



**Illuminating**  
ENGINEERING SOCIETY

Rochester, NY Section

2015 Annual Lighting Awards



# Submissions

The text and photographs presented here were provided by the design firm(s) responsible for submission.



# 3 Categories

## The Harley Hill Excellence in Lighting Award

Harley Hill was well known member of the Rochester area professional lighting community and was very active in the local IES. These awards have been named in tribute to him and signify the best lighting projects as submitted by local firms and as judged by members of the local lighting community. There are two Harley Hill Awards - one for *interior* lighting projects and one for *exterior* lighting projects. These awards place particular emphasis on design

## The Unitrac Energy Excellence in Green Lighting Award

The Unitrac Energy award was created to recognize submissions where emphasis is placed on efficiencies towards a better environment [*Interior or Exterior*]



# Harley Hill - Interior

Irondequoit Public Library

Our Lady of Mercy High School  
Performing Arts Center Renovation

RG&E Scottsville Road  
2nd Floor Renovation

RRHS - Unity Hospital  
Med/Surg/Rehab Renovation & Expansion - BP7





# Harley Hill - Interior

## Irondequoit Public Library

Project Name: Irondequoit Public Library

Location: 1290 Titus Ave, Rochester, NY 14617

Completion Date: September 9, 2015

Contact Person: Peter Wehner, AIA, Passero Associates

Managing Agency: Town of Irondequoit, Adam Bello, Town Supervisor

Project Cost: \$13,000,000

Project Architect: Passero Associates

Civil Engineer: LaBella Associates

M/E/P Engineer: EC4B Engineering

Structural Engineer: Jensen/BRV Engineering

Construction Manager: Christa Construction

Lighting Contractor: Concord Electric





# Harley Hill - Interior

## Irondequoit Public Library

### Noteworthy Features

The new Irondequoit Public Library replaces the two library branches in the existing system. This 38,700 SF building is centrally located, reinforcing the original vision for the civic campus, which included a library adjacent to the Town Hall. The library's modern interior design serves and enhances the community. Its traditional exterior is in fitting with its location on the Town Hall campus. The new library enhances the symbolic and physical heart of the community, and is a source of pride for the entire Monroe County Library System. As a piece of civic architecture, it contributes to Irondequoit's image in the community, region, and state.





# Harley Hill - Interior

## Irondequoit Public Library





# Harley Hill - Interior

## Irondequoit Public Library

### Noteworthy Features

Materials that will bring energy efficiency for the life of the library are throughout the project. One example of sustainable design put into practice is the lighting. Lighting is connected to occupancy and daylight sensors that automatically adjust lighting levels, reducing usage and creating efficiency. Throughout the inside and outside of the building, light and transparency are clearly evident. Views and natural light penetrate deeply into the library environment, reducing the need for artificial lighting. The central space is highlighted by the intercommunicating stairway, reinforcing the connectivity and openness of the environment.



Computer Lab



Children's Area





# Harley Hill - Interior

## Irondequoit Public Library





# Harley Hill - Interior

## Irondequoit Public Library





# Harley Hill - Interior

## Irondequoit Public Library

### Noteworthy Features

All of the lighting within the building is LED lighting. Use of LED lighting allows for the greatest energy savings while minimizing service and maintenance. The entry lobby is highlighted by a large connected OLED fixture that is a state of the art in lighting technology, and is one of the first uses of this new technology in our the Rochester area. Luminous chandeliers that evoke flora highlight the atrium and central stairway. These distinctive LED fixtures are set into the bamboo slat ceiling and contribute to the beauty of the interior.





# Harley Hill - Interior

## Irondequoit Public Library

### Noteworthy Features

The new Irondequoit Library has truly become the reality of the ideal expressed in the Library motto, “*Where the Community Connects*” and its thoughtful design and construction have made it a welcome and integral part of the community that it serves.





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation

Project Name: Our Lady of Mercy High School - Performing Arts  
Center Renovation

Location: 1437 Blossom Road, Rochester, NY

Date of Completion: October, 2015

Architect: SWBR Architects

Electrical Engineering/Lighting Design: M/E Engineering, P.C.

Construction Manager: LeChase Construction

Electrical Contractor: O'Connell Electric

Lighting Manufacturer's Representative: Lightspec



# Harley Hill - Interior

## Our Lady of Mercy High School Performing Arts Center Renovation

### Noteworthy Features

This project included a 10,000 square foot renovation of the Our Lady of Mercy High School auditorium. The original auditorium was built in 1940 with limited improvements in the last 75 years and is listed on the Town of Brighton Historic Registry.

This significant renovation to the 978 seat auditorium included a complete ceiling replacement, full HVAC upgrade, sprinklers, new seating, finishes, theatrical and house lighting. The auditorium is used for several major productions every year but is also used on a daily basis by students of the school. With such high utilization, the lighting system required needed to be energy efficient and have a long life. The design team recommended an LED networked dimming system with color changing lighting. The capacity to transform the color of the entire auditorium very effectively engages the audience in the performance.





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation



Auditorium Before & After





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation

## Noteworthy Features

The complex curved ceiling, which preserved the original architecture of the space, made the house lighting design challenging because of the limited mounting locations for luminaires as well as the arches and shapes involved while still trying to make the lighting indirect. Our solution was to utilize four-foot LED luminaires mounted in rows on 6" shelves along the arches of the ceiling. There are four rows of these fixtures at the high ceiling and a fifth row beneath the face of the balcony. All of the fixtures were aimed upwards into the ceiling curves creating a very soft, indirect light throughout the auditorium. When the fixtures are set to vivid colors, the effect is impressive. These fixtures are full RGBW, DMX controlled, color changing fixtures with a "full on" lumen output of 3,600 lumens while only using 105 watts.

The area under the balcony did not have the height available to utilize indirect lighting, in this area we utilized round downlights with a wide beam spread. These fixtures are full RGBW, DMX controlled color changing and use 100 watts.





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation



Auditorium Before & After





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation

## Noteworthy Features

The theatrical lighting system utilizes Strand networked system providing DMX control with color changing LED fresnel, elliptical and cyclorama style fixtures located on stage battens and six tormentor bars located throughout the auditorium. All of the theatrical lighting fixtures are RGBW color changing LED. The fresnels and cyclorama fixtures use 100 watts each, while the elliptical fixtures use 250 watts.

Stage work lighting was also provided to limit the use of the theatrical lighting and therefore extending the life of the system. For work lighting we utilized high output LED high bay fixtures mounted above the stage rigging. These fixtures provide 24,000 lumens while using only 236 watts.





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation





# Harley Hill - Interior

Our Lady of Mercy High School  
Performing Arts Center Renovation





# Harley Hill - Interior

RG&E Scottsville Road, 2nd Floor Renovation

Project Name: RG&E Scottsville Road, 2nd Floor Renovation

Project Location: 1300 Scottsville Road, Rochester New York 14624

Project Completion: December 2015

Owner: Iberdrola USA

Electrical Contractor: Schuler-Haas Electric Corp.

Design Firm: LaBella Associates





# Harley Hill - Interior

## RG&E Scottsville Road, 2nd Floor Renovation

### Noteworthy Features

The renovation of the second floor of our Scottsville Road Office Building included approximately 31,400 square feet.

The scope of work included the replacement of (255) 8-foot 4-lamp T8 indirect linear pendant fixtures and (32) 2'x4' 3-lamp T8 lay-in fixtures with the installation of a new high efficient LED system.

The system includes (317) 2'x4' LED fixtures and (15) 2'x2' LED fixtures by Cooper Lighting- Metalux.

With the LED installation the working environment has greatly improved for the 240 staff members. The high efficiency of the LED light source is providing approximately 35-40 foot candles at desk height - an increase of almost 50% more light for the same energy put in.

This system provides our building with lower maintenance costs and longer lasting fixtures. The renovation also included the replacement of existing furniture, flooring, restrooms, and new interior finishes as well as, building system upgrades.





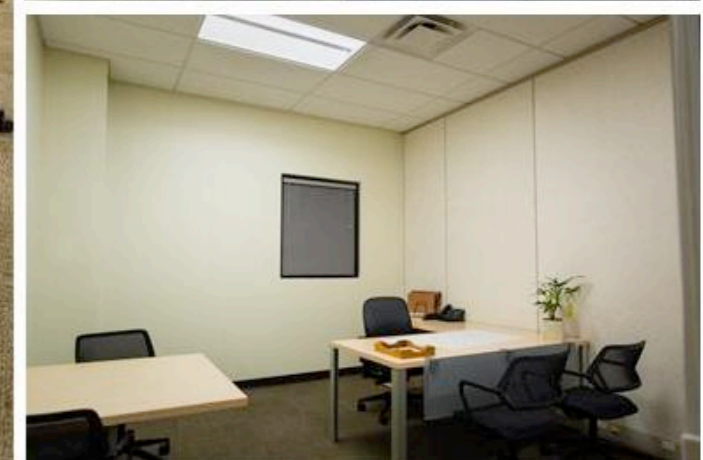
# Harley Hill - Interior

## RG&E Scottsville Road, 2nd Floor Renovation

Existing Lighting



Renovated Lighting





# Harley Hill - Interior

RRHS - Unity Hospital

Med/Surg/Rehab Renovation & Expansion - BP7

Project Name: RRHS - Unity Hospital - Med/Surge/Rehab Renovation & Expansion - Bid Package 7

Project Location: 1555 Long Pond Road, Greece, New York

Date of Completion: June 16, 2014

Architect: Gardner Plus Architects

MEP Engineering: M/E Engineering, P.C.

Interior Design: Hunt

General Contractor: LeChase Construction

Electrical Contractor: Billitier Electric

Lighting Representatives: Vertex Solutions and Point Source Group





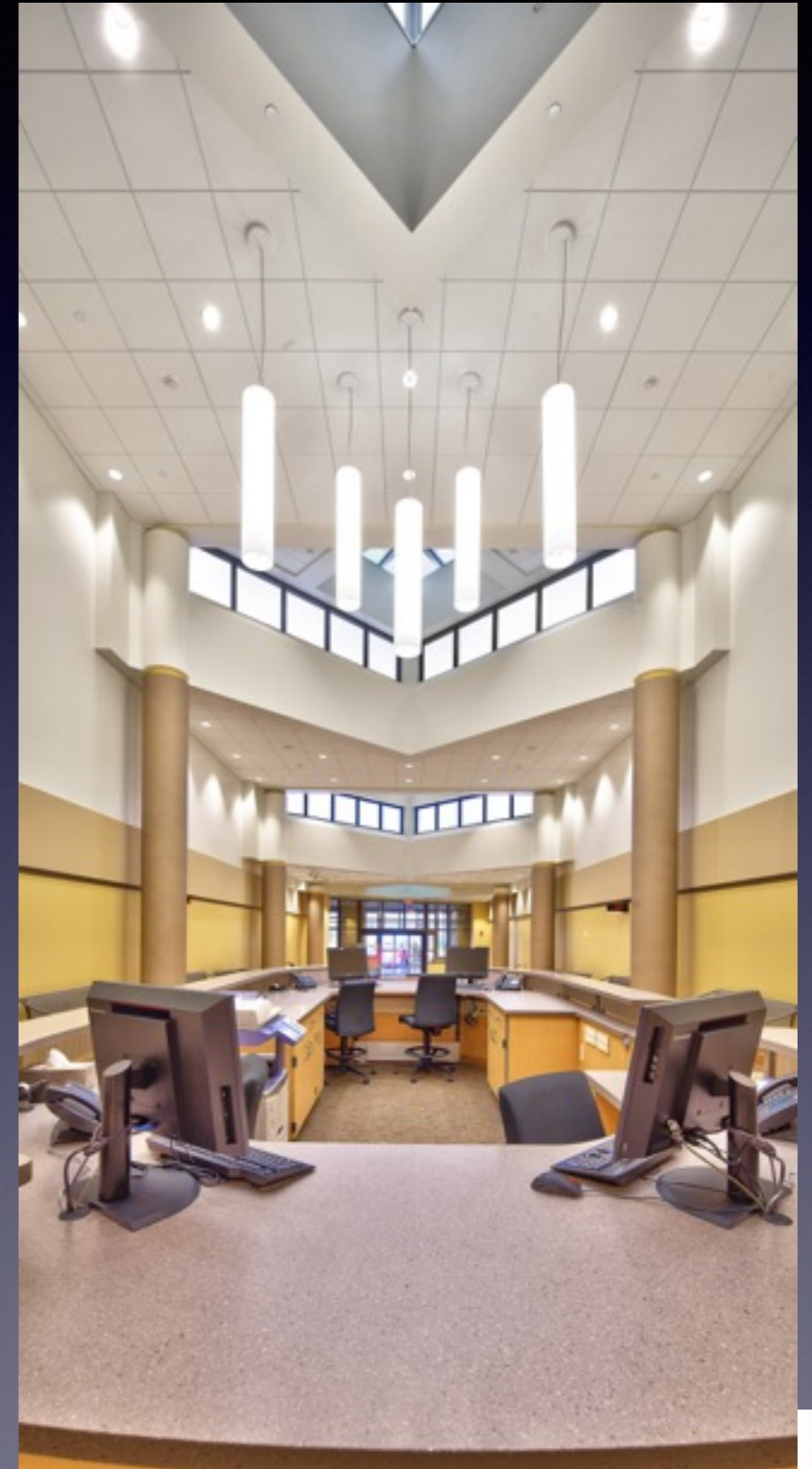
# Harley Hill - Interior

RRHS - Unity Hospital

Med/Surg/Rehab Renovation & Expansion - BP7

A combination of natural light and 3500 K LED down lights was utilized to illuminate the main entrance and concourse. Decorative compact fluorescent sconces were provided at the columns. Cylindrical type T5HO dimmable fluorescent pendants were used to provide an artistic feel along with the LED illuminated acrylic 20' wide by 6' tall 3Form panels.

Dimming controls with multiple zones were provided to allow adjustable lighting levels for any special events they wish to hold.





# Harley Hill - Interior

RRHS - Unity Hospital

Med/Surg/Rehab Renovation & Expansion - BP7





# Harley Hill - Interior

RRHS - Unity Hospital

Med/Surg/Rehab Renovation & Expansion - BP7

Patient room lighting utilizes 3500K LED down lights, LED in wall night light, fluorescent undercabinet light at writing surface & sink, compact fluorescent decorative sconce and three lamp T5HO fluorescent over the patient lighting with built in LED reading lamps.

There are eight control zones in each patient room to give the most flexibility in use of lighting.

Dimming has been provided on the LED down lights to give the patients further flexibility for individual preferences.





# Harley Hill - Interior

RRHS - Unity Hospital

Med/Surg/Rehab Renovation & Expansion - BP7



# Harley Hill - Exterior

Irondequoit Town Hall Site Lighting

Project Name: Irondequoit Town Hall Site Lighting

Project Location: Titus Avenue - Irondequoit, New York

Date of Completion: Summer 2015

Design Firm: LaBella Associates D.P.C.





# Harley Hill - Exterior

## Irondequoit Town Hall Site Lighting

The Town of Irondequoit Town Hall site lighting consisted of some old world post top style pole lights by Sternberg Lighting in the rear parking lot behind the Town Hall (in front of the Public Safety Building). Each pole included triple lanterns each with 250 watt metal halide lamps at a 16ft mounting height. Additionally, the drive on the north side of the park (which was widened to become the Library parking lot) had 3 wood utility poles, with either a high pressure sodium (HPS) cobra head or an HPS flood light.

The design was to provide new parking lot lighting for the new library which was to be built on the Town Hall site just east of the Town Hall. The parking lot is on the North side of the library. The improvements included lighting for the westerly drive into the site from Titus Avenue, the parking lot behind the Town Hall (which also serves the Public Safety Building), sidewalk lighting from the Town Hall to the street, new flagpole lighting, new monument lighting and additional walkway lighting around the new Library.



# Harley Hill - Exterior

## Irondequoit Town Hall Site Lighting





# Harley Hill - Exterior

## Irondequoit Town Hall Site Lighting



# Harley Hill - Exterior

## Irondequoit Town Hall Site Lighting





# Harley Hill - Exterior

## Irondequoit Town Hall Site Lighting

The design intent was to have an average of 2 foot-candles of light in the parking lots with a minimum of 1/2 foot-candle at the outer edges. The walk in front of the Town Hall was designed for a minimum of 1/2 foot-candle.

Difficulties encountered included matching the existing poles and lanterns with an affordable budget and locating the poles where the light would not be blocked by the existing trees (without trimming the trees).

Additionally, although this is not an energy saving submittal, *each* triple head pole saves 420 watts, *each* double head pole saves 280 watts, and *each* single head saves 140 watts over comparable metal halide fixtures, while producing many more usable lumens.



# Harley Hill - Exterior

## Irondequoit Town Hall Site Lighting





# Harley Hill - Exterior Irondequoit Town Hall Site Lighting



# The Unitrac Energy Excellence in Green Lighting Award

Roberts Wesleyan College- Crothers Science & Nursing Center

Project Name: Roberts Wesleyan College- Crothers Science & Nursing Center

Date of Completion: September, 2015

Architect: SWBR Architects

Electrical Engineering/Lighting Design: M/E Engineering, P.C.

Construction Manager: LeChase Construction

Electrical Contractor: Schuler-Haas Electric Corp.

Lighting Manufacturer's Representative: Point Source Group





# The Unitrac Energy Excellence in Green Lighting Award

Roberts Wesleyan College- Crothers Science & Nursing Center

This project is a new 43,872 square foot laboratory building for Roberts Wesleyan College. The building was completed in the fall of 2015 with an overall construction cost of \$15 million. The program for this building includes laboratory/classroom, office and common spaces that serve the campus science and nursing programs.

The building is attempting to achieve a LEED-Silver Certification by the USGBC. The overall building interior lighting power density was designed to exceed ASHRAE 90.1 2007 requirements by 35% with an overall lighting power density of .78W/SF while still meeting the requirements for higher light levels within laboratory spaces and maintaining a modern college campus environment. The building lighting controls utilize individual room/space controls (switching, dimming, step dimming & occupancy/vacancy sensors) throughout the building to suit each of the individual spaces needs. The building consists of a combination of T8 - 3100 lumen fluorescent with high efficiency ballast and LED luminaires throughout.



# The Untrac Energy Excellence in Green Lighting Award

Roberts Wesleyan College- Crothers Science & Nursing Center



Higher Light Levels for Laboratory Spaces



Skills Nursing Lab - Even Illumination





# The Unitrac Energy Excellence in Green Lighting Award

Roberts Wesleyan College- Crothers Science & Nursing Center

The building offices, conference rooms and general spaces utilize recessed indirect LED luminaires with dimming controls to provide flexible illumination levels. The nursing skills lab features recessed linear fluorescent luminaires utilizing step dimming ballast with the front row controlled separately in the teaching area and recessed 2'x4' fluorescent luminaires in the skills area to simulate a hospital environment. The biology and chemistry labs feature recessed indirect fluorescent 2'x4' luminaires utilizing dual level controls to provide multiple light levels.

The building features multiple student study spaces and lounges utilizing a combination of fluorescent and LED luminaires. The second floor student study space features three custom LED pendant luminaire and LED downlights utilizing dimming controls to accent the spaces. The student lounges feature recessed linear fluorescent luminaires and LED downlights with separate controls to provide flexible illumination and meet student needs. The linear lights help accent the space and ceiling features.



# The Unltrac Energy Excellence in Green Lighting Award

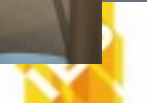
Roberts Wesleyan College- Crothers Science & Nursing Center



Second Floor Student Study Space



Student Lounge





# The Unitrac Energy Excellence in Green Lighting Award

Roberts Wesleyan College- Crothers Science & Nursing Center

The building corridors feature an exposed structure with 8' pendant mounted fluorescent luminaires to blend with the exposed utilities. Each laboratory features a classroom portal that consists of a lab/donor name, tack board and white board that is highlighted by a wall mounted adjustable LED luminaire.

The building main entry link connects the new science and nursing building to the existing campus science building and features an open stair that connects to the second floor. The link features a wood slat ceiling with recessed fluorescent luminaires and glass LED pendant luminaires to highlight student study spaces.

The entire building was designed to meet LEED Indoor Environmental Quality Credit 6.1: Controllability of Lighting Systems. Specific attention was paid to the building exterior site lighting to meet dark sky compliance, reduced power densities and minimize light trespass at the site boundary while still maintaining a safe and secure environment for the Campus. The building exterior luminaires are a combination of pole and building mounted LED luminaires.



# The Unltrac Energy Excellence in Green Lighting Award Roberts Wesleyan College- Crothers Science & Nursing Center



Overview of the Open Stair & Link



Main Entry Stair/Link



The Unitrac Energy Excellence in Green Lighting Award  
Roberts Wesleyan College- Crothers Science & Nursing Center





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Thank you for attending !!

