

DESIGN COLUMBUS 2016

**Sustainable Building
Education Day & Trade Show**
For a Healthy, Prosperous & Sustainable Future!

Monday, April 18, 2016
8:00 AM - 5:30 PM

www.designcolumbus.org
#DesignCbus



WELCOME from CSI Columbus Chapter President



As President of CSI Columbus chapter, I welcome you to DesignColumbus 2016, a premier Education Forum in Ohio! Experience team presentations and panel discussions about innovative sustainable design solutions. Explore state-of-the-art building products and engage experts at our trade show. Expand your professional network by meeting architects, designers, engineers, owners, developers, contractors, planners, educators, students, writers, editors, technical representatives and others. I am delighted you are here and I hope to meet you!

CSI Columbus contributes to the greater good of construction by offering lunch seminars on the "Second Monday" from September thru June. Our construction technology seminars are

interesting, compelling and not generally available as architect office Lunch N Learns. Most seminars earn one AIA LU HSW. You do not need to be a member of CSI Columbus to attend our seminars. I invite you to join us as my guest, so let me know!

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 egebauer@oberfields.com www.linkedin.com/in/edwinhgebauer

WELCOME from USGBC Central Ohio Chapter Chair



The U.S. Green Building Council - Central Ohio Chapter welcomes you to DesignColumbus 2016. We are thrilled to join CSI Columbus in co-hosting the region's premier building industry event for the 6th year! We are proud to offer you a high level of education sessions, presented by some of the finest professionals in our community, that are sure to challenge and inspire attendees from all disciplines. Our keynote speaker is Dr. Whitney Austin Gray, Senior Vice President, Business Development, at Delos. Dr. Gray's presentation will address designing systems to enhance and promote the human component of sustainability.

We invite you to learn about how our community is making Central Ohio a leader in building a more healthy, prosperous, and sustainable built environment. Attendees can earn up to 5 CEU's (AIA and GBCI, including some LEED Specific).

Be sure to visit the exhibitors and learn about new and innovative products. Meet new people and grow your professional network. I hope you enjoy your day, and please stop by the USGBC and CSI booths to learn how you can get involved in shaping your Central Ohio built environment.

Tammie Wareham, LEED Green Associate, DesignGroup
 Chair, U.S. Green Building Council – Central Ohio Chapter

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- 05 THE BLUE BOOK
- 06 ASSA ABLOY
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EDUCATION SESSIONS

8:00 AM - 9:00 AM

SESSION 101

A CAMPUS OF WOVEN COURTYARDS, GREENSPACE AND ART

Presented by

Michael Bongiorno, *DesignGroup*

Jack Giljahn, *DesignGroup*

Sam Rosenthal, *Schooley Caldwell Associates*

Matt Manda, *MKSK*

Jim Demsky, *Korda/Nemeth Engineering*

1 GBCI CE, 1 AIA LU/HSW

Currently under construction is the new 195,000 square foot office building for the City Columbus, which will be an important facet of the City's Municipal Campus vision. This new facility will bring together four City departments (Development, Building and Zoning, Public Services, and Public Utilities) currently housed in different buildings around Columbus to create an efficient "one-stop shop" for residents and businesses to handle a multitude of City-related functions such regulatory, code, and construction issues. The project also includes an outdoor "civic green" as well as the inclusion of local artists to incorporate art into the building and site design. The project is pursuing LEED certification in accordance with the City of Columbus' commitment to the sustainable design & construction of its facilities. This presentation will discuss the particular challenges faced by the design team in meeting the City's requirements for

innovative envelope, HVAC, lighting strategies, green roof, future-flexibility, and functionality.

SESSION 102

DESIGNING TO 2050: EVOLVING TODAY'S NEIGHBORHOOD DESIGN TO MEET TOMORROW'S REGIONAL DEMOGRAPHICS

Presented by

Kerstin Carr, *Mid-Ohio Regional Planning Commission*

Kimberly Sharp, *City of Westerville*

Jamie Greene, *planning NEXT*

1 GBCI LEED Specific BD+C, 1 AIA LU/HSW

From 1980 to 2010, Central Ohio experienced extraordinary population growth, primarily among those aged 35 – 54. Central Ohio's communities became some of the fastest-growing in the nation as the region faced – and met – an exceptional demand for larger lot single family homes to accommodate this growth. Projections for the next 30 years predict population growth similar to that of the past 30 years. However, the demographic makeup will be dramatically different: over 80% of new growth will be in households without children. What are the implications of these unprecedented demographics on Central Ohio's built environment?

This panel discussion will introduce insight2050, a collaborative initiative led by MORPC, ULI Columbus, and Columbus 2020, that helps Central Ohio communities, businesses, and development leaders to evaluate and prepare for the impact of population growth and changing demographics. Through the lens of local example Westerville, see how Central Ohio communities are working with the building and design industry to adopt policies that encourage a sustainable built environment. Even the most thoughtfully designed project can't break ground without community buy-in, so we conclude with strategies for purposeful public engagement, highlighting successes from across Central Ohio. Together, our panelists will provide a winning strategy for evolving today's neighborhood design to meet tomorrow's regional demographics.

SESSION 103

INCORPORATING SUSTAINABLE DESIGN AND LEED IN MULTI-PHASE PROJECTS

Presented by

Allen Schaffer, *Moody Nolan*

Troy Sherrard, *Moody Nolan*

1 GBCI CE, 1 AIA LU/HSW

Until recently LEED certification was typically applied to stand alone buildings, this made design considerations and LEED documentation

pretty straight forward. With the LEED program being in existence for over a decade many clients have moved on to a second and third LEED project. These latest projects have varying relationships to existing LEED projects; additions, renovations and close proximity on a campus to name a few. This dynamic has brought about new challenges for owners and project team pursuing certification. The team has to be able to sort out the best and most cost effective approach to the LEED certification process before getting to deep and finding certification beyond the projects reach.

The USGBC provides guidance on how to address this issue. Supplemental guidance documents talk about LEED boundaries, attaching a new LEED building to an existing LEED building, an addition that is certified to an existing building that is not to name a few scenarios. This guidance is very helpful for owners but every project has its own nuances and rarely does the guidance fit the project circumstances perfectly. There are always questions and trepidation on how the project should proceed with confidence that the owner will be able to achieve their goal. This presentation will use a multi-phase project that consists of three LEED certified additions to an existing, non-certified building to walk thru the challenges, potential solutions and opportunities to certifying such projects. We will discuss the LEED master plan developed for this project and how that shaped design, system decisions and operations considerations along with how the master plan has evolved over time.

9:30 AM - 10:30 AM

SESSION 201

LESSONS LEARNED: PURSUING A PERFORMANCE-BASED PROCESS TOWARD ENERGY EFFICIENCY

Presented by

Amy Kaspar, *Ohio History Connection*

Greg Raffio, *Go Sustainable Energy*

Phil Stafa, *Korda/Nemeth Engineering*

Fred Smith, *Ohio History Connection*

1 GBCI LEED Specific BD+C, 1 AIA LU/HSW

How often does the design team assume they know the best way to help a Building Owner achieve maximum efficiency? How active are Owners in the process? One Owner challenged its consultants to pursue a different strategy to the design and installation of a chiller project at the Ohio History Center. With a solid team, thoughtful steps, and an engaged process, significant benefits can be gained by Owners. The team shares lessons learned, which may assist other design teams and owners in the future.

SESSION 202

WHAT'S NEW IN LEED FOR HOMES V4 – COMPARATIVE CASE STUDIES

Presented by

Paul Yankie, *Green Building Consulting*

Yanitza Brongers, *Moody Nolan*

1 GBCI LEED Specific BD+C, Homes, 1 AIA LU/HSW

The new version of LEED for Homes, V4, is now live and has a multitude of subtle and some not so subtle updates. These updates will have a significant impact on the next generation of high performance buildings. By taking a cross section of a variety of current version LEED for Homes certified projects and running them through the rigors of V4, we can extrapolate potential impacts of the new rating system on future projects.

SESSION 203

REBIRTH OF AN ICON: RENOVATION OF THE HISTORIC LEVEQUE TOWER

Presented by

Robert D. Loversidge, *Schooley Caldwell Associates*

Sam Rosenthal, *Schooley Caldwell Associates*

1 GBCI CE, 1 AIA LU/HSW

Once the fifth tallest building in the world, the LeVeque Tower stands at the heart of downtown Columbus. The building served as an aerial lighthouse for pilots, as an annex for the biggest hotel in America, as an observation tower, and as corporate headquarters for the American Insurance Union, which commissioned construction of the Citadel, which opened in 1927. After many years, multiple renovations, a few owners, and name changes, the LeVeque Tower is showing its age.

Work is underway to revitalize this iconic building and enhance curb appeal — thereby re-positioning the LeVeque in today's marketplace. A master plan for this project includes a wholesale revitalization of the building and streetscape as well as the creation of new public spaces and an enhanced lobby space. The LeVeque's exterior renovation is in progress and the interior renovation has begun. Eventually, in addition to revitalized office space, the LeVeque Tower will include luxury apartments and a boutique hotel.

12:00 PM - 1:00 PM

KEYNOTE

BUILDING FOR HUMAN HEALTH AND WELL-BEING: INTRODUCTION TO THE WELL BUILDING STANDARD DESCRIPTION

Presented by

Dr. Whitney Austin Gray, *Senior Vice President,*

Business Development, Delos

1 GBCI CE, 1 AIA LU/HSW

The Introduction to the WELL Building Standard presentation provides an overview of the WELL Building Standard ideology, structure, and certification process. The medical basis for the concept categories is introduced along with design and construction strategies to create healthy buildings. The time has come to elevate human health and comfort to the forefront of building practices and reinvent buildings that are not only better for the planet—but also for people. This presentation will introduce how to do this using the WELL Building Standard as the framework.

EDUCATION SESSIONS (CONTINUED)

1:30 PM - 2:30 PM

SESSION 301

DRONES (UAS) – HOW THEY ENHANCE SUSTAINABILITY FOR THE BUILT ENVIRONMENT

Presented by

Michael Berning, *Heapy Engineering*
Mike Gilkey, *3D Aerial*

1 GBCI LEED Specific BD+C, 1 AIA LU/HSW

Heapy Engineering's Drone (UAS – Unmanned Aerial Systems) Program will advance data gathering for project work similar to when the calculator replaced the slide rule. The math was the same... it was just much more efficient (faster) in getting it done.

Come hear (and see) how UAS are making an impact in the A/E/C Industry. It is commonly known approximately 85% of what buildings will exist in 2030 already exist. Therefore, to meet future energy standards (ie: the carbon-neutral goal of the 2030 Challenge), we need to wage a massive campaign to upgrade our current building stock. UAS become a powerful tool to enhance energy efficiencies and identify which buildings to address first. Further, UAS can enhance the ability to document and potentially achieve specific LEED Credits. These Credits will be reviewed in this presentation. Attend this seminar and learn what is an UAS as well as the basics of using UAS to enhance the built environment, (and see an operational UAS both up close and in flight).

SESSION 302

IMPACT OF DAYLIGHTING AND SPACE PLANNING ON BUILDING AND WORKPLACE PERFORMANCE

Presented by

Bob Larrimer, *Moody Nolan*
Caren Foster, *Moody Nolan*
Derick Stadge, *Moody Nolan*
Glenn Boesger, *Korda/Nemeth Engineering*
David Rinaldi, *AEP*

1 GBCI LEED Specific BD+C, ID+C, 1 AIA LU/HSW

The concept of incorporating daylighting in architectural design is certainly nothing new, yet it still seems to be overlooked in too many of today's space planning and design discussions. Join us to learn the benefits that combining daylighting strategies with effective space planning can provide to a project and its stakeholders, and help us raise the awareness of the overwhelming impact natural light can have upon interior environments.

We will discuss the general rules of thumb that should be considered when implementing daylighting strategies. Interior space planning strategies that increase the effectiveness of daylighting while also providing additional indoor environmental quality benefits will be presented. Additionally, the thoughtful integration of daylighting with artificial lighting design and controls will be explored. Lastly, we will discuss a real world example of the impact the implementation of these strategies had upon AEP's work environment

SESSION 303

250 HIGH – AN EXPERIMENTAL WORKPLACE

Presented by

Eric Thompson, *NBBJ*
Jason Richardson, *NBBJ*
Alyson Erwin, *NBBJ*

1 GBCI LEED Specific BD+C, 1 AIA LU/HSW

The Columbus studio of NBBJ recently had the opportunity to radically transform our workplace environment and environs. We moved from our longtime office in the suburbs of Grandview to the downtown core, a move driven in part by sustainable design, along with a design to connect to Columbus' community and growing urban energy. This move afforded us the opportunity to design from scratch our new building, 250 High, as well as our own offices within this new mixed-use project. Sustainable design was a central driver of every aspect of these projects, from workplace to site. Both projects are tracking LEED certification (Certified for 250 High and Gold for our own office tenant improvement) and we'll share our successes and lessons learned there, including remarkable energy performance savings and workplace transformation strategies. The project used a 3rd party energy modeling consultant and we'll discuss how this helped us do sophisticated analyses of our performance and make key decisions early, when they have the most impact. We'll discuss the strategic thinking and goals that led to our decision to move downtown, and we'll also discuss innovative ideas in workplace strategies, such as encouraging mobility, deep transparency, and multimodal workspaces.

3:00 PM - 4:00 PM

SESSION 401

A NEW LEED GOLD SCIENCE BUILDING FOR KENT STATE

Presented by

Giancarlo Del Vita, *BHDP Architecture*
Jeremy Bowers, *Karpinski Engineering*
Tim Skinner, *EDGE Group*

1 GBCI LEED Specific BD+C, 1 AIA LU/HSW

The new Science and Nursing building at Kent State University – Stark Campus achieved LEED Gold certification implementing a variety of sustainable strategies and features including wind and solar power, rain gardens and green roofs.

Learn how the integrated team of Architect, Engineer, and Landscape Architect collaborated to deliver this sustainable facility for innovative, flexible, collaborative learning environments for the sciences.

SESSION 402

CASE STUDY: UC NIPPERT PRESSBOX RENOVATION

Presented by

Jake Taylor, *Heapy Engineering*

1 GBCI LEED Specific BD+C, 1 AIA LU/HSW

Additional difficulties come with atypical or complex buildings going after LEED-NC. This presentation would review the University of Cincinnati Nippert Stadium Pressbox Major Renovation and the process of attaining LEED certification. How can a building with nearly 60% glass on the exterior, operated for only a few days per year, and served by existing central plant systems achieve LEED certification? Not easily. High performance glazing, displacement ventilation, effective lighting design, and efficient plumbing selections were among the contributing categories. This presentation will guide the attendees through the design and LEED processes specifically pointing out the added complexities at various steps that come with a project of this type.

SESSION 403

MANAGING LEGAL ISSUES ON SUSTAINABLE PROJECTS

Presented by

Lane Beougher, *Ohio Facilities Construction Commission*

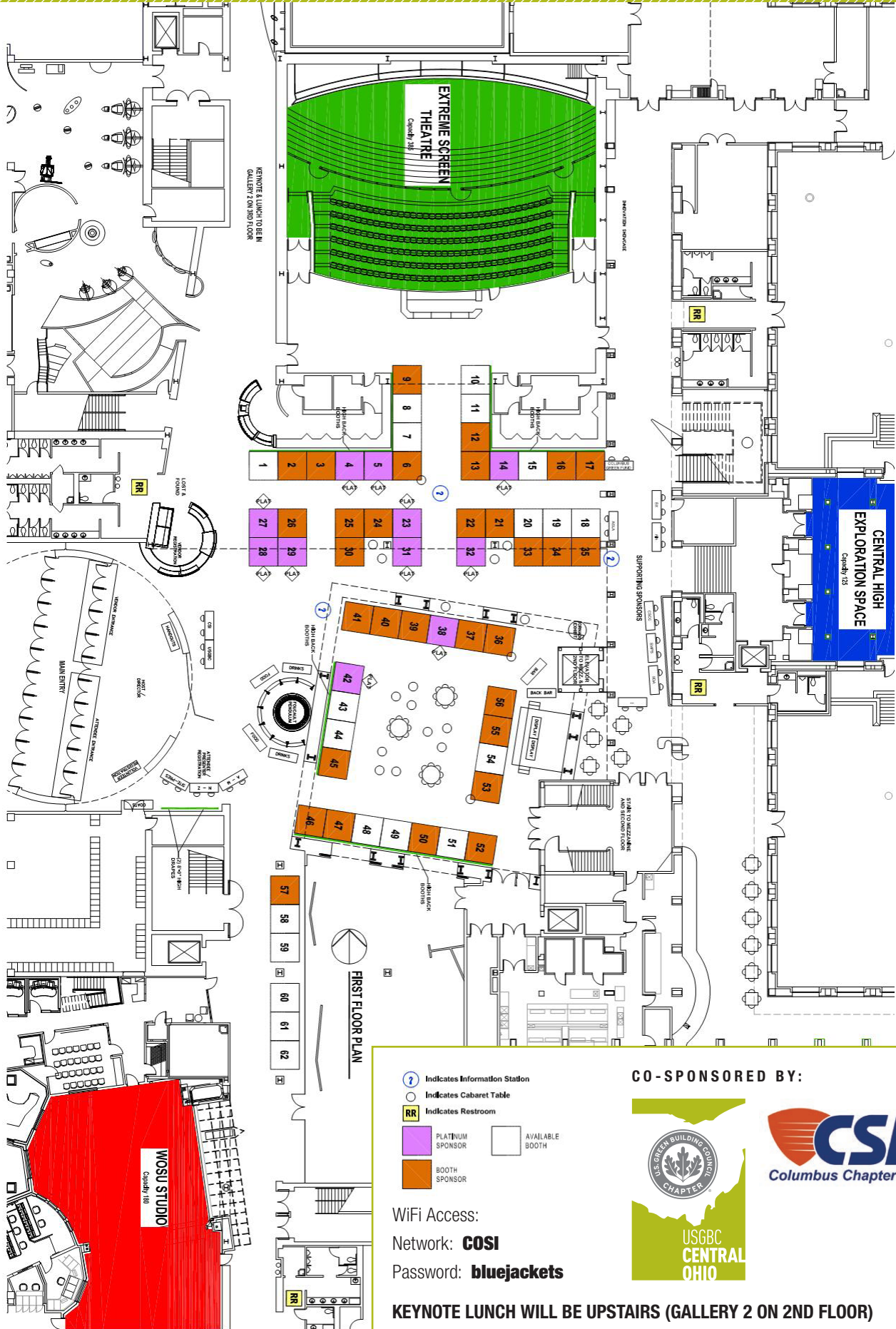
1 GBCI CE, 1 AIA LU/HSW

Sustainable design and construction provides exciting opportunities to reduce negative impacts on the environment, improve energy efficiency and building performance, and enhance the health and comfort of building occupants. New building codes and certification systems continually impact sustainable design and construction practices. As sustainable design and construction continues to evolve, Owners, Architects and Contractors will be faced with an increasingly diverse set of standards to apply to their projects.

Through an exploration of the design-bid-build, construction management, and design-build delivery models, participants in this course will understand the unique roles, responsibilities, risks and

opportunities unique to sustainable design and construction projects and discover how to reduce, or better allocate, contractual risks using the AIA's Sustainable Projects Contract Documents and the revised AIA Sustainability Guide.

PROGRAM MAP



CO-SPONSORED BY:

WiFi Access:
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KEYNOTE LUNCH WILL BE UPSTAIRS (GALLERY 2 ON 2ND FLOOR)

- Indicates Information Station
- Indicates Cabaret Table
- Indicates Restroom
- PLATINUM SPONSOR
- BOOTH SPONSOR
- AVAILABLE BOOTH