standards to maintain. Welliver reviewed any conflicts with the planned construction activities and stakeholder needs with airport operations and came up with an alternative plan to satisfy the tenants while also completing the project on time and budget.

Although the primary focus was to maintain all services at all times, backup plans were discussed with each stakeholder to ensure their operations could continue in the event power, data, or similar services temporarily went down. Throughout the project, operations were maintained for all tenants consistent with the lease agreements with the airport. Airline personnel for all three airlines that serve multiple airports who had been through other major construction projects all said this was the least disruptive project they had been a part of.

Completed TSA checkpoint and courtyard.

Excellence in Project Safety

The airport terminal revitalization project was successful in many aspects including safety. At the project's inception, Welliver established the important role security and safety play. Each contractor was required to provide their respective safety manuals for review and acceptance. Furthermore, it was made very clear that all work had to be done in coordination and with respect to airport security and safety standards. Once the project was underway it was mandatory that each on-site contractor complete a weekly toolbox talk along with inspections of their own employees. With this strategy in place it would become very clear as to what problems existed or may be trending on the jobsite. In addition to the reports, Welliver had regular job-wide safety inspections performed by our corporate safety department. The result of these inspections identified safety hazards and recommended ways to mitigate or engineer them out.

Team members take safety seriously and implement safety standards throughout completion of project.

Welliver's Director of Safety had multiple meetings with other contractor's safety personnel to assist them in the challenges of mitigating their respective safety hazards. This tiered level of safety involvement resulted in the project having no recordable incidents or any lost or restricted time. Continuous awareness for safety through meetings and inspections allows for a truly safe worksite. Many metrics can be used to measure safety and when we see numbers like this, we know that a culture of safety had been created and maintained throughout the job.

Passenger concourse structure under construction.

Contributions to the Community

Being a publically owned airport, the entire project and facility exists strictly for the benefit of the community and, in some form, the stakeholders are the residents of Chemung County. The airport is the gateway to the community and the first impression anyone gets when visiting the area. A large focus when planning the construction was to minimize any disruption of services to the general public and to maintain a clean, safe environment throughout construction so the visiting public and local residents would have a positive experience.

With the fast-track schedule, the design team's primary focus was the permanent structure and finishes. To construct the new terminal and allow airport operations to continue, temporary spaces and facilities needed to be created in the existing ticketing area. When design was completed and construction about to start, Welliver reviewed the new facilities with all tenants providing services to the public to ensure the local personnel understood exactly what was going to happen. It quickly became clear that the corporate decision-makers for many of the companies did not fully understand the intricacies of the local operations. Welliver coordinated the services each company needed to provide and offered improvements to the temporary facilities for the design team and airport to review and enhance the service to the general public. Some of the changes included modified baggage handling paths and distribution equipment. This led to the airline offloading bags faster to their customers, a critical time that airlines are rated on while reducing one of the most frustrating times for the public. Welliver also came up with a way to relocate additional bar and food preparation facilities to enhance the services available during construction. This and other similar improvements all led to a better customer experience for travelers entering and leaving the County.

Welliver also focused on engaging local companies and labor for the construction of the terminal to benefit the local community. The labor demands of the project were communicated to local labor unions to ensure they could provide the required labor. At the end of the project, 92.8% of companies contracted for the project were local and 6.7% of the non-local companies were for specialty airport systems for which there were no local manufacturers.

Completed bar and restaurant.

Completed passenger ticketing area.

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SUMMARY

Project Excellence

The NYS Governor's Office, NYS DOT, Chemung County, design team, Welliver, and all other parties involved would agree that the Elmira-Corning Regional Airport Terminal Revitalization was a highly successful project that transformed the gateway of the Southern Tier into a world-class facility. It was a project with many challenges that were overcome by the entire team working together in a constant collaborative approach. Welliver's core values of Safety, Quality, Value, and Collaboration were incorporated into every aspect of this project. Throughout the entire project lifecycle, we thrived on creating solid relationships built on trust, accountability, communication, and exceptional customer service.

Schedule
Many projects are labeled as fast-track or with aggressive schedules. Not many projects are tasked with designing and building a $61 million expansion and renovation of a fully operational facility with multiple phases in 19 months. Welliver and the rest of the team managed to break ground after four months of design, public bid, and award with one month of temporary spaces, enabling work, and relocations; 11 months of abatement, demolition, and new building construction; and three months of renovations. Within each of these phases there were many additional micro-phases. Nearly all tenant moves happened overnight in a highly coordinated manner to ensure operations were unaffected. As the end of the project neared, Welliver accelerated the project even more to accommodate a request by the Governor's office to open the entire facility a day early for a public event by the Lieutenant Governor.

Safety
Safety is one of Welliver's core values and a primary focus on all projects. Safety and security are also of great concern at an airport. Our site-specific safety orientation ensured all OSHA, TSA, and other safety and security regulations were met and exceeded throughout the project. During Welliver's weekly contractor meeting, safety and security was one of the first topics discussed. In addition to potential safety hazards that might be encountered during the week, TSA security regulations were reviewed to ensure all contractors remained in compliance. This was especially critical as SIDA lines moved and contractors began working within secure areas. During the project, there were no OSHA recordables or lost time incidents, no failures of the SIDA containment areas, and no security breaches.

Collaboration
The Welliver team faced all challenges presented at the Elmira Corning Regional Airport Terminal Revitalization with a proactive, collaborative team approach with the design team, stakeholders, and contractors. This allowed the project team to successfully complete the new terminal under budget, a day ahead of schedule, and allowed the needs of all stakeholders to be met throughout the process. The end result is a world-class airport that serves as the first impression to visitors to the Southern Tier. Corning, Inc. employees traveling throughout the world on business are a large percentage of traffic through the Elmira Corning Regional Airport. Multiple comments have been made to airline staff, airport management, and the Welliver team that they have traveled around the world and it's wonderful to have one of the nicest and best airports they've seen right in their own backyard.

ELMIRA CORNING
REGIONAL AIRPORT

Suite 1, 276 Sing Sing Road
Horseheads, NY 14845
607-739-5621
www.FlyELM.com

October 2, 2019

Brad Kasiske
Welliver
250 North Genesee Street
Montour Falls, NY 14865

Build New York Letter of Recommendation for Elmira-Corning Regional Airport Terminal Revitalization

Dear Brad:

Welliver was hired as the Construction Manager for the Elmira-Corning Regional Airport (ECRA) Terminal Revitalization project in Horseheads, NY. The project was a multi-phase $61 million expansion and renovation of the public airport terminal serving the Southern Tier designed and constructed over the course of 19 months. The scope involved consolidating all operations into approximately half the existing airport, demolish the remainder, construct a new concourse, TSA checkpoint, baggage claim, and baggage handling building, and then renovate the remainder of the building.

Welliver was brought on board at the start of the design process to work with the design team to design a project that could be constructed within a very tight schedule and budget. They managed the bid packages and contractor bid process, ultimately reviewing and recommending the low qualified bidders. Welliver then managed all contractors and interfaced with the design team throughout the construction and closeout process.

Ultimately, the project was substantially completed a day early and under budget. Most importantly, all existing airport operations functioned throughout the construction process and no flights were cancelled. Welliver professionally and effectively managed the extremely tight schedule, budget, and phased design, bid, and construction phases while minimizing the impact to the traveling public to the greatest extent possible and leaving the Elmira-Corning area a world class airport. Congratulations and thank you for a job well done.

Sincerely,

Tom Freeman

Tom Freeman
Director of Aviation
Elmira-Corning Regional Airport

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PROJECT TEAM

Contractors with >$1,000,000 Contract Values

General Trades, Curtain Wall & EIFS
Streeter Associates, Inc.
Elmira, New York

Structural Steel
Raulli & Sons, Inc.
Syracuse, New York

Passenger Boarding Bridges
Ameribridge, LLC
Indianapolis, Indiana

Baggage Handling System
Five Star Airport Alliance, Inc.
Salt Lake City, Utah

Fire Protection, Plumbing & Geothermal Wells
Frey & Campbell, Inc.
Hammondsport, New York

Mechanical
Piccirilli-Slavik & Vincent Plumbing & Heating, Inc.
Binghamton, New York

Electrical
John Mills Electric, Inc.
Elmira Heights, New York

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STATE LAW
TO
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DELTA
allegiant
ENTRANCE
UNITED
UNITED
UNITED
UNITED
UNITED


TASTE
bar


United
4978


DELTA
UNITED

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NEW YORK'S BEST BUILDING THE BEST

ENTRY FORM

DEADLINE: October 4, 2019

Date Submitted October 4, 2019

Contractor Company Name Welliver

This is the first time this firm has submitted a Build New York Award entry: ☐ Yes ☑ No

Street Address 250 North Genesee Street

City/State/Zip Montour Falls, New York 14865

Chief Executive Officer Anne Welliver-Hartsing

Project Title MAGIC Spell Studios Location Rochester, NY

Project Size $ 17,200,000

Performed as: ☐ General Contractor ■ CM at Risk ☐ Design/Builder ☐ CM as Agent

Project Owner Rochester Institute of Technology

Project Architect SWBR

Project Engineer MEP/FP: M/E Engineering P.C. Civil: Stantec Consulting Services Inc

Category: ■ New Building ☐ Restoration/Renovation ☐ Heavy Civil ☐ Bridge ☐ Highway

Notable Contributing Team Member (consultant, sub, supervisory employee, supplier, craftsperson)

Landscape Architect: McCord Landscape Architecture, PLLC Acoustic Design: Janson + Tsai Design Associates

Date Project Started 7/2016 Completion Date (must be between 9/1/17-9/1/19) 8/2018

Entry Submitted By SWBR/Lisa Fingar Phone 585-232-8300

E-mail lfingar@swbr.com Fax _____

Note: AGC NYS will contact this person if we have any questions about your entry.

See Build New York Entry Guidelines for further instructions. Application Fee: **$300.00**

Mail a copy of entry form and check to: AGC NYS, 10 Airline Drive, Suite 203, Albany, New York 12205. All entry materials must be sent in via flash drive or via file sharing (Dropbox etc.)

Direct questions to: Brendan Manning, bmanning@agcnys.org or 518-456-1134

BUILD NEW YORK AWARD
SAFETY SUMMARY

Project: _____

Contractor: _____

PLEASE COMPLETE ALL 3 SECTIONS

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Number of lost workdays on the above project: _____

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Incident rate on the above project: _____
(# of incidents / total hours worked x 200,000)

Severity rate on the above project: _____
(# of lost workdays / total hours worked x 200,000)

3) Company's overall experience modification rating (EMR) (not just this project): _____

SWBR WELLIVER PLAN | MANAGE | BUILD

David Lamb Photography

Prominently located on the Rochester Institute of Technology campus, MAGIC Spell Studios is a 52,000 square-foot academic, entrepreneurial, and commercial initiative whose core principle is "We Learn by Making Things". It's part commercial film production and media development studio and part academic laboratory.

Just as digital technology has blurred the lines between creative industries, MAGIC Spell Studios provides a first-of-its-kind facility that reflects these converging industries by bringing together various schools and departments across the university—computer game design, film, animation, and digital media—under one roof. Emphasizing student entrepreneurship and commercialization, MAGIC uniquely co-locates select faculty and students in a collaborative, interdepartmental, startup environment that is playful, fun, and inspiring.

MAGIC Spell Studios was completed as CM at Risk form of agreement and was completed in August 2018.

EXCELLENCE IN PROJECT MANAGEMENT

Throughout any project, Welliver uses many standard project management processes to successfully manage a project. These standard operations include weekly superintendent meetings, weekly PM meetings and weekly scheduling meetings. More specifically, Welliver employs the use of Pull Planning for scheduling meetings. This requires accountability on behalf of all trades to make decisions regarding manpower and durations with all other trades present. Welliver found success on this project using this technique not only managing schedule requirements, but also ensuring all trades completed their required work in each area prior to closing up a wall or inspecting of work.

In order to accurately manage cost impacts of this value-centered project for RIT, Welliver employed value engineering support in the preconstruction portion of this project. With a set budget in mind

from RIT, Welliver offered valuable insight on costs associated with certain elements of the project so that RIT could make educated decisions reducing cost on the project. This process continued through the construction execution portion of the project where change orders were discussed weekly with RIT and the overall budget was forecasted on a weekly basis resulting in a project that came in under budget upon completion.

RESPONSIVENESS TO CLIENT NEEDS – FINANCIAL, SCHEDULING, AND OTHER

"Schedule"

Given the challenges of a central campus site and the project's complex integration with an existing building, affordable and efficient strategies to relocate utilities were evaluated from the start of design. From the time the Construction Manager was engaged, the team worked with RIT to coordinate multiple site utility shut downs, relocations and tie-ins around the building footprint. This work had to be addressed while also maintaining services during the university's active academic calendar.

The client's request of our design and construction team was to "challenge the status quo" at the university and create a high-tech, exceptional experience expressing innovation. This building supports their vision for a collaborative, interdepartmental, start-up environment that is playful, fun, and inspiring for occupants and where visitors feel welcome, curious, and engaged. Our team accepted this challenge and responded to their needs in the following ways:

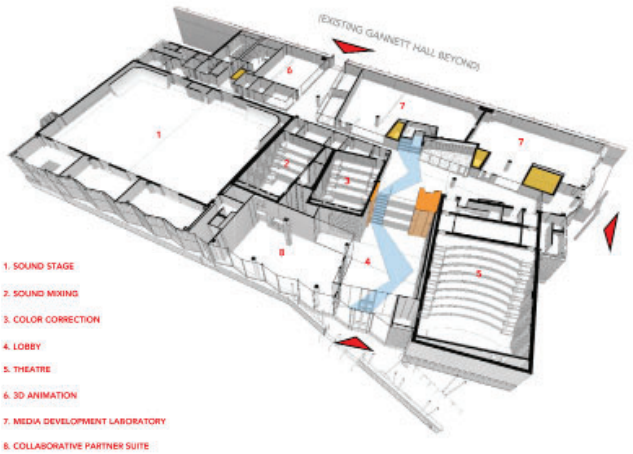
"Challenge the Status Quo"

MAGIC Spell Studios is new and dynamic experience for RIT that can be seen in the building form, materials, finishes, furniture, lighting and technology. The project makes a statement with an exterior design that features a "proscenium and curtain" that wraps and unifies the building and defines the entry at a distance. Distinct from the monolithic brick architecture behind it, MAGIC differentiates itself through playful elements that include a glowing entry canopy, a "pixelized" terra cotta façade, and a see-through "MAGIC" sign that integrates with the programmable lighting in the upper canopy.

"A High-Tech, Exceptional Experience Expressing Innovation"

Inside, a two-story display wall in the main lobby includes an interactive screen and opportunities for game-play. A terrazzo floor directs visitors toward the large portal that is the gateway to the central circulation corridor and stair. On each floor, the high-end computing power of the Media Development Laboratories, 2D and 3D Animation Rooms and an elegantly lit server room. The "Demo Lounge" is one of many spaces that express innovation.

Four key program components required acoustic isolation and no natural light. These are the Sound Stage, Sound Mixing Room, Color Correction Room, and 180-seat Theatre. These are professional environments with innovative technology including



laser projectors and Dolby Atmos surround sound systems. The Sound Stage is constructed to meet professional specifications, encouraging commercial use and student cooperative opportunities.

"A Collaborative, Interdepartmental, Start-Up Environment"

The student Commercial Startup environment is innovative because of the way that faculty offices from various campus schools are built adjacent to students to provide them the mentorship and support to commercialize their projects. The Collaborative Partner Suite is another unique space that external business partners can occupy and where students can participate in cooperative education opportunities.

INNOVATION IN CONSTRUCTION TECHNIQUES, MATERIALS OR EQUIPMENT, AND STATE-OF-THE-ART ADVANCEMENT

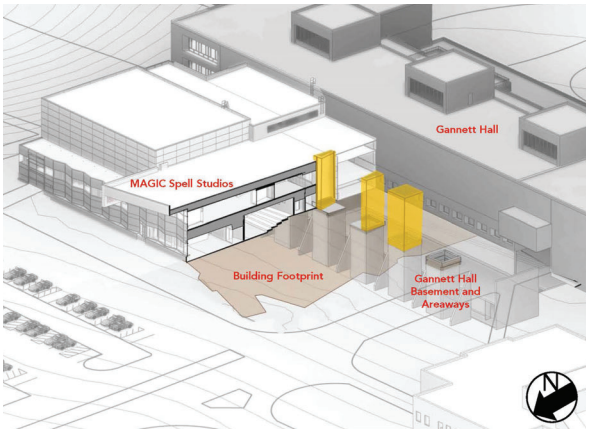
In order to create a more efficient installation of the exterior overhangs and canopy framing, our team and subcontractors developed a pre-fabrication station to build sections of the overhang walls. This allowed large sections to be assembled on the ground, then installed in sections onto the building. This was far more efficient than piece-building each overhang and canopy thirty feet up in the air, ultimately resulting in a higher quality end product as well.

Welliver used strategic scheduling of Saturday work activities with subcontractors to maximize efficiency of overtime work. One example of this was the installation of the terra cotta façade which was completed with one crew on one Saturday. The terra cotta façade was to be installed around the main entrance to the building where during a normal work day 50-60 workers would be constantly be walking in and out. On a Saturday, the terra cotta installation crew was the only crew scheduled to be onsite so that the crew could complete work that would normally have taken an entire week working around other trades, in one day.

The theater space design created an opportunity for efficiency if work between all trades was coordinated properly. When it was time for interior fit out in the theater, Welliver setup a scaffold at the ceiling level to allow for installation of all the above ceiling MEP/FP work. Welliver also coordinated the use of this scaffold with RIT's AV contractor for all of the above ceiling AV wiring and rough ins. Providing a single level platform managed by Welliver allowed for all trades to quickly finish their work in this high ceiling area, thus avoiding the need for separate

scaffold operations or multiple lifts in this area which would have increased working durations.

The project is LEED-Silver Certified under LEED version 2009 and is designed to save 25% of the energy cost and 39% of the water over a standard project of its type.

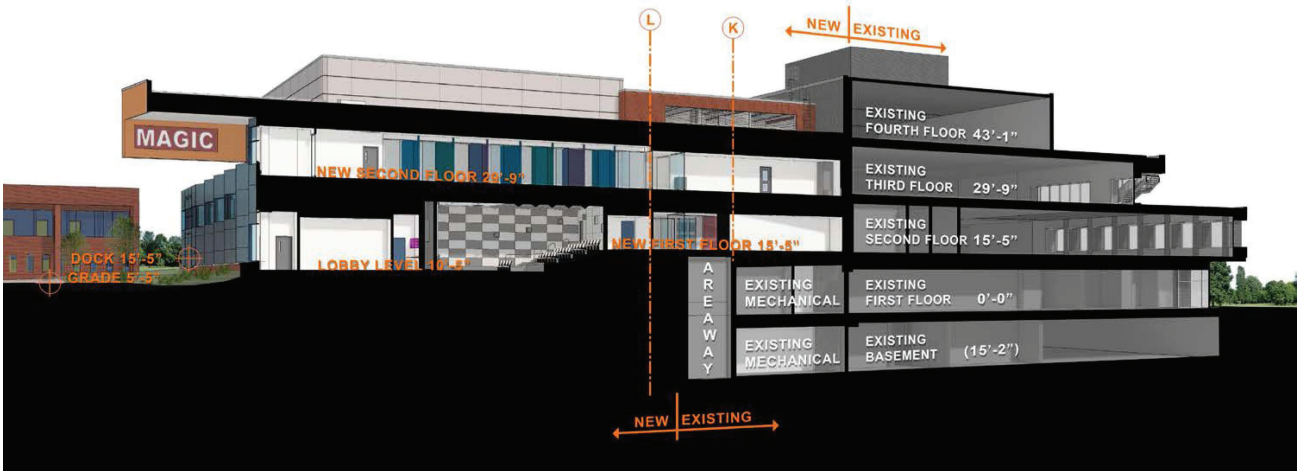


Areaways Diagram

OVERCOMING CHALLENGING AND UNUSUAL OR UNIQUE CIRCUMSTANCES

There were many aspects of this project which created unusual or unique circumstances. One of the primary unusual circumstances that Welliver dealt with was working over a two-story basement below the project site. There were weight limit restrictions in these areas which accounted for approximately 30% of the new construction footprint. Welliver dealt with these restrictions through pre-planning, coordination and clear communication with subcontractors.

There were five existing areaway vents from the basement levels below which exhausted air or served as return air for the adjacent buildings. The new construction was designed to be installed around these areaway vents. Therefore, work around these needed to be carefully planned so that occupants of the nearby buildings were not affected. By scheduling work for off-hours and weekends and installing temporary measures, Welliver was able to effectively plan for this unusual circumstance.



Floor Levels Diagram

EXCEPTIONAL SERVICE

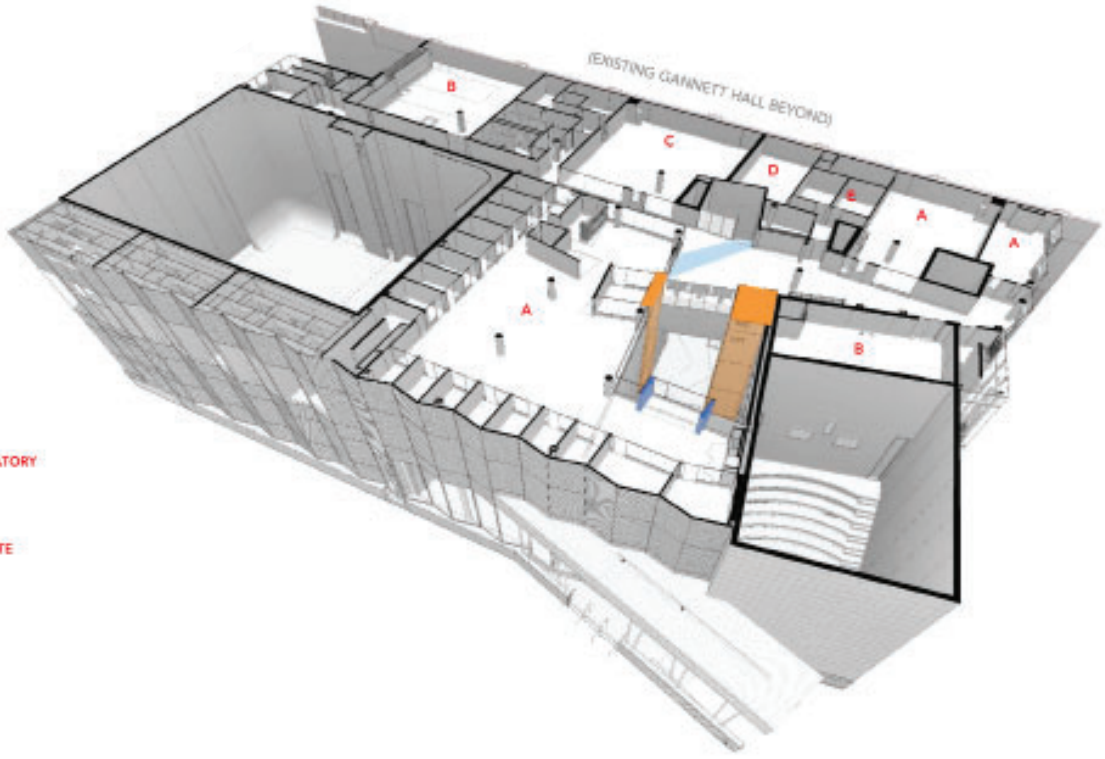
This product utilized a relatively new terra cotta rainscreen system that was required to be installed across two substrates, one being a framed exterior wall and the other being an insulated precast wall panel. The tolerances across these two substrates were vastly different. In order to mitigate the effects of different tolerances between the systems, Welliver managed a pre-installation meeting process with the rainscreen system manufacturer's representative to discuss these concerns and develop solutions specifically related to this project's conditions.

The MAGIC Spell Studios building is very technology intensive with a lot of specialty equipment, systems, and operations. Welliver managed the project warranty period with onsite support through the end of the one year warranty period to assist the end users with any project specific questions that arose. Specific systems which required this type of attention were the sound stage area, theater, building BMS system, building lighting system, and classroom operations. Through this process Welliver worked closely with the end user team from MAGIC at RIT to make sure any issues that arose were dealt with quickly and efficiently so as not to disrupt normal operation of the building.

EXCELLENCE IN PROJECT SAFETY

This job certainly offered its share of safety challenges right from the beginning. We had four 32 foot deep vaults that required some renovations and a block inserted from the bottom up. With this unique challenge we utilized an aluminum scaffold system that was raised with the masons every four courses of block being laid. This was the first time we had used such a system. It was truly the best method available to keep our workers safe while inside of these vaults.

Also, nearly our entire footprint for this job was covered by some sort of existing utility. Safety



Second Floor Plan

A. COMMERCIAL STARTUP

B. MECHANICAL ROOM

C. MEDIA DEVELOPMENT LABORATORY

D. VR/AR LABORATORY

E. STOP MOTION ANIMATION SUITE

F. 2D ANIMATION LAB

G. CONFERENCE ROOM

meetings were held continuously to ensure the coordination and protection of these vital areas. This also incorporated a high voltage line which had to be worked around. The Safety Director along with site management and supervision developed a plan to encapsulate the utility by digging trenches on each side and then forming and pouring concrete on top and along the sides. This eliminated a situation with a lot of potential for injury.

Every utility was carefully moved in a very planned and safe manner to include, but not limited to, the drainage, sewage, and fiber optic lines.

Frequent safety meetings, tool box talks, and mandatory monthly safety meetings were all part of the process to keep everyone aware of the potential dangers on site and how to mitigate them. This job was a text book example of how to run a safe job. Even with an inordinate amount of unique hazards, this site was exemplary in the planning and attention to safety detail on every aspect of the project. We are proud to say that there were no recordable incidents and no lost time on this job.

Frequent Safety Meetings were Part of the Process

CONTRIBUTIONS TO THE COMMUNITY OVER AND ABOVE WHAT IS SPECIFIED BY THE OWNER IN THE CONTRACT DOCUMENTS

MAGIC Spell Studios is a striking facility that has meaningfully transformed the RIT campus and uniquely supports their creative culture. The MAGIC Spell Studios building provides a facility with cutting-edge technology and innovative educational opportunities. Contributions to the community were made in a few ways on this project.

Within the RIT internal community, Welliver conducted multiple jobsite tours for the students in the Civil Engineering Technology, and Environmental Management and Safety program. Tours were conducted at multiple stages of construction to educate students on different aspects of construction and expose them to multiple trades' work across the many phases of a project. Welliver and SWBR also educated students at the jobsite tours on the design and construction team relationship, how the RFI and submittal process works, and how Welliver plans around contract documents delivered by SWBR.

Welliver also mitigated risk to the adjacent community safely and effectively. This project is located at a main artery or the campus which includes the admissions office and many academic buildings. Essentially this is the "front door" to the campus. With this in mind, Welliver established clear barriers of construction and implemented safety procedures to ensure construction activity was

not affecting the operation of the institution. This includes coordinated shutdowns of sidewalks and detouring, notifications in the event of high noise activities, and coordination with RIT faculty and staff for offices adjacent to the project which had their windows removed and filled in as part of the project scope.

MAGIC Spell Studios serves RIT students by preparing them for successful careers and has created a facility that is highly desirable for leasing by professional organizations and film companies, helping the local film community. The sound stage meets the requirements for the New York State Film Tax Credit. This incentive is a benefit for the film industry and the region, but also creates invaluable opportunities for student employment and engagement.

This building brings together students and faculty from different departments and creative disciplines. Students develop their own film, animation, game and digital media projects with the support of MAGIC's faculty and state-of-the-art resources. This entrepreneurial environment helps students commercialize their work, ultimately creating new companies and new jobs that will advance our growing regional hub for animation and design. MAGIC Spell Studios is a success story regionally, in our state and is a unique facility on the national academic stage.

Construction-Phase Photograph of the areaways during construction

SUMMARY

MAGIC Spell Studios is deserving of a Jeffery J. Zogg Build NY Award because it is an academic, entrepreneurial and commercial initiative whose core principle is "We Learn by Making Things". Of course, construction of a building is a primary example of "making things" and there are always lessons learned when we do so.

MAGIC Spell is special not only for its function on the Rochester Institute of Technology campus, but also because of how it is constructed. It is a striking facility that has meaningfully transformed the RIT campus and uniquely supports their creative culture. Near the entrance, a flexible "Collaborative Partner Suite" supports next-tier product development and collaborative work with external corporate partners and internal start-ups. Currently occupied by Forbes Media, RIT students have helped develop a new web platform that the company is rolling out for its writers. One of the many unique aspects of MAGIC Spell Studios is that the facilities are designed to professional standards. This serves RIT students in preparing for successful careers and creates facilities that are highly desirable for leasing by professional organizations and film companies.

MAGIC (Media, Arts, Games, Interaction and Creativity) involved some tricks of its own to address critical design constraints. Maintaining connectivity with the monolithic 1965 building that housed the University's existing film program, MAGIC was not only an addition in plan, but also in section. Two existing basement levels extended beneath a portion of the new building including (5) 14'x14' concrete air shafts. Four reconfigured, well-concealed shafts extend vertically through the building in the final design.

MAGIC Spell Studios requested "a journey." The journey begins at the exterior, featuring an abstracted theater proscenium and glass "curtain" that unifies and consolidates the program components and extends a canopy to visitors. Additionally, a loading dock at this prominent site was a major concern. The site's restrictions meant that the dock is on the building's main façade. Our team concealed the dock using a vertical folding door structure clad in the same curtain wall as the rest of the building. With the limited use of the dock, the client is grateful that this façade elegantly conceals the dock.

Inside, four key program components required acoustic isolation and no natural light: The Sound Stage, Sound Mixing Room, Color Correction Room, and Theater. This was a design and construction challenge, given the desire to move away from a monolithic architecture. The design leverages each of these high-tech spaces to work with the slope of the existing site, providing accessibility to the high and low elevations of each space. Adjacent to each other for programmatic reasons, they open up to invite visitors to the dynamic double-height lobby at the heart of the building.

With the lobby and its media as a centerpiece, a terrazzo path leads through a large portal to the central stair. Playful color, lighting and furnishings create a sense of wonder and discovery. The Commercial Startup Suite is the second-story destination on this journey. It's designed for collaboration and teaming for high-end digital media work.

RIT is looking forward to growing the network of industry partners and continuing to be recognized for the value that MAGIC Spell Studios provides. This state-of-the-art facility will support the transformation of the Finger Lakes' regional economy as it continues to move forward.

R·I·T

Rochester Institute of Technology

Facilities Management Services
120 Lomb Memorial Drive
Rochester, New York 14623-5608
C-(585) 261-5115

October 3, 2019

Dear Jeffrey J. Zogg Build New York Awards Jurors,

I am writing in support of the nomination of SWBR and Welliver to receive The Jeffrey J. Zogg Build New York Award for their work on MAGIC Spell Studios.

MAGIC Spell Studios is an extraordinary new facility that combines digital media disciplines, including film and animation and game design and development, and is a highly unique facility in higher education. The new state-of-the-art center, which includes a theater, film sound stage, and creative media production spaces, offers resources and facilities for education and commercial use that formerly could be found only in Toronto or New York City. It's a wonderful resource for our students while also serving as an economic engine for the Finger Lakes region and New York State.

The SWBR and Welliver team masterfully incorporated the university's vision of video game and film inspired design - from the outside to the inside of the building. Welliver's commitment to stay true to the intent of SWBR's design, from dynamic start-up environments filled with brightly colored furniture to the highly technical and acoustically sensitive studio and filmmaking environments, made MAGIC Spell Studios the fun and collaborative space we envisioned.

From the beginning, the team worked with RIT to coordinate multiple site utility shut downs, relocations and tie-ins around the building footprint. This work had to be addressed while also maintaining services during the university's active academic calendar.

We were pleased that the team offered valuable insight on cost and value engineering associated with certain aspects of the project so that RIT could make educated decisions reducing costs on the project. This process continued through the construction execution portion of the project where change orders were discussed weekly with RIT and the overall budget was forecasted on a weekly basis resulting in a project that came in under budget upon completion.

Overall we are very pleased with the outcome of the MAGIC Spell Studios project. It meets our expectations for a striking facility that has meaningfully transformed the RIT campus and uniquely supports our creative culture.

Sincerely,

W. Mark Williams RIT Construction Services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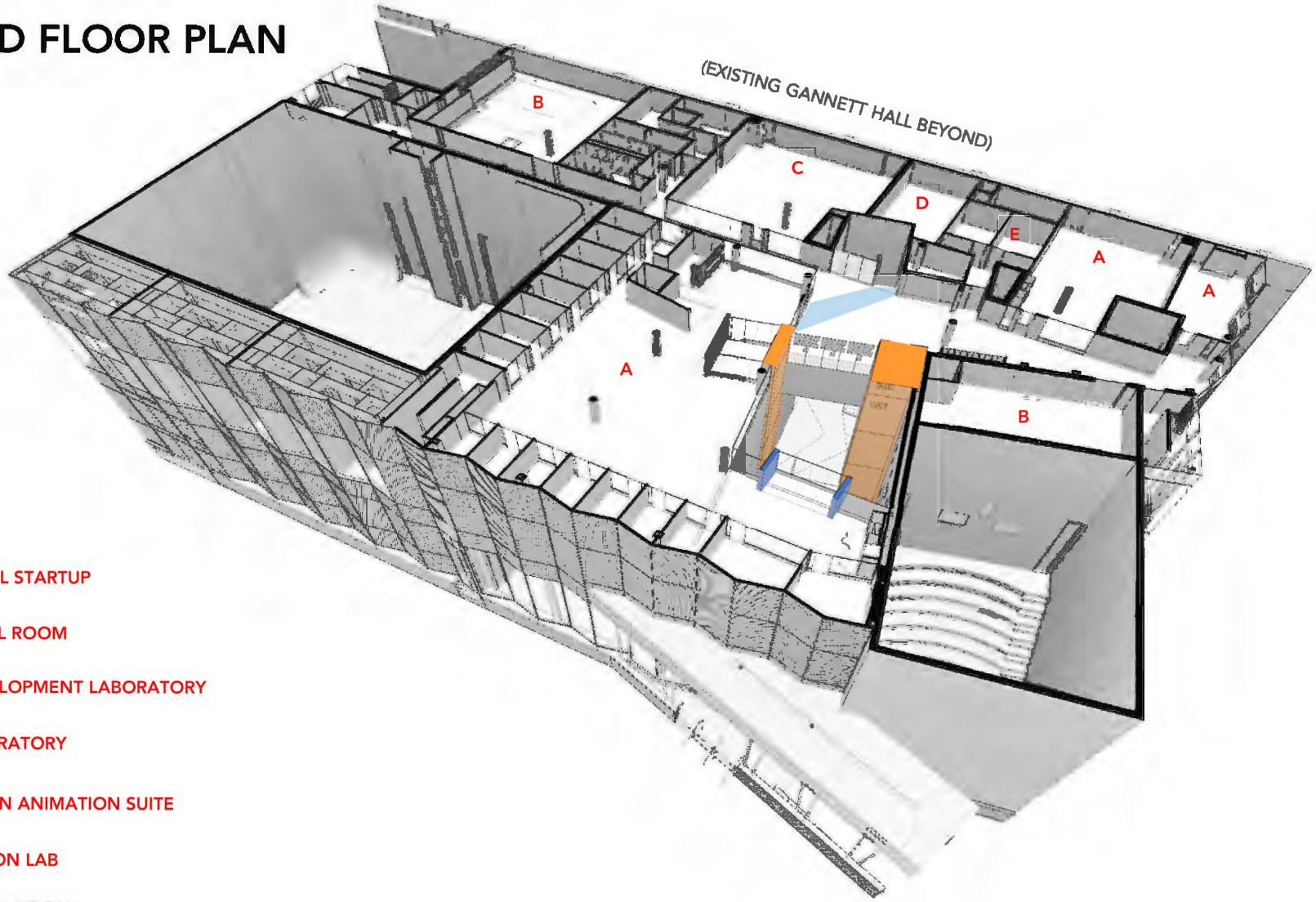
OVERSIZE LOAD

SECOND FLOOR PLAN



A. COMMERCIAL STARTUP

B. MECHANICAL ROOM

C. MEDIA DEVELOPMENT LABORATORY

D. VR/AR LABORATORY

E. STOP MOTION ANIMATION SUITE

F. 2D ANIMATION LAB

G. CONFERENCE ROOM

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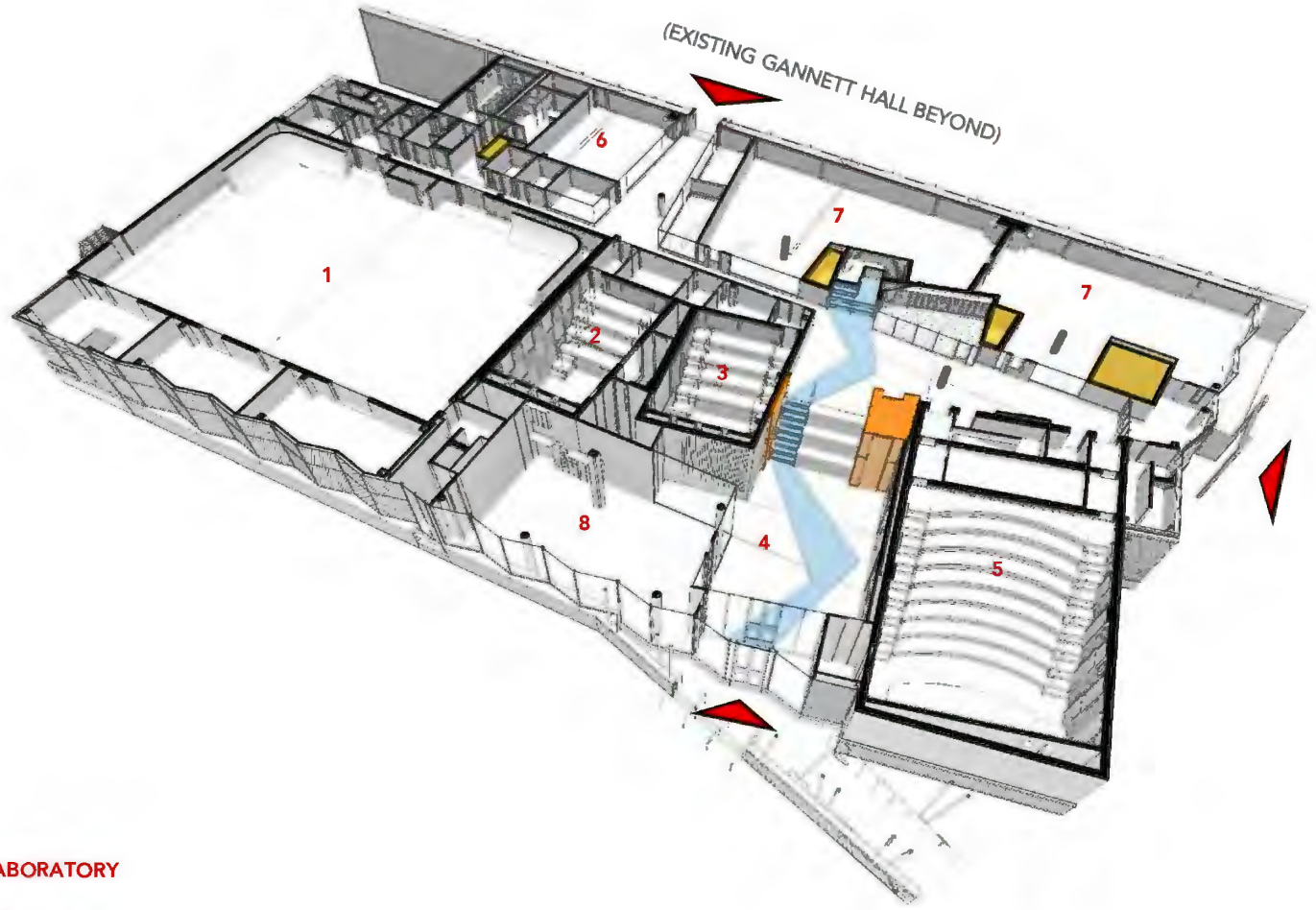
MAGIC Spell Studios

The Commercial Startup Suite is the primary second-story destination. Adjacent academic laboratories support innovative new programs on the campus focused on virtual and augmented reality as well as traditional 2D animation and a suite for stop-action animation.

FIRST FLOOR PLAN



1. SOUND STAGE
2. SOUND MIXING
3. COLOR CORRECTION
4. LOBBY
5. THEATRE
6. 3D ANIMATION
7. MEDIA DEVELOPMENT LABORATORY
8. COLLABORATIVE PARTNER SUITE

RIT | Media, Arts, Games, Interaction and Creativity
MAGIC Spell Studios

The design leverages each of these high-tech spaces to work with the slope of the existing site, providing accessibility to the high and low elevations of each space. Adjacent to each other for programmatic reasons, they open up to invite visitors to the dynamic double-height lobby at the heart of the building.


MAGIC
SIGN & LIGHTING SERVICES LLC
Altec


OVERSIZE LOAD
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WE
LEARN
BY
MAKING
THINGS


NOW PLAYING
THEATER


RIT MAGIC Spell Studios
RIT MAGIC Spell Studios


WE
LEARN
BY
MAKING
THINGS


MAGIC


MAGIC Spell Studios
Building Footprint

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